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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)

2022 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN OF COMMERCIAL ENERGY OF MONTANA, INC. DBA COMMERCIAL ENERGY OF CALIFORNIA (PUBLIC VERSION)

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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 COMMERCIAL ENERGY OF MONTANA, INC. DBA COMMERCIAL ENERGY OF CALIFORNIA (PUBLIC VERSION)

In accordance with the April 11, 2022 *Assigned Commissioner and Assigned Administrative Law Judge's 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*, and the December 19, 2022 *Decision on 2022 Renewables Portfolio Standard Procurement Plans,* Commercial Energy of Montana, Inc. dba Commercial Energy of California ("Commercial Energy") hereby submits this Final 2022 Renewables Portfolio Standard ("RPS") Procurement Plan for the period of 2022-2032.

1. Summary of Major Changes – (Section 5.1)

Plan Reference	Plan Section	Summary/ Justification of Change
2022 RPS Plan Section: 1	*Summary of Major Changes*	*Updated table of the summary of major changes to the RPS Plan.*
2022 RPS Plan Section: 2	*Executive Summary*	*Updated Executive Summary to include important information from 2021 Procurement Plan.*
2022 RPS Plan Section: 3	*Summary of Legislative Compliance*	*Updated Legislative Compliance to include important information on D.22-04-035, general order 156, and SB 255.*
2022 RPS Plan Section: 4	*Assessment of RPS Portfolio Supplies and Demand*	*Updated current supply and demand information to show compliance for 2017-2020 Compliance Period.*

		Updated information on strategy to achieve future long-term contracting requirement compliance.
2022 RPS Plan Section: 4.A.1	*Voluntary Allocation and Market Offer*	*Added required section to discuss Voluntary Allocation and Market Offer process as it related to Commercial Energy's procurement.*
2022 RPS Plan Section: 4.B.1	*Long-Term Procurement*	*Updated information on long-term contracting requirement compliance.*
2022 RPS Plan Section: 4.C	*Portfolio Diversity and Reliability*	*Updated information on transportation electrification.*
2022 RPS Plan Section: 7	*Risk Assessment*	*Updated information on risk assessment.*
2022 RPS Plan Section: 8	*Renewable Net Short Calculations*	*Updated RNS narrative description.* *Updated Load Forecast for future Compliance Periods.*
2022 RPS Plan Section: 10.C	*Bid Solicitation Protocol*	*Updated information on bid solicitation protocol and LCBF criteria.*
2022 RPS Plan Section: 15	*Coordination with Integrated Resource Planning*	*Updated information on the coordination of the RPS Procurement Plan and IRP.*
2022 RPS Plan Appendix B	*Project Development Status Template*	*Added updated template for project development status update.*
2022 RPS Plan Appendix C	*Renewable Net Short Calculations*	*Updated RPS-Eligible Procurement.*
2022 RPS Plan Appendix E	*Cost Quantification*	*Updated Cost Quantification.*
2022 RPS Plan Appendix F	*Procurement Plan Checklist*	*Updated Procurement Plan Checklist.*

2. Executive Summary – (Section 5.2)

Commercial Energy currently serves a small portion of the State's direct access (DA) load but has grown its DA load more than fivefold from Compliance Period 3 to the current Compliance Period 4. For purposes of this report, Commercial Energy does not forecast its current portion of DA load to change significantly during the 2022-2032 RPS compliance period, because they are unable to quantify future DA openings or their ability to attract new

customers and retain existing ones. For the 2022-2032 compliance period, Commercial Energy continues to employ a procurement strategy secured through a mix of bundled and REC-only transactions, mostly through long-term contracts. For Compliance Period 3 (2017-2020), Commercial Energy secured enough RECs to meet its Procurement Quantity Requirement (PQR), Portfolio Balance Requirement (PBR), and long-term contracting requirements. Commercial Energy has positioned itself well for compliance in Compliance Period 4 and future periods and is actively exploring additional options for additional procurement consistent with the interests of its existing customers and shareholders.

3. Summary of Legislative Compliance – (Section 5.3)

Commercial Energy takes all legislative requirements seriously and has made every effort to adjust its procurement strategy as new legislation is passed. Commercial Energy is on track to reach its targets in accordance with SB 100 and SB 350 including the 65% long-term contracting requirement and the various RPS percentages as evidenced by its Renewable Net Short Calculation in Section 8.

The Commission issued D.22-04-035 April 18, 2022, revising general order 156 supplier diversity program to implement SB 255 to incorporate community choice aggregators and electric service providers. This program was previously established for large utilities. Commercial Energy will continue to consider supplier diversity as outlined in the bid solicitation protocol section.

4. Assessment of RPS Portfolio Supplies and Demand -§ § 399.13(a)(6)(A), 399.13(b), Compliance to D.17-06-026 Implementing SB 350's Requirement for Long-Term Procurement – (Section 5.4.A-5.4.D)

A. Portfolio Supply and Demand

As stated above, Commercial Energy serves a small portion of the State's direct access (DA) load. For the 2022-2032 compliance periods, Commercial Energy plans to

continue to employ a procurement strategy making procurements secured through a mix of bundled and REC-only transactions, including through long-term contracts.

Specifically, for the 2011-2013 compliance period Commercial Energy was able to contract for the majority of its Category 1 and 2 obligations and was able to round out Category 3 procurements as final load numbers became available. Due to a combination of load increase and limited availability of supply toward the end of 2013, Commercial Energy finished the compliance period slightly short in Category 1 and 2 procurements. As a result of the initial compliance period shortfall above, Commercial Energy began hedging its Category 1 and 2 positions erring toward over-procurement within the parameters of allowable category allocations in order to accommodate future load fluctuation.

Commercial Energy worked diligently to satisfy its Category 1, 2, and 3 obligations for the 2014-2016 compliance period, trueing up on actual and forecast volumes for the remainder of the period before the period closing date.

In the 2017-2020 compliance period, Commercial Energy made procurements that met their Category 1, 2 and 3 obligations, minimized cost, and maximized value for its customers, and made procurements in all Categories in pursuit of its compliance obligations. Commercial Energy was able to meet their full compliance obligation for Compliance Period 3.

In the 2021-2024 compliance period, Commercial Energy has begun to make retirements and additional procurements in order to be compliant based on their significant increase in served load since previous reports. Commercial Energy intends to utilize multiple avenues available to be compliant including bilateral agreements, RFPs, and the Voluntary Allocation and Market Offer process.

1. **Voluntary Allocation and Market Offer (VAMO)**

Commercial Energy co-authored the proposal from Working Group 3 in the PCIA case for the allocation of the attributes held in the IOU legacy portfolios, named the VAMO model. As previously stated in filings, at this time Commercial Energy plans to accept 100% of its voluntary allocations from all three utilities for all their attributes. Should other LSEs refuse any of their VAMO portfolio, Commercial Energy looks forward to the opportunity to make Market Offers for those additional assets to supplement its needs. If there is additional Direct Access expansion in the future, Commercial Energy's load served will continue to increase along with its voluntary allocations.

2. Portfolio Optimization

Commercial Energy plans to continue to meet any future RPS obligations through a mix of bundled and REC-only transactions in compliance with the minimums and maximums allowed and/or required for the various categories. The exact portfolio mix will depend on customer requests, conformance with their developed IRP portfolios, and competitive pricing and availability for various products.

Commercial Energy's goal is to meet all RPS-eligible energy procurements from in-state resources and/or resources that have their first point of interconnection with a California balancing authority. Commercial Energy expects to meet most, if not all, of its RPS compliance through long-term contracts with renewable generation capacity during the planning period.

Ideally, with the right mix of competitively priced generating assets and attributes sourced from its recent RFP, Commercial Energy will provide all of its customers with a 100% GHG-free portfolio while remaining competitive in the ESP and CCA marketplace by 2032.

Commercial Energy aims to make cost effective procurements exceeding the parameters of current statutory requirements. Commercial Energy will remain flexible in their procurement strategy in order to respond to changes in market conditions and regulations. To minimize and control RPS costs and optimize its portfolio, Commercial Energy has taken steps to:

- Procure the minimum amount of category 3 resources allowed pursuant to Public Utilities Code Section 399.16(c)(2)
- Procure the minimum amount of category 1 resources required pursuant to Public Utilities Code Section 399.16(c)(1); and
- Procure the balance of its RPS resource requirements from category 2 resources.
- Continue to work toward identifying available and cost-effective long-term procurement opportunities.

Commercial Energy does not anticipate that its forward procurement strategy will meaningfully change as SB 350 and SB 100 are implemented and procurement obligations are increased to 60% by 2030. The Mid-Term Reliability decision for 2023-2026 requires Commercial Energy to procure a portion of the 11,500 MW of new net qualifying capacity coming online in 2023-2026. While this is a small total MW allocation for Commercial Energy based on peak demand, it will require Commercial Energy to procure additional long-term contracts from zero-emitting generation including RPS-Eligible resources. Commercial Energy intends to make all of their procurements for the Mid-Term Reliability decision from RPS-Eligible resources. Commercial Energy will not adjust their PQR obligations downward and will instead apply the RECs from these additional resources to their VMoP. This will allow an

additional buffer above their PQR and MMoP. As load forecasts become more stable post-pandemic and more accurate in future compliance periods, Commercial Energy will issue other RFOs based on the bid solicitation protocols outlined in Section 10. This will allow Commercial Energy to continue to make procurements above their legislative requirements, MMoP and VMoP. Commercial Energy will evaluate and monitor market conditions to ensure that its current strategy remains economically competitive and will evaluate alternative strategies as they present themselves.

B. Responsiveness to Local and Regional Policies

Commercial Energy presently serves energy throughout the state, across multiple local and regional areas to hundreds of business locations. Commercial Energy partners and works with developers and suppliers in various locations when developing or procuring RPS. Commercial Energy understands the importance of Local and Regional Policies and has worked diligently to incorporate respective policies into their planning and portfolio. Commercial Energy works directly with customers throughout the state on energy projects to ensure compliance with Local and Regional policies. These projects include solar, battery storage and other energy efficiency measures to reduce energy consumption and increase in-state RPS generation.

1. Long-Term Procurement

Regarding long-term contracting requirements, Commercial Energy entered into long- term contracts in both the 2011-2013 period and 2014-2016 period to satisfy its 0.25% obligation. To comply with the 65% long-term contracting requirements, which went into effect in 2021, Commercial Energy executed multiple long-term contracts over the past years, including accepting all VAMO allocation offers. Over 90% of Commercial Energy's RPS-Eligible

Procurements are currently projected to come from long-term contracts. Commercial Energy is very well-positioned to comply with the long-term contracting requirement for compliance period 4, compliance period 5, and compliance period 6. Commercial Energy already has long-term contracts in place for over 65% of the current Gross RPS Procurement Quantity Requirements in the RNS table for compliance period 4, compliance period 5, and compliance period 6. Assuming recent load increases continue, Commercial Energy will make additional long-term procurements through bilateral agreements and the VAMO process to satisfy its requirements through 2032 based on current forecasted load. As referenced in the RNS Table, Commercial Energy is forecasted, in aggregate, to be short in Compliance Period 4, including current anticipated VAMO procurements. However, it should be noted these contracts will deliver more RECs than required to meet its 65% long-term contracting obligation. Commercial Energy will sign additional contracts to exceed its obligation and Minimum Margin of Procurement (MMoP) as well as bank the extra RECs for a buffer in future compliance periods. In future Compliance Periods, Commercial Energy will apply all eligible banked RECs from previous periods. When Commercial Energy includes their 5% MMoP and additional VMoP, Commercial Energy estimates to be about [redacted] for Compliance Periods 5 and 6, respectively. Because of this, Commercial Energy will sign additional contracts during Compliance Period 4 to reach their MMoP and VMoP for Compliance Periods 5 and 6. Though Commercial Energy has accurate forecasts out past 2032 based on current load, there are chances for additional load increases or new customers.

C. Portfolio Diversity and Reliability

Commercial Energy understands the importance of energy diversity and reliability when conducting RFOs and evaluating procurement options. Commercial Energy makes it a priority to procure from multiple resource types and multiple geographic regions in order to limit the risks outlined in later sections. In Commercial Energy's most recent long-term contracts, PCC 1 RECs are sourced from over a hundred solar and wind facilities across California, all of which are now operational. Commercial Energy also considers the importance of deliverability characteristics such as peaking, dispatchable, baseload, firm and as-available capacity as a secondary concern. At this time, Commercial Energy's past procurement strategies appear to provide sufficient diversity to ensure reliability to meet its client loads on an hourly basis. If and when Commercial Energy's hourly load shape of its aggregated clients change due to any variety of factors, Commercial Energy will adjust its mix of resources and demand response strategies to achieve balance. Those factors that could change the total load and/or the shape of the load over the next ten years include, but are not limited to, increased deployment of EV charging, increased behind-the-meter technology solutions ranging from energy storage to energy shifting or shedding, to on-site generation. Commercial Energy also has internal strategies for dispatching and pricing EV charging to optimize reliability and mitigate costs to the client and the system.

Commercial Energy accounts for the increase in customer load resulting from transportation electrification in the procurement planning process. Commercial Energy has worked with customers from start to finish to deploy EV charging on-site across the state. These relationships will help Commercial Energy forecast more precisely for transportation electrification in the future as more EV charging is added to the grid.

Commercial Energy currently forecasts load consistent with the CEC's IEPR assumptions for annual load growth, which includes projected transportation electrification demand. Commercial Energy has incorporated the below load for transportation electrification in 2022 IRP planning and future load forecasting. Commercial Energy works intimately with customers on energy planning and will continue to closely monitor transportation electrification changes to integrate into future load forecasts.

	Commercial Energy Transportation Electrification Load Projections (MWh)									
Planning Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CEC IEPR	[redacted]									

D. Lessons Learned

Over the course of the previous RPS Compliance Periods, Commercial Energy has learned many lessons. These lessons have allowed them to refine their procurement strategies in order to meet and exceed obligations going forward. As stated above, Commercial Energy learned to err on the side of over-procurement and incorporate a voluntary MMOP. This allows them to combat unanticipated load or obligation fluctuations caused by any number of factors, including weather, policy, customers, and natural disasters. Commercial Energy has persevered through the challenges finding economically viable long-term contracts despite their small load size relative to the utilities and CCAs, who are their natural competitors for such assets. Because of this, Commercial Energy made it a priority to begin solicitations in advance of the 65% long-term contracting requirement that went into place in Compliance Period 4. Another lesson Commercial Energy learned through their own, as well as other's experience, is the uncertainty of project development and output from facilities currently online. The pandemic has put an exclamation point as supply chains, labor shortages, permitting bottlenecks, and cost overruns dominating the excuses of

developers. Because of this, Commercial Energy has structured all future contracts as firm volume delivery from large resource pools shaped around its forecasted hourly load shape, but at a price premium. The lessons Commercial Energy has learned are invaluable to their success in meeting and exceeding obligations in past and future Compliance Periods.

5. Project Development Status Update -§ 399.13(a)(6)(D) – (Section 5.5)

Commercial Energy currently does not own any generation assets or have specific contracts with resources currently under construction. A combination of factors in 2020 led Commercial Energy to conclude that its most prudent course of action at that time was to contract with existing generators, rather than risk construction delays that would impact its 2021 compliance obligations and beyond. Commercial Energy is in discussions with a variety of new generation facilities planning to come online in 2022 and beyond for ancillary energy and products and will update project development status at a time when it becomes applicable.

6. Potential Compliance Delays - § 399.13(a)(6)(B) – (Section 5.6)

Given the reliance on existing operating assets for the bulk of its long-term compliance and the stipulations for hourly fixed volumes in its contracts, Commercial Energy's Category 1 and 2 RPS procurement strategy and contractual codicils are intended to mitigate almost all of its compliance risks in these categories. If, however, fundamental barriers to the development of new renewable generation facilities that may be needed to meet the state's RPS goals of 60% by 2030 arise during the 2022-2032 planning period, any corresponding deficiency in the overall amount of RPS products could possibly result in compliance delays for Commercial Energy. Now that the VAMO process is fully engaged, Commercial Energy finds itself in a shorter position, and with much more clarity and transparency in future acquisitions in the specified attributes.

As a retail seller that relies on written contracts of specific terms, Commercial Energy

has very little risk to unanticipated increases in retail sales. The enrollment process promulgated by the utilities and supported by the CPUC require a long runway to visibility of new contract load. If and when an inability to meet the long-term contracting requirements becomes a barrier to complete compliance in any compliance period, Commercial Energy will address this concern directly with the CPUC. Currently, Commercial Energy has met the long-term requirement for the 2017-2020 period and has exceeded its Long-Term requirements for 2021-2024 with the acceptance of the VAMO allocations for 2023 and 2024. Commercial Energy continues to evaluate cost effective, feasible options for the future compliance periods past 2030.

7. Risk Assessment - § 399.13(a)(6)(F) – (Section 5.7)

Commercial Energy has concerns regarding the availability of long-term contracts consistent with its market needs for future compliance periods. Commercial Energy has no information to report regarding risks associated with facilities that are not yet in commercial operation, except that developers have asked for flexibility of commissioning dates due to uncertainties of permitting, constructing, and interconnection that may be exacerbated by the Covid-19 shutdown, including equipment backlogs, delivery constraints, siting and permitting delays, and interconnection queues.

Commercial Energy also sought to minimize these risks through its co-authored proposal from Working Group 3 on the PCIA for allocation of the attributes held in the IOU legacy portfolios, the Voluntary Allocation and Market Offer model that Commercial Energy essentially drafted over three years ago. Commercial Energy hypothesized that the Working Group 3 allocations could account for up to 30% of their compliance attributes.

The severity of risk to Commercial Energy's RPS compliance, especially long-term contract requirements, is low. As outlined in the Long-Term Procurement section previously, after incorporating forecasted VAMO allocations into future RPS periods, Commercial Energy

is well-positioned to meet long-term contracting requirements. Forecasted VAMO allocations have also reduced Commercial Energy's physical net short positions for compliance periods 4, 5, and 6. Commercial Energy has engaged in bilateral discussions to purchase additional long-term and short-term RPS to cover physical net shortages in compliance periods 4, 5, and 6. Additional purchases would also account for VMoP, contributing to Commercial Energy's severity of risk being low.

The balance of Commercial Energy's generation risk is small compared to the PCIA allocations to be received in future compliance periods. Commercial Energy models its customers' usages and market prices applying proven risk analytics based on one and two standard deviations. They also monitor the increasing trend to noontime curtailments on non-dispatchable renewable resources and have modelled the effect of the state producing 45% of its annual energy usage through solar production by 2030 and a less than proportionate installation of battery storage. As a result, Commercial Energy wrote long-term contracts for facilities that were not currently online but came online in the past year. The nature of its aggregate volumetric obligations on the Sellers minimizes site-specific volumetric risks to Commercial Energy over the contract period. There is no need to quantify the risk of delays for any of Commercial Energy's long-term contracted deliveries since the counterparties guarantee fixed volumes by hour over the entire period.

8. Renewable Net Short Calculation - §§ 399.13(a)(6)(A), (D), and (F) – (Section 5.8)

Please see this information in the excel spreadsheet attached hereto as Appendix C and Responses to RNS Questions in Appendix D.

Previously, Commercial Energy had signed long-term contracts for existing generation to meet and exceed its obligation until 2030 based on the clients' it was serving at the time. Due to the dramatic recent load increases, Commercial Energy will rely on additional long-term procurements and/or VAMO allocations in order to be compliant with their increased

obligations. Commercial Energy has long-standing relationships with the suppliers they entered into long-term contracts with, but understands the possibility of failure rate for online generation. Failure rate of new projects is and was a serious concern for Commercial Energy over the past years as they pursued various developers and assessed their successes, failures, and other constraints, especially COVID-related risks that were basically unquantifiable and that rippled from contracting to procurement and delivery of equipment, to siting work and local and utility permitting, to items not foreseeable. As a result, Commercial Energy made the decision to contract based on fully developed, deployed, and operational assets to cover the 65% long-term contract requirement. As importantly, they contracted for firm volumes, not arbitrary volumes dependent on wind and sun and the CAISO dispatch system. These resources and deliveries are drawn from an aggregation of many RPS resources across various technologies minimizing coincidental generation and better matching Commercial Energy's clients hourly load profile. Therefore, they have no financial or operational risk for the RPS volumes contracted for, even the new build sites which account for a small portion of the portfolio. However, that certainty and reliability cost Commercial Energy a premium price that was not borne lightly. Commercial Energy recognizes the commissioning failure rate risk can be as high as 50% and may grow in the coming years as prices rationalize with the excess solar generation, just as the curtailment risk grows. Therefore, Commercial Energy chose to pay the premium now rather than bear the risk for itself and its customers. At its current forecast loads, Commercial Energy does not have any other contracts with facilities in development nor does it plan to contract with facilities in development as laid out in Commercial Energy's IRP Conforming Portfolios. Nevertheless, Commercial Energy understands the failure rates of facilities in development and has applied a 10% failure rate, which is consistent with published interconnection studies on the generation coming online in 2023.

9. **Minimum Margin of Procurement (MMoP) - § 399.13(a)(5)(D) – (Section 5.9)**

A. MMoP Methodology and Inputs

Though Commercial Energy will meet all future compliance period procurement obligations through primarily firm delivery contracts from existing facilities, Commercial Energy understands that it is still important to have a margin of over procurement. Commercial Energy examined historical data for load deviation from forecasts as well as REC deliveries from variable production contracts and arrived at an MMoP of 5%. On top of the MMoP, Commercial Energy has added an additional 5% VMoP to allow for any additional load or unforeseen circumstances. Commercial Energy feels that this, combined with banked RECs will provide enough of a buffer to cover any load variability in the near term without unreasonable cost increases for its customers.

B. MMoP Scenarios

Commercial Energy is aware that based on the MMoP and VMoP, it will need to procure [redacted] to be compliant in Compliance Period 6 prior to finalizing additional contracts. These additional RECs will likely come from existing generation, but Commercial Energy applied an MMoP between the failure rate of facilities in development and facilities currently online to reduce risk. Commercial Energy will continue to evaluate the feasibility and cost effectiveness of marginal over-procurement as the compliance periods progress and will adjust its strategy as necessary after considering its annual load fluctuations as it adds or loses customers and/or their associated energy usage changes.

10. Bid Solicitation Protocol, Including Least-Cost Best-Fit (LCBF) Methodologies - § 399.13(a)(6)(C), D.04-07-029, D.11-04-030, D.12-11-016, D.14-11-042, and D.16-12-044 – (Section 5.10)

A. Solicitation Protocols for Renewable Sales

Commercial Energy has not sold any renewable energy products and therefore has nothing to report on solicitation protocols for renewable sales. If there becomes a time that Commercial Energy participates in renewable sales, they will provide an update to this section.

B. Bid Selections Protocols

As stated in Section 4 of this filing Commercial Energy will continue to make procurements secured through a mix of bundled and REC-only transactions. In 2020, Commercial Energy posted a formal RPS/RA solicitation to meet a portion of both its long-term and short-term forecasted needs and expected growth. While the timing coincided with the first days of the pandemic and the offers coincided with the IOUs requests for RA in the 2021-2023 period, Commercial Energy received competent, and mostly competitive, offers from a variety of developers, technologies, and sites principally within California. Commercial Energy's goal is to meet the RPS-eligible energy procurements from in-state resources and/or resources that have their first point of interconnection with a California balancing authority.

Please refer to Appendix G- Bid Solicitation for detailed Bid Selection Protocols.

C. LCBF Criteria

Commercial Energy's bid evaluation process followed the Least Cost Best-Fit parameters, seeking projects that would help disadvantaged communities, pay prevailing or greater wages, create positive long-term impacts, and were in critical areas (reference Appendix G– Bid Solicitation). Future bids will maintain that balanced approach. Commercial Energy considers availability and price for various market products, and contracts with RPS brokers and suppliers to procure renewable resources to meet its requirements. Commercial Energy is also supportive of Diverse Business

Enterprises (DBEs). When comparing similar quantitative bid proposals, Commercial Energy will assess qualitative attributes, such as support for disadvantaged communities, how a resource contributes to Commercial Energy's portfolio diversity and if it is supportive to DBEs. Commercial Energy plans to remain flexible in their procurement strategy in order to make the most cost-effective procurements within the parameters of current statutory requirements. Commercial Energy will continue to regularly evaluate and respond to market pricing as an informing aspect of their procurement strategy. Commercial Energy's small market share limits its ability to identify cost-effective opportunities to enter into long-term contract agreements.

11. Safety Considerations – (Section 5.11)

Commercial Energy does not own or operate generation facilities or transmission infrastructure in California at this time, but does understand all market participants must be conscious of promoting safety by controlling the risks they can control. Commercial Energy has taken steps to reduce the risks created by its procurements. Commercial Energy is acutely aware of the wildfire risks and vegetation management obstacles California faces. In order to help combat wildfires and promote vegetation management, they have also made efforts to procure PCC 1 RECs through biomass contracts, which use woody biomass. Commercial Energy also conducts due diligence when evaluating RPS sellers' track record with safety issues and responsiveness to risks. In order to combat wildfire risk, Commercial Energy has begun to evaluate procurement options based on locational preferences outside of high-risk fire zones.

Climate Change Adaptation is also an important safety consideration. Commercial Energy understands the presumed risks posed to electrical supply from climate change, whether that results in more fires, floods or earthquakes or simply in more variable and extreme temperatures. Commercial Energy believes in the importance of electrification and

environmentally sustainable practices in order to combat climate change and thus holds its RPS suppliers to responsible practices. Though Commercial Energy does not own generation facilities, it requires all counterparties be responsible for all decommissioning activities in accordance with state and local guidelines.

Public Safety Power Shut (PSPS) offs are another safety concern. Because Commercial Energy serves customers that need their power and buys from RPS suppliers in regions where PSPS events are possible, Commercial Energy has made efforts to both vary the geographic location of suppliers as well as encourage and assist customers in installation of behind-the-meter generation and storage solutions. Because of their quarter century of experience with natural gas fired generation, Commercial Energy feels that that technology has a role in California for the next decade, is easily deployable, and less destructive than other solutions. Their CE360 Solutions team continues to assess and deploy relevant sites to assist in mitigating the effects of PSPS events.

12. Consideration of Price Adjustment Mechanisms - § 399.13(a)(6)(E) – (Section 5.12)

Commercial Energy does not own or operate eligible renewable energy resources at this time, and therefore, has no position on this topic.

13. Curtailment Frequency, Cost, and Forecasting – (Section 5.13)

Commercial Energy currently does not own generation assets in California and therefore has limited experience with managing curtailments. Commercial Energy has seen the effect of overproduction of solar on the wholesale spot market and the value of long-term contracts. Commercial Energy's understanding is that the ramping RPS requirements have led to a quick surge in new renewable generation in California, which will likely continue as the RPS requirements increase to 60% in 2030. As oversupply instances increase during the peak solar hours of 10am-3pm, solar and winds units must be curtailed to stop congestion on the grid.

Based on available information, over the past few years maximum load served by wind and solar in the CAISO exceeded 50% but in 2020 has exceeded 70% in some hours, especially in the spring when retail load is light. Curtailment events have increased significantly from 371,000 MWh in 2017 to 1,250,000 MWh in 2021.

Commercial Energy has limited experience managing negative pricing but works with a team to hedge and schedule energy based on costs and forecasts. In some of Commercial Energy's past contracts, curtailment has affected delivery volumes. Because of this, Commercial Energy now structures contracts where the seller is responsible for delivering firm volumes. If the facilities are curtailed, the seller must replace the energy and RECs from other facilities. At such a time that Commercial Energy does own generation assets for RPS compliance, Commercial Energy fully expects to balance their load, probably with battery storage, so negative prices will unlikely impact any generation plans. As Commercial Energy increases their knowledge of curtailment, Commercial Energy will continue to address and analyze any experience relating to curtailment frequency, forecasting, and costs.

14. Cost Quantification – (Section 5.14)

Please see this information in the excel spreadsheet attached hereto as Appendix E.

15. Coordination with the IRP Proceeding – (Section 5.15)

15. Coordination with Integrated Resource Planning - §399.13 (Section 5.15)	**RPS Alignment in IRPs**
III. Study Results a. Conforming and Alternative Portfolios	Commercial Energy employs a procurement strategy of making procurements secured through a mix of bundled and REC-only transactions. Commercial Energy currently does not own any generation resources but is actively looking for opportunities to purchase or contract with new facilities. As stated in the Procurement Plan, Commercial

	Energy is on track for compliance and intends to have its Conforming Portfolios for the IRP meet its targets using the same strategy outlined in this plan. Commercial Energy will create both Conforming Portfoliosto align
IV. Action Plan a. Proposed Activities	Commercial Energy intends to use bundled and REC-only transactions from suppliers with existing RPS facilities to implement both Conforming Portfolios for the IRP. Commercial Energy has met both their long-term contracting requirement and met the requirements for their Conforming Portfolios through contracts with existing facilities. Commercial Energy will continue to evaluate additional procurement options as load forecasts change in the future.
IV. Action Plan b. Procurement Activities	Commercial Energy currently does not own any generation resources and therefore has no position on solicitation strategies. If and when this changes, Commercial Energy will provide an updated solicitation strategy including, type of solicitation, timeline, desired online dates, and other relevant information.
IV. Action Plan c. Potential Barriers	As Commercial Energy procures through a mix of bundled and REC-only transactions, there is minimal risk associated with the potential retirement of existing RPS resources. Commercial Energy has no stand-alone contracts for facilities that are not currently online but will reevaluate potential barriers if that changes. Due to

	Commercial Energy's relatively small market share, ability to procure the exact mix of resources in its conforming portfolios may prove difficult, thus Commercial Energy will continue to refine and improve the accuracy of its portfolios as it approaches the 2032 planning horizon. Commercial Energy will file their first RDT in November 2022.

16. Confidentiality

Commercial Energy intends to file a motion for confidential treatment of portions of its 2022 RPS Procurement Plan along with an unexpurgated copy of the Plan. Redacted information included in this submission has been designated "Confidential".

Respectfully submitted this 18th day of January 2023 at Oakland, CA.

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Dated: January 18, 2023

Verification

I am an officer of Commercial Energy of Montana, Inc. dba Commercial Energy of California and am authorized to make this verification on its behalf. The statements om the foregoing document are true of my own knowledge, except as to matters which are therein state on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the forgoing is true and correct, and that this verification is executed on this 18th day of January 2023 at Oakland, California.

Curry Stypula
President
Commercial Energy of Montana, Inc. dba
Commercial Energy of California

Appendix A

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)

2022~~1~~ RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN OF COMMERCIAL ENERGY OF MONTANA, INC. DBA COMMERCIAL ENERGY OF CALIFORNIA

(~~CONFIDENTIAL~~ PUBLIC VERSION)

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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~~21~~ RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN OF COMMERCIAL ENERGY OF MONTANA, INC. DBA COMMERCIAL ENERGY OF CALIFORNIA (~~CONFIDENTIAL~~ PUBLIC VERSION)

In accordance with the April 11, 2022 *Assigned Commissioner and Assigned Administrative Law Judge's 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*, and the December 19, 2022 *Decision on 2022 Renewables Portfolio Standard Procurement Plans*, Commercial Energy of Montana, Inc. dba Commercial Energy of California ("Commercial Energy") hereby submits this ~~Draft~~Final 2022 Renewables Portfolio Standard ("RPS") Procurement Plan for the period of 2022-2032.

~~In accordance with the March 30, 2021 *Assigned Commissioner and Assigned Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2021 Renewables Portfolio Standard Procurement Plans*, the April 21, 2021 *, E-mail Ruling Correcting Error in Table 2 of the ACR and granting PacifiCorp's Extension Request*, and the January 13, 2021 *Decision on 2021 Renewables Portfolio Standard Procurement Plans*, Commercial Energy of Montana, Inc. dba Commercial Energy of California ("Commercial Energy") hereby submits this 2021 Renewables Portfolio Standard ("RPS") Procurement Plan for the period of 2021-2030.~~

1. Summary of Major Changes – (Section 5.1)

Plan Reference	Plan Section	Summary/ Justification of Change

2022 RPS Plan Section: 1	*Summary of Major Changes*	*Updated table of the summary of major changes to the RPS Plan.*
2022 RPS Plan Section: 2	*Executive Summary*	*Updated Executive Summary to include important information from 2021 Procurement Plan.*
2022 RPS Plan Section: 3	*Summary of Legislative Compliance*	*Updated Legislative Compliance to include important information on D.22-04-035, general order 156, and SB 255.*
2022 RPS Plan Section: 4	*Assessment of RPS Portfolio Supplies and Demand*	*Updated current supply and demand information to show compliance for 2017-2020 Compliance Period.* *Updated information on strategy to achieve future long-term contracting requirement compliance.*
2022 RPS Plan Section: 4.A.1	*Voluntary Allocation and Market Offer*	*Added required section to discuss Voluntary Allocation and Market Offer process as it related to Commercial Energy's procurement.*
2022 RPS Plan Section: 4.B.1	*Long-Term Procurement*	*Updated information on long-term contracting requirement compliance.*
2022 RPS Plan Section: 4.C	*Portfolio Diversity and Reliability*	*Updated information on transportation electrification.*
2022 RPS Plan Section: 7	*Risk Assessment*	*Updated information on risk assessment.*
2022 RPS Plan Section: 8	*Renewable Net Short Calculations*	*Updated RNS narrative description.* *Updated Load Forecast for future Compliance Periods.*
2022 RPS Plan Section: 10.C	*Bid Solicitation Protocol*	*Updated information on bid solicitation protocol and LCBF criteria.*
2022 RPS Plan Section: 15	*Coordination with Integrated Resource Planning*	*Updated information on the coordination of the RPS Procurement Plan and IRP.*
2022 RPS Plan Appendix B	*Project Development Status Template*	*Added updated template for project development status update.*
2022 RPS Plan Appendix C	*Renewable Net Short Calculations*	*Updated RPS-Eligible Procurement.*
2022 RPS Plan Appendix E	*Cost Quantification*	*Updated Cost Quantification.*
2022 RPS	*Procurement Plan*	*Updated Procurement Plan*

Plan Appendix F	*Checklist*	*Checklist.*

2. Executive Summary – (Section 5.2)

Commercial Energy currently serves a small portion of the State's direct access (DA) load but has grown its DA load more than fivefold from Compliance Period 3 to the current Compliance Period 4.~~tripled their will nearly double their DA load served with accounts that came online in 2021 and 2022coming online in 2021~~. For purposes of this report, Commercial Energy does not forecast its current portion of DA load to change significantly during the 2022~~1~~-2032~~0~~ RPS compliance period, because they are unable to quantify ~~successes in~~ future DA openings~~, n~~ or their ability to attract new customers and retain existing ones. For the 2022~~1~~-2032~~0~~ compliance period, Commercial Energy continues to employ a procurement strategy secured through a mix of bundled and REC-only transactions, mostly through long-term contracts. For Compliance Period 3 (2017-2020), Commercial Energy ~~has completed procurements and REC retirements for the 2017-2020 Compliance Period. Commercial Energy was able to~~ secured enough RECs to meet its Procurement Quantity Requirement (PQR), Portfolio Balance Requirement (PBR), and long-term contracting requirements. Commercial Energy has positioned itself well for compliance in Compliance Period 4 and future periods and is ~~but is~~ actively exploring additional options for additional procurement consistent with the interests of its existing customers and shareholders.

3. Summary of Legislative Compliance – (Section 5.3)

Commercial Energy takes all legislative requirements seriously and has made every effort to adjust its procurement strategy as new legislation is passed. Commercial Energy ~~has been able to comply with the requirements for past compliance periods and~~ is on track to reach its targets in accordance with SB 100 and SB 350 including the 65% long-~~-~~term contracting requirement and the various RPS percentages as evidenced by its Renewable Net Short

Calculation in Section 8.

The Commission issued D.22-04-035 April 18, 2022, revising general order 156 supplier diversity program to implement SB 255 to incorporate community choice aggregators and electric service providers. This program was previously established for large utilities. Commercial Energy will continue to consider supplier diversity as outlined in the bid solicitation protocol section.

4. **Assessment of RPS Portfolio Supplies and Demand -§ § 399.13(a)(6)(A), 399.13(b), Compliance to D.17-06-026 Implementing SB 350's Requirement for Long-Term Procurement – (Section 5.4.A-5.4.D)**

   A. **Portfolio Supply and Demand**

      As stated above, Commercial Energy serves a small portion of the State's direct access (DA) load. For the 20221-20320 compliance periods, Commercial Energy plans to continue to employ a procurement strategy making procurements secured through a mix of bundled and REC-only transactions, including through long-term contracts ~~executed in the past year~~.

      Specifically, for the 2011-2013 compliance period Commercial Energy was able to contract for the majority of its Category 1 and 2 obligations and was able to round out Category 3 procurements as final load numbers became available. Due to a combination of load increase and limited availability of supply toward the end of 2013, Commercial Energy finished the compliance period slightly short in Category 1 and 2 procurements. As a result of the initial compliance period shortfall above, Commercial Energy began hedging its Category 1 and 2 positions erring toward over-~~-~~procurement within the parameters of allowable category allocations in order to accommodate future load fluctuation.

      Commercial Energy worked diligently to satisfy its Category 1, 2, and 3

obligations for the 2014-2016 compliance period, trueing up on actual and forecast volumes for the remainder of the period before the period closing date.

In the 2017-2020 compliance period, Commercial Energy made procurements that metet their Category 1, 2 and 3 obligations, minimized cost, and maximized value for its customers, and has made procurements in all Categories in pursuit of its compliance obligations. Commercial Energy was able to meet their full compliance obligation for Compliance Period 3. , which will be reported by August 1, 2021.

In the 2021-2024 compliance period, Commercial Energy has begun to make retirements and additional procurements in order to be compliaint based on their significant increase in served load since previous reports. Commercial Energy intends to utilize multiplecall avenues available to be compliaint including bilateral agreements, RFPs, and the Voluntary Allocation and Market Offer process.

1. **Voluntary Allocation and Market Offer (VAMO)**

Commercial Energy co-authored the proposal from Working Group 3 ion the PCIA case for the allocation of the attributes held in the IOU legacy portfolios, named the VAMO model. , and aAs previously stated in filings, at this time Commercial Energy plans to accept 100% of its voluntary allocations from all three utilities for all their attributes. Should other LSEs refuse any of their VAMO portfolio, Commercial Energy looks forward to the opportunity to make Market Offers for those additional assets to supplement its needs. If there is additional Direct Access expansion in the future, Commercial Energy's load served will continue to increase along with its voluntary allocations.

~~1.~~2. **Portfolio Optimization**

Commercial Energy plans to continue to meet any future RPS

obligations through a mix of bundled and REC-only transactions in compliance with the minimums and maximums allowed and/or required for the various categories. The exact portfolio mix will depend on customer requests, conformance with their developed IRP portfolios, and competitive pricing and availability for various products.

Commercial Energy's goal is to meet all RPS-eligible energy procurements from in-state resources and/or resources that have their first point of interconnection with a California balancing authority. Commercial Energy expects to meet most, if not all, of its RPS compliance through long-term contracts with renewable generation capacity during the planning period.

Ideally, with the right mix of competitively priced generating assets and attributes sourced from its recent RFP, Commercial Energy will provide all of its customers with a 100% GHG--free portfolio while remaining competitive in the ESP and CCA marketplace by 20320.

Commercial Energy aims to make cost effective procurements exceeding the parameters of current statutory requirements. Commercial Energy will remain flexible in their procurement strategy in order to respond to changes in market conditions and regulations. To minimize and control RPS costs and optimize its portfolio, Commercial Energy has taken steps to:

- Procure the miniaximum amount of category 3 resources allowed pursuant to Public Utilities Code Section 399.16(c)(2)
- Procure the minimum amount of category 1 resources required pursuant to Public Utilities Code Section 399.16(c)(1); and
- Procure the balance of its RPS resource requirements from category 2 resources.

- Continue to work toward identifying available and cost-effective long-term procurement opportunities.

Commercial Energy does not anticipate that its forward procurement strategy will meaningfully change as SB 350 and SB 100 are implemented and procurement obligations are increased to 60% by 2030. The Mid-Term Reliability decision for 2023-2026 requires Commercial Energy to procure a portion of the 11,500 MW of new net qualifying capacity coming online in 2023-2026. While this is a small total MW allocation for Commercial Energy based on peak demand, it will require Commercial Energy to procure additional long-term contracts from zero-emitting generation including RPS-Eligible resources. Commercial Energy intends to make all of their procurements for the Mid-Term Reliability decision from RPS-Eligible resources. Commercial Energy will not adjust their PQR obligations downward and will instead apply the RECs from these additional resources to their VMoP. This will allow an additional buffer above their PQR and MMoP. As load forecasts become more stable post-pandemic and more accurate in future compliance periods, Commercial Energy will issue other RFOs based on the bid solicitation protocols outlined in Section 10. This will allow Commercial Energy to continue to make procurements above their legislative requirements, MMoP and VMoP. Commercial Energy will evaluate and monitor market conditions to ensure that its current strategy remains economically competitive and will evaluate alternative strategies as they present themselves.

B. Responsiveness to Local and Regional Policies

Commercial Energy presently serves energy throughout the state, across multiple local and regional areas to hundreds of business locations. Commercial Energy partners

and works with developers and suppliers in various locations when developing or procuring RPS. ~~While Commercial Energy does not have any local or regional requirements,~~ Commercial Energy understands the importance of Local and Regional Policies and has worked diligently to incorporate respective policies into their planning and portfolio. Commercial Energy works directly with customers throughout the state on energy projects to ensure compliance with ~~l~~Local ~~or~~ and ~~r~~Regional policies. These projects include solar, battery storage and other energy efficiency measures to reduce energy consumption and increase in-state RPS generation.

1. **Long-Term Procurement**

Regarding long-term contracting requirements, Commercial Energy entered into long- term contracts in both the 2011-2013 period and 2014-2016 period to satisfy its 0.25% obligation. To comply with the 65% long-term contracting requirements, which went~~go~~ into effect in ~~-~~2021, Commercial Energy ~~entered~~ executed ~~into~~ multiple long-term contracts ~~,~~ over the past years, including accepting all VAMO allocation offers. Over 90% of Commercial Energy's RPS-Eligible Procurements are currently projected to come from long-term contracts. Commercial Energy is very well-positioned to comply with the long-term contracting requirement for compliance period 4, compliance period 5, and compliance period 6. Commercial Energy already has long-term contracts in place for over 65% of the current Gross RPS Procurement Quantity Requirements in the RNS table for compliance period 4, compliance period 5, and compliance period 6. ~~,Based on~~Assuming recent load increases continue, Commercial Energy will ~~need to~~ make additional long-term procurements through bilateral agreements and the VAMO process to ~~that will~~ satisfy its requirements through 2032~~0~~ based on current forecasted load. As referenced in

the RNS Table, Commercial Energy is forecasted, in aggregate, to be short in Ccompliance Period ~~in Compliance Period~~ 4 ~~specifically~~, including ~~but based on~~ current~~,~~ anticipated VAMO procurements. However, it should be noted~~,~~ these contracts will deliver ~~significantly~~ more RECs than required to meet ~~Commercial Energy's PQR and~~ its 65% long-term contracting obligation. ~~As a result,~~ Commercial Energy will sign additional contracts to exceed its obligation and Minimum Margin of Procurement (MMoP) as well as bank the extra RECs for a buffer in future compliance periods. In future Compliance Periods, Commercial Energy will apply all eligible banked RECs from previous periods. When Commercial Energy includes their 5% MMoP and additional VMoP, Commercial Energy ~~will~~ estimates to be about [redacted] for Compliance Periods 5 and ~~-~~6, respectively ~~prior to inclusion of additional long-term contracts and VAMO procurements which will be finalized later this year~~. Because of this, Commercial Energy will sign additional contracts during Compliance Period 4 to reach their MMoP and VMoP for Compliance Periods 5 and 6. Though Commercial Energy has accurate forecasts out past 2032~~0~~ based on current load, there are chances for additional load increases or new customers. ~~Because of this, Commercial Energy will look to sign additional contracts between Compliance Period 4 and Compliance Period 5 to reach their MMoP and VMoP for Compliance Period 6.~~

C. Portfolio Diversity and Reliability

Commercial Energy understands the importance of energy diversity and reliability when conducting RFOs and evaluating procurement options. Commercial Energy makes it a priority to procure from multiple resource types and multiple

geographic regions in order to limit the risks outlined in later sections. In Commercial Energy's most recent long-term contracts, PCC 1 RECs are sourced from over a hundred solar and wind facilities across California, all of ~~most of~~ which are now ~~currently~~ operational. Commercial Energy also considers the importance of deliverability characteristics such as peaking, dispatchable, baseload, firm and as-available capacity as a secondary concern. At this time, Commercial Energy's past procurement strategies appear to provide sufficient diversity to ensure reliability to meet its client loads on an hourly basis. If and when Commercial Energy's hourly load shape of its aggregated clients change due to any ~~of a~~ variety of factors, Commercial Energy will adjust its mix of resources and demand response strategies to achieve balance. Those factors that could change the total load and/or the shape of the load over the next ten years include, but are not limited to, increased deployment of EV charging, increased behind-the-meter technology solutions ranging from energy storage to energy shifting or shedding, to on-site generation. ~~In addition to actually deploying EV charging systems at its clients,~~ Commercial Energy also has internal strategies for dispatching and pricing EV charging to optimize reliability and mitigate costs to the client and the system.

Commercial Energy accounts for the increase in customer load resulting from transportation electrification in the procurement planning process. ~~As a trusted advisor to its customers,~~ Commercial Energy has worked with customers from start to finish to deploy EV charging on-site across the state. These relationships will help Commercial Energy forecast more precisely for transportation electrification in the future as more EV charging is added to the grid. Commercial Energy currently forecasts load consistent with the CEC's IEPR assumptions for annual load growth, which includes projected transportation electrification demand. Commercial Energy has incorporated

the below load for transportation electrification in 2022 IRP planning and future load forecasting. Commercial Energy works intimately~~tricately~~ with customers on energy planning and will continue to closely monitor transportation electrification changes to integrate into future load forecasts.

	Commercial Energy Transportation Electrification Load Projections (MWh)									
Planning Year	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
CEC IEPR	[redacted]									

D. Lessons Learned

Over the course of the previous RPS Compliance Periods, Commercial Energy has learned many lessons. These lessons have allowed them to refine their procurement strategies in order to meet and exceed obligations going forward. As stated above, Commercial Energy learned to err on the side of over-~~-~~procurement and incorporate a voluntary MMOP. This allows them to combat unanticipated load or obligation fluctuations caused by any number of factors, including weather, policy, customers, and natural disasters. Commercial Energy has persevered through ~~also discovered~~ the challenges finding economically viable long-term contracts despite~~based on~~ their small load size relative to the utilities and CCAs, who are their natural competitors for such assets. Because of this, Commercial Energy made it a priority to begin solicitations in advance of the 65% long-term contracting requirement that went into~~goes into~~ place in Compliance Period 4. Another lesson Commercial Energy learned through their own, as well as other ~~ESP~~'s experience, is the uncertainty of project development and output from facilities currently online. The pandemic has put an exclamation point as supply chains, labor shortages, permitting bottlenecks, and cost overruns dominating the excuses of developers. Because of this, Commercial Energy has structured all future contracts as firm volume delivery from large resource pools shaped around its forecasted hourly load shape, but at a price premium. The lessons Commercial Energy

has learned~~,~~ are invaluable to their success in meeting and exceeding obligations in past and future Compliance Periods.

5. **Project Development Statu~~i~~s Update -§ 399.13(a)(6)(D) – (Section 5.5)**

Commercial Energy currently does not own any generation assets or have specific contracts with resources currently under construction. A combination of factors in 2020 led Commercial Energy to conclude that its most prudent course of action at that time was to contract with existing generators, rather than risk construction delays that would impact its 2021 compliance obligations and beyond. Commercial Energy is in discussions with a variety of new generation facilities planning to come online in 20222~~1~~ and beyond for ancillary energy and products and will update project development status at a time when it becomes applicable.

6. **Potential Compliance Delays - § 399.13(a)(6)(B) – (Section 5.6)**

Given the reliance on existing operating assets for the bulk of its long-~~-~~term compliance and the stipulations for hourly fixed volumes in its contracts, Commercial Energy's Category 1 and 2 RPS procurement strategy and contractual codicils are intended to mitigate almost all of its compliance risks in these categories. If, however, fundamental barriers to the development of new renewable generation facilities that may be needed to meet the state's RPS goals of 60% by 2030 arise during the 2022~~1~~-203~~0~~ planning period, any corresponding deficiency in the overall amount of RPS products could possibly result in compliance delays for Commercial Energy. Now that ~~Once~~ the ~~CPUC completes its work implementing the~~ VAMO process is fully engaged, Commercial Energy finds itself ~~will be~~ in a ~~significantly longer~~shorter position ~~than required~~it ~~is today~~, and ~~but~~ with much more clarity and transparency in future acquisitions~~, which is already compliant, so the Company sees little risk to a net short position~~ in the specified attributes.

As a retail seller that relies on written contracts of specific terms, Commercial Energy has very little risk to unanticipated increases in retail sales. The enrollment process

promulgated by the utilities and supported by the CPUC require a long runway to visibility of new contract load. If and when an inability to meet the long-term contracting requirements becomes a barrier to complete compliance in any compliance period, Commercial Energy will address this concern directly with the CPUC. Currently, Commercial Energy has met the long-term requirement for the 2017-2020 period and has exceeded its Long-Term ~~is working towards meeting the~~ requirements for 2021-2024 with the acceptance of the VAMO allocations for 2023 and 2024. ~~future compliance periods,~~ Commercial Energy continues to~~and is~~ evaluat~~e~~~~ing~~ cost effective, feasible options for the future compliance periods past 2030.

7. **Risk Assessment - § 399.13(a)(6)(F) – (Section 5.7)**

Commercial Energy has concerns regarding the availability of long-term contracts consistent with its market needs for future compliance periods. Commercial Energy has no information to report regarding risks associated with facilities that are not yet in commercial operation, except that developers have asked for flexibility of commissioning dates due to uncertainties of permitting, constructing, and interconnection that may be exacerbated by the Covid-19 shutdown, including equipment backlogs, delivery constraints, siting and permitting delays, and interconnection queues.

Commercial Energy also sought to minimize these risks through its co-authored proposal from Working Group 3 on the PCIA for allocation of the attributes held in the IOU legacy portfolios, the Voluntary Allocation and Market Offer model that Commercial Energy essentially drafted over three years ago. ~~Unfortunately, that decision has been delayed for the past year as the CPUC decided to expand the scope of the proceeding after the final agreement was reached between Southern California Edison, Commercial Energy, and the CalCCA and presented for decision. This delay adds risk on all ESPs as planning horizons have no way to see the effect of the Working Group 3 adoption on individual portfolio obligations. By itself,~~ In ~~its last filing~~ C~~E~~ommercial Energy hypothesized that the Working Group 3 allocations could

account for up to 30% of ~~Commercial Energy's~~their compliance attributes. ~~As the attached RNS report documents, the Company's assumptions appear correct. (since the IOUs are also in compliance).~~

The severity of risk to Commercial Energy's RPS compliance, especially long-term contract requirements, is low. As outlined in the Long-Term Procurement section previously, after incorporating forecasted VAMO allocations into future RPS periods, Commercial Energy is well-positioned to meet long-term contracting requirements. Forecasted VAMO allocations have also reduced Commercial Energy's physical net short positions for compliance periods 4, 5, and 6. Commercial Energy has engaged in bilateral discussions to purchase additional long-term and short-term RPS to cover physical net shortages in compliance periods 4, 5, and 6. Additional purchases would also account for VMoP, contributing to Commercial Energy's severity of risk being low.

The balance of Commercial Energy's generation risk is ~~relatively~~ small compared to the PCIA allocations to be ~~that are hopefully forthcoming in~~received in future compliance periods. Commercial Energy models its customers' usages and market prices applying proven risk analytics based on one and two standard deviations. They also monitor the increasing trend to noontime curtailments on non-dispatchable renewable resources and have modelled the effect of the state producing 45% of its annual energy usage through solar production by 2030 and a less than proportionate installation of battery storage. As a result, Commercial Energy wrote long-term contracts for facilities that we~~a~~re not currently online but came online in the past year. T~~t~~he nature of its aggregate volumetric obligations on the Sellers minimizes site-specific volumetric risks to Commercial Energy over the contract period. There is no need to quantify the risk of~~of~~ delays for~~of~~ any of Commercial Energy's long-term contracted deliveries since the counterparties guarantee fixed volumes by hour over the entire period.

8. **Renewable Net Short Calculation - §§ 399.13(a)(6)(A), (D), and (F) – (Section 5.8)**

Please see this information in the excel spreadsheet attached hereto as Appendix C and Responses to RNS Questions in Appendix D.

~~Commercial Energy has met its requirements for the past compliance periods.~~ Previously, Commercial Energy had~~s~~ signed long-term contracts for existing generation to meet and exceed its obligation until 2030 based on the clients' it was serving at the time. D~~but~~ ~~d~~ue to the dramatic recent load increases, Commercial Energy will rely on additional long-term procurements and/or VAMO allocations in order to be compli~~a~~~~i~~nt with their increased obligations. Commercial Energy has long-standing relationships with the suppliers they entered into long-term contracts with, but understands the possibility of failure rate for online generation. Failure rate of new projects is and was a serious concern for Commercial Energy over the past years ~~18 months~~ as they pursued various developers and assessed their successes, failures, and other constraints, especially COVID~~ovid~~-related risks that were basically unquantifiable and that rippled from contracting to procurement and delivery of equipment, to siting work and local and utility permitting, to items not foreseeable. As a result, Commercial Energy made the decision to contract based on fully developed, deployed, and operational assets to cover the 65% long-term contract requirement. As importantly, they contracted for firm volumes, not arbitrary volumes dependent on wind and sun and the CAISO dispatch system. These resources and deliveries are drawn from an aggregation of many RPS resources across various technologies minimizing coincidental generation and better matching Commercial Energy's clients hourly load profile. Therefore, they have no financial or operational risk for the RPS volumes contracted for, even the new build sites which account for a small portion of the portfolio. However, that certainty and reliability cost Commercial Energy a premium price that was not borne lightly. Commercial Energy recognizes the commissioning failure rate risk can be as high as 50% and may grow in the coming years as prices rationalize with the excess solar generation, just as the curtailment risk grows.

Therefore, Commercial Energy chose to pay the premium now rather than bear the risk for itself and its customers. At its current forecast loads, Commercial Energy does not have any other contracts with facilities in development nor does it plan to contract with facilities in development as laid out in Commercial Energy's IRP Conforming Portfolios. Nevertheless, Commercial Energy understands the failure rates of facilities in development and has applied a 10% failure rate, which is consistent with published interconnection studies on the generation coming online in 2023~~2~~.

9. Minimum Margin of Procurement (MMoP) - § 399.13(a)(5)(D) – (Section 5.9)

A. MMoP Methodology and Inputs

Though Commercial Energy ~~has~~ will meet all ~~met all~~ future compliance period procurement obligations through primarily firm delivery contracts from existing facilities, Commercial Energy understands that it is still important to have a margin of over procurement. Commercial Energy examined historical data for load deviation from forecasts as well as REC deliveries from variable production contracts and arrived at an MMoP of 5%. On top of the MMoP, Commercial Energy has added an additional 5% VMoP to allow for any additional load or unforeseen circumstances. Commercial Energy feels that this, combined with banked RECs will provide enough of a buffer to cover any load variability in the near term without unreasonable cost increases for its customers.

B. MMoP Scenarios

Commercial Energy is aware that based on the MMoP and VMoP, it will need to procure [redacted] RECs to be compl~~a~~iant in Compliance Period 6 prior to finalizing~~ed~~ additional contracts ~~and VAMO procurements. Without a MMoP and VMoP, Commercial Energy would cover the obligation~~. These additional RECs will likely come from existing generation, but

Commercial Energy applied an MMoP between the failure rate of facilities in development and facilities currently online to reduce risk. Commercial Energy will continue to evaluate the feasibility and cost effectiveness of marginal over-procurement as the compliance periods progress and will adjust its strategy as necessary after considering its annual load fluctuations as it adds or loses customers and/or their associated energy usage changes.

10. Bid Solicitation Protocol, Including Least-Cost Best-Fit (LCBF) Methodologies - § 399.13(a)(6)(C), D.04-07-029, D.11-04-030, D.12-11-016, D.14-11-042, and D.16-12-044 – (Section 5.10)

A. Solicitation Protocols for Renewable Sales

Commercial Energy has not sold~~does not sell~~ any renewable energy products and therefore has nothing to report on solicitation protocols for renewable sales. If there becomes a time that Commercial Energy participates in renewable sales, they will provide an update to this section.

B. Bid Selections Protocols

As stated in Section 4 of this filing Commercial Energy will continue to make procurements secured through a mix of bundled and REC-only transactions. In 2020, Commercial Energy posted a formal RPS/RA solicitation to meet a portion of both its long--term and short-term forecasted needs and expected growth. While the timing coincided with the first days of the pandemic and the offers coincided with the IOUs requests for RA in the 2021-2023 period, Commercial Energy received competent, and mostly competitive, offers from a variety of developers, technologies, and sites principally within California. Commercial Energy's goal is to meet the RPS-eligible energy procurements from in-state resources and/or resources that have their first point of interconnection with a California balancing authority. ~~Commercial Energy does not~~

~~currently sell any eligible renewable energy products.~~

Please refer to Appendix G- Bid Solicitation for detailed Bid Selection Protocols.

C. LCBF Criteria

Commercial Energy's bid evaluation process followed the Least Cost Best-Fit parameters, seeking projects that would help disadvantaged communities, pay prevailing or greater wages, create positive long-term impacts, and were in critical areas (reference Appendix G– Bid Solicitation). Future bids will ~~try to~~ maintain that balanced approach. ~~Commercial Energy~~ Commercial Energy considers availability and price for various market products, and contracts with RPS brokers and suppliers to procure renewable resources to meet its requirements. Commercial Energy is also supportive of Diverse Business Enterprises (DBEs). When comparing similar quantitative bid proposals, Commercial Energy will assess qualitative attributes, such as support for disadvantaged communities, how a resource contributes to Commercial Energy's portfolio diversity and if it is supportive to DBEs. Commercial Energy plans to remain flexible in their procurement strategy in order to make the most cost-effective procurements within the parameters of current statutory requirements. Commercial Energy will continue to regularly evaluate and respond to market pricing as an informing aspect of their procurement strategy. Commercial Energy's small market share limits its ability to identify cost-effective opportunities to enter into long-term contract agreements.

11. Safety Considerations – (Section 5.11)

Commercial Energy does not own or operate generation facilities or transmission infrastructure in California at this time, but does understand all market participants must be conscious of promoting safety by controlling the risks they can control. Commercial Energy

has taken steps to reduce the risks created by its procurements. Commercial Energy is acutely aware of the wildfire risks and vegetation management obstacles California faces. In order to help combat wildfires and promote vegetation management, they have also made efforts to procure PCC 1 RECs through biomass contracts, which use woody biomass. Commercial Energy also conducts due diligence when evaluating RPS sellers' track record with safety issues and responsiveness to risks. In order to combat wildfire risk, Commercial Energy has begun to evaluate procurement options based on locational preferences outside of high-risk fire zones.

Climate Change Adaptation is also an important safety consideration. Commercial Energy understands the presumed risks posed to electrical supply from climate change, whether that results in more fires, floods or earthquakes or simply in more variable and extreme temperatures. Commercial Energy believes in the importance of electrification and environmentally sustainable practices in order to combat climate change and thus holds its RPS suppliers to responsible practices. Though Commercial Energy does not own generation facilities, it requires all counterparties be responsible for all decommissioning activities in accordance with state and local guidelines.

Public Safety Power Shut (PSPS) offs are another safety concern. Because Commercial Energy serves customers that need their power and buys from RPS suppliers in regions where PSPS events are possible, Commercial Energy has made efforts to both vary the geographic location of suppliers as well as encourage and assist customers in installation of behind--the-meter generation and storage solutions. Because of their quarter century of experience with natural gas fired generation, Commercial Energy feels that that technology has a role in California for the next decade, is easily deployable, and less destructive than other solutions. Their CE360 Solutions team continues to assess and deploy relevant sites to assist in mitigating the effects of PSPS events.

12. Consideration of Price Adjustment Mechanisms - § 399.13(a)(6)(E) – (Section 5.12)

Commercial Energy does not own or operate eligible renewable energy resources at this time, and therefore, has no position on this topic.

13. Curtailment Frequency, Cost, and Forecasting – (Section 5.13)

Commercial Energy currently does not own generation assets in California and therefore has limited experience with managing curtailments. Commercial Energy has seen the effect of overproduction of solar on the wholesale spot market and the value of long-~~-~~term contracts. Commercial Energy's understanding is that the ramping RPS requirements have led to a quick surge in new renewable generation in California, which will likely continue as the RPS requirements increase to 60% in 2030. As oversupply instances increase~~s~~ during the peak solar hours of 10am-3pm, solar and winds units must be curtailed to stop congestion on the grid.

Based on available information, over the past few years maximum load served by wind and solar in the CAISO exceed~~ed~~ed 50% but in 2020 has exceeded 70% in some hours, especially in the spring when retail load is light. Curtailment events have increased significantly from 371,000 MWh in 2017 to 1,250,000 MWh~~959,000~~ in 202~~1~~1~~9, though down 5% since from the 2020 highs~~with 2020 being the highest economic curtailment to date.

Commercial Energy has limited experience managing negative pricing but works with a team to hedge and schedule energy based on costs and forecasts. In some of Commercial Energy's past contracts, curtailment has affected delivery volumes. Because of this, Commercial Energy now structures contracts where the seller is responsible for delivering firm volumes. If the facilities are curtailed, the seller must replace the energy and RECs from other facilities. At such a time that Commercial Energy does own generation assets for RPS compliance, Commercial Energy fully expects to balance their load, probably with battery storage, so negative prices will unlikely impact any generation plans. As Commercial Energy

increases their knowledge of curtailment, Commercial Energy will continue to address and analyze any experience relating to curtailment frequency, forecasting, and costs.

14. Cost Quantification – (Section 5.14)

Please see this information in the excel spreadsheet attached hereto as Appendix E.

15. Coordination with the IRP Proceeding – (Section 5.15)

15. Coordination with Integrated Resource Planning - §399.13 (Section 5.15)	**RPS Alignment in IRPs**
III. Study Results a. Conforming and Alternative Portfolios	Commercial Energy employs a procurement strategy of making procurements secured through a mix of bundled and REC-only transactions. Commercial Energy currently does not own any generation resources but is actively looking for opportunities to purchase or contract with new facilities. As stated in the Procurement Plan, Commercial Energy is on track for compliance and intends to have its Conforming Portfolios for the IRP meet its targets using the same strategy outlined in this plan. Commercial Energy ~~has created~~ will create both Conforming Portfolios~~, which~~ to align ~~with the strategies outlined in the Procurement Report. Commercial Energy has made procurements significantly in excess of the RPS requirements while achieving the GHG emissions targets in both the 38MMT and 46MMT portfolios.~~
IV. Action Plan a. Proposed Activities	Commercial Energy intends to use bundled and REC-only transactions from suppliers with existing RPS facilities to implement both Conforming Portfolios for the IRP.

	Commercial Energy has met both their long-term contracting requirement and met the requirements for their Conforming Portfolios through contracts with existing facilities. Commercial Energy will continue to evaluate additional procurement options as load forecasts change in the future.
IV. Action Plan b. Procurement Activities	Commercial Energy currently does not own any generation resources and therefore has no position on solicitation strategies. If and when this changes, Commercial Energy will provide an updated solicitation strategy including, type of solicitation, timeline, desired online dates, and other relevant information.
IV. Action Plan c. Potential Barriers	As Commercial Energy procures through a mix of bundled and REC-only transactions, there is minimal risk associated with the potential retirement of existing RPS resources. Commercial Energy has no stand-alone contracts for facilities that are not currently online but will reevaluate potential barriers if that changes. Due to Commercial Energy's relatively small market share, ability to procure the exact mix of resources in its conforming portfolios may prove difficult, thus Commercial Energy will continue to refine and improve the accuracy of its portfolios as it approaches the 2032~~0~~ planning horizon. Commercial Energy will file their first ~~updated~~ RDT ~~with new procurements~~ in ~~August 2021~~November 2022.

16. Confidentiality

Commercial Energy intends to file a motion for confidential treatment of portions of its 20221 RPS Procurement Plan along with an unexpurgated copy of the Plan. Redacted information included in this submission has been designated "Confidential".

Respectfully submitted this 18th 6th day of JulyMayJanuary 20223 at Oakland, CA.

Curry Stypula
President
7767 Oakport St., Suite 525
Telephone: (510) 567-2700
Facsimile: (510)567-2715
Email:
curry.stypula@commercialenergy.net
Dated: JulyJanuary 18May 27, 20232

Verification

I am an officer ~~er~~ of Commercial Energy of Montana, Inc. dba Commercial Energy of California and am authorized to make this verification on its behalf. The statements om the foregoing document are true of my own knowledge, except as to matters which are therein state on information and belief, and as to those matters I believe them to be true.

I declare under penalty of perjury that the forgoing is true and correct, and that this verification is executed on this 18th ~~st~~ ~~6th~~ day of ~~July~~~~May~~ January 2023~~2~~ at Oakland, California.

Curry Stypula
President
Commercial Energy of Montana, Inc. dba
Commercial Energy of California

Appendix B

Reporting LSE Name	RPS Contract ID	Project Name	Technology Type	Project Development Phase	City	County	State	Zip Code	Latitude	Longitude	Contract Length (Years)	Contract Execution Date (mm/dd/yyyy)	Contract Start Date (mm/dd/yyyy)	Contract End Date (mm/dd/yyyy)	Contract Capacity	Expected Annual Generation	Total Contract Volume	Commercial Operation Date (COD)	Transmission Status	Storage Rated Power (MW)	Storage Capacity (MWh)	Project Notes

Appendix C

Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name	Commercial Energy of Montana, Inc dba Commercial Energy of California
Date Filed	/ 8/23

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	2025-2027	2028 Forecast	2029 Forecast	2030 Forecast	2028-2030	2031 Forecast	2032 Forecast
		Forecast Year					CP 3		1	2	3	CP 4	4	5	6	CP 5	7	8	9	CP 6	10	11
		Annual RPS Requirement																				
A		**Total Retail Sales (MWh)**	106,972	90,055	88,429	100,486	393,942						693,964	694,162	694,073	2,082,199	695,236	693,981	693,960	2,083,179	693,964	694,057
B		RPS Procurement Quantity Requirement (%)	27.0%	29.0%	31.0%	33.0%	29.9%	35.8%	38.5%	41.3%	44.0%		46.7%	49.3%	52.0%	49.3%	54.7%	57.3%	60.0%	57.3%	60.0%	60.0%
C	A*B	**Gross RPS Procurement Quantity Requirement (MWh)**	28,882	28,436	27,413	33,160	117,891.8						323,873	342,430	360,918	1,027,221.1	380,087	397,859	416,876	1,194,821.9	416,378	417,634
D		Voluntary Margin of Over-procurement (MWh)					-						16,194	17,122	18,046	51,361	19,004	19,893	20,819	59,716	20,819	20,882
E	C+D	**Net RPS Procurement Need (MWh)**	28,882	28,436	27,413	33,160	117,892						340,067	359,552	378,964	1,078,582	399,091	417,752	437,695	1,254,538	437,197	438,516
		RPS-Eligible Procurement																				
Fa		**Risk-Adjusted RECs from Online Generation (MWh)**	350	57,350	9,115	51,341	118,156	77,594	160,882	295,222	293,633	827,331	273,815	272,637	272,160	818,112	272,239	273,179	268,539	811,957	174,992	109,679
Faa		Forecast Failure Rate for Online Generation (%)					#DIV/0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Fb		**Risk-Adjusted RECs from RPS Facilities in Development (MWh)**					-					-				-				-		
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)					#DIV/0	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Fc		**Pre-Approved Generic RECs (MWh)**					-					-				-				-		
Fd		**Executed REC Sales (MWh)**					-					-				-				-		
F	Fa+Fb+Fc-Fd	**Total RPS Eligible Procurement (MWh)**	350	57,350	9,115	51,341	118,156	77,594	160,882	295,222	293,633	827,331	273,815	272,637	272,160	818,112	272,239	273,179	268,539	811,957	174,992	109,679
F0		Category 0 RECs					-			72,334	71,233	143,567	57,105	56,861	56,603	170,569	56,505	56,116	55,922	168,543	55,725	55,616
F1		Category 1 RECs		42,000	8,765	47,459	98,224	76,712	160,000	221,234	220,743	678,689	214,939	214,755	214,536	644,230	214,712	214,042	212,128	640,882	118,778	53,573
F2		Category 2 RECs		8,000			8,000					-				-				-		
F3		Category 3 RECs	350	7,350	350	3,882	11,932	882	882	1,654	1,657	5,075	1,271	1,021	1,021	3,313	1,022	1,021	489	2,532	489	490
		Gross RPS Position (Physical Net Short)																				
Ga	F-E	**Annual Gross RPS Position (MWh)**	(28,532)	28,914	(18,298)	18,181	264						(66,752)	(86,915)	(106,804)	(260,470)	(126,852)	(146,573)	(168,656)	(442,081)	(262,205)	(328,837)
Gb	F/A	Annual Gross RPS Position (%)	0%	50%	10%	51%	30%						39%	39%	39%	39%	39%	39%	39%	39%	25%	16%
		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)					-					-				-				-		
		Net RPS Position (Optimized Net Short)																				
La	Ga+Ia-Ib-Hc	**Annual Net RPS Position after Bank Optimization (MWh)**																				
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)																				

Note All values are to be input in MWhs

Appendix D

RESPONSES TO RESIDUAL NET SHORT QUESTIONS

I. RPS COMPLIANCE RISK

1. How do current and historical performance of online resources in your RPS portfolio impact future projections of RPS deliveries and your subsequent RNS?

For its long-term contracting, Commercial Energy specified firm hourly volumes of renewable energy from an aggregated mix of resources to mitigate any historic performance risk on projections of RPS deliveries and RNS compliance.

2. Do you anticipate any changes to the current bundled retail sales forecast? If so, describe how the anticipated changes impact the RNS.

Commercial Energy is a non-utility retail seller and accordingly, does not forecast bundled retail sales. However, the effect of this past year's Shelter-In-Place order may have structural effects on the business sector in California with significant effects on the size and shape of hourly electricity usage in future years. If the losses in load of Commercial Energy's individual customers persists, say because of a decrease in occupancy in office buildings, then this could lead to a longer, not shorter, renewable position, as that load migrates to residential load that they are not allowed to serve today. Commercial Energy is reliant on the success of its value proposition with its customers on an annual basis to grow its clients or not.

3. Do you expect curtailment of RPS projects to impact your projected RPS deliveries and subsequent RNS?

Unless there are curtailments of RPS projects that Commercial Energy is not aware of, the company does not anticipate that any curtailment will impact projected RPS deliveries and subsequent RNS that they have contracted for unless it is large enough to hamper the efforts of non-utility retail sellers to meet their RPS obligations.

4. Are there any significant changes to the success rate of individual RPS projects that impact the RNS?

There are no significant changes to report.

5. **As projects in development move toward their COD, are there any changes to the expected RPS deliveries? If so, how do these changes impact the RNS?**

Commercial Energy has no information on this subject.

RECS ABOVE THE PROCUREMENT QUANTITY REQUIREMENT

6. **What is the appropriate amount of RECs above the PQR to maintain? Please provide a quantitative justification and elaborate on the need for maintaining banked RECs above the PQR.**

Commercial Energy has planned and will continue to plan to make procurements commensurate with its obligations for each compliance period. Commercial Energy is in constant communication with its customers about their desires to decarbonize their energy purchases and will purchase products to satisfy their future needs with the goal of providing a 100% greenhouse gas free portfolio to every customer that wants it.

Regarding forecasting and banking above the PQR, this past year has shown a load loss of up to 20% in certain sectors of the commercial space, especially the hospitality industry, while a more muted increase in residential energy usage. Because Commercial Energy is an ESP and not a CCA or IOU, they can only serve the more negatively impacted portion of the market. While they could stipulate a percentage, that percentage is a function of the underlying load assumption, economic growth, governmental return-to-work policies and a host of other uncertainties too broad to produce a meaningful percentage. At this time, Commercial Energy creates an internal, informed load forecast for each customer for each year and procures to that amount. Because their compliance obligation is dictated by what the Commission tells Commercial Energy is their load forecast, they compare the two. If the Commission forecast is

higher, they comply to that number, with the intent to sell excess as the year unfolds. If it is lower, they comply to their internal number. Spot buys will close the difference near year end.

7. **What are your strategies for short-term management (10 years forward) and long-term management (10-20 years forward) of RECs above the PQR? Please discuss any plans to use RECs above the PQR for future compliance and/or to sell RECs above the PQR.**

Please see response to Question 6 above and note that Commercial Energy is above its compliance obligation for the next ten years that will roll forward for future compliance.

VOLUNTARY MARGIN OF OVERPROCUREMENT

8. **Provide VMOP on both a short-term (10 years forward) and long-term (10- 20 years forward) basis. This should include a discussion of all risk factors and a quantitative justification for the amount of VMOP.**

Please see response to Question 6 above.

9. **Please address the cost-effectiveness of different methods for meeting any projected VMOP procurement need, including application of forecast RECs above the PQR.**

Please see response to Question 6 above.

COST EFFECTIVENESS

10. **Are there cost-effective opportunities to use banked RECs above the PQR for future RPS compliance in lieu of additional RPS procurement to meet the RNS?**

Commercial Energy has no opinion on this topic at this time.

11. **How does your current RNS fit within the regulatory limitations for PCCs? Are there opportunities to optimize your portfolio by procuring RECs across different PCCs?**

Commercial Energy has no opinion on this topic at this time.

Appendix E

LSE Name:	Commerc a Energy of Montana, Inc. dba Commerc a Energy of Ca forn a
Date Filed:	1/18/23

Input Requ red No Input Requ red

	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	B ogas: D gester Gas			
3	B ogas: Landf Gas			
4	B od ese			
5	B omass	$88,526.50	$317,735.90	$235,562.30
6	Mun So d Waste			
7	Geotherma			
8	Sma Hydro (Non-UOG)			
9	Condu t Hydro			
10	Water Supp y / Conveyance			
11	Ocean Wave			
12	Ocean Therma			
13	T da Current			
14	So ar PV (Non-UOG)		$245,000.00	$680,709.75
15	So ar Therma			
16	W nd		$315,000.00	
17	Unbund ed RECs (REC On y)	$1,975	$17,603.00	$4,103.00
18	Var ous (Index P us REC)***			
19	Fue Ce			
20	UOG: Sma Hydro			
21	UOG: So ar PV			
22	UOG: Other			
23	Executed REC **Sales** (Revenue)			
24	**Total RPS-Eligible Procurement and Generation Net Cost**	**$90,502**	**$895,339**	**$920,375**
25	Tota Reta Sa es (MWh)	88,429	100,486	277,526
26	**Incremental Rate Impact**	**$0.10**	**$0.89**	**$0.33**

	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 Land ill 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 hermal											
13	idal Current											
14	Solar PV (Non-UOG)											
15	Solar hermal											
16	Wind											
17	Unbundled RECs (REC Only)											
18	Various (ndex 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	otal Retail Sales (MWh)	[redacted]			693,964	694,162	694,073	695,238	693,981	693,960	693,964	696,057
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	[redacted]										
30	Biogas Land ill 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 hermal											
40	idal Current											
41	Solar PV (Non-UOG)											
42	Solar hermal											
43	Wind											
44	Unbundled RECs (REC Only)											
45	Various (ndex Plus REC)***											
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**											
53	otal Retail Sales (MWh)	[redacted]	[redacted]	[redacted]	693 964	694 162	694 073	695 238	693 981	693 960	693 964	696 057
54	**Incremental Rate Impact**	[redacted]										
55	**Total RPS-Eligible Procurement and Generation Cost**											
56	**Total Incremental Rate Impact**											

*Note echnology de initions are given in the PCC Classi ication Handbook located in the RPS Compliance Reporting section o https //www cpuc ca gov/RPSComplianceReporting/

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

***Note he "Various" technology type is to be used in the case o contracts encompassing multiple acilities where the generation type is not yet known

****Note For OUs and SMJUs nclude all executed contracts that required CPUC approval For CCAs and ESPs nclude all executed contracts that have been approved through relevant ormal approval processes

	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			
3	Biogas: Landfill Gas			
4	Biodiesel			
5	Biomass	8,765	31,459	23,323
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)		7,000	53,389
15	Solar Thermal			
16	Wind		9,000	
17	Unbundled RECs (REC Only)	350	3,882	882
18	Various (Index Plus REC)***			
19	Fuel Cell			
20	UOG: Small Hydro			
21	UOG: Solar PV			
22	UOG: Other			
23	Executed REC Sales (MWh)			
24	**Total RPS Eligible Procurement (MWh)**	**9,115**	**51,341**	**77,594**

	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	[redacted]										
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)				79,999	79,999	79,999	80,169	79,999	79,167	32,567	
40	Solar Thermal											
41	Wind				79,999	79,999	79,999	80,169	79,999	79,167	32,567	
42	Unbundled RECs (REC Only)				1,271	1,021	1,021	1,022	1,021	489	489	490
43	Various (Index Plus REC)***				112,046	111,618	111,141	110,879	110,160	109,716	109,369	109,189
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**				**273,315**	**272,637**	**272,160**	**272,239**	**271,179**	**268,539**	**174,992**	**109,679**
51	**Total RPS Eligible Procurement (MWh)**				**273,315**	**272,637**	**272,160**	**272,239**	**271,179**	**268,539**	**174,992**	**109,679**

Appendix F

Track 2 - 2022 RPS Procurement Plan Checklist- Task Completed

Retail seller name:	**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 Responsiveness to Local and Regional Policies	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 Draft 2022 RPS Plan	YES	

Appendix G