

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking to Continue
Implementation and Administration, and
Consider Further Development, of California
Renewables Portfolio Standard Program.

Rulemaking 18-07-003

**AMENDED 2020 RENEWABLES PORTFOLIO STANDARD PROCUREMENT
PLAN OF WESTERN COMMUNITY ENERGY**

**PUBLIC VERSION
(Appendix E Redacted)**

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September 4, 2020

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OF THE STATE OF CALIFORNIA**

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1. MAJOR CHANGES TO RPS PLAN

**Table 1
Major Changes from Final 2019 RPS Procurement Plan to
Draft 2020 RPS Procurement Plan**

Plan Reference	Plan Section	Summary/Justification of Change
2020 Draft RPS Plan: Section 2.A.	Introduction	New Ruling replaced 2019 Rulings.
2020 Draft RPS Plan: Section 2.B.	Background	Updated background now that WCE commenced service and provided information and power supply solicitations and status.
2020 Draft RPS Plan: Section 3.	Summary of Legislative Compliance	Updated for new contracts, pending bids, and planned RFO.
2020 Draft RPS Plan: Section 4.A.	Portfolio Supply and Demand	Load forecast description updated to reflect new information from Southern California Edison (SCE)
2020 Draft RPS Plan: Section 4.A.1.	Portfolio Optimization	Added information on recent solicitations for diverse power supply
2020 Draft RPS Plan: Section 4.B.1.	Long-Term Procurement	Information on WCE long-term contract added
2020 Draft RPS Plan: Section	Portfolio Diversity and	Added information on recent solicitations for diverse power supply

Plan Reference	Plan Section	Summary/Justification of Change
4.C.	Reliability	
2020 Draft RPS Plan: Section 5.	Project Development Status	Updated with PCC3 contract and how that contract impacts WCE's future compliance obligation with regard to Project Development Status
2020 Draft RPS Plan: Section 7.	Risk Assessment	Added additional narrative on risks and management
2020 Draft RPS Plan: Section 8.	Renewable Net Short Calculation	Updated with WCE MMoP for future years
2020 Draft RPS Plan: Sections 9, 9.A., and 9.B.	Minimum Margin of Procurement	Clarified WCE approach to MMoP and assumptions included for Section 8 response.
2020 Draft RPS Plan: Sections 10., 10.B., and 10.C.	Bid Solicitation Protocol	Added bid valuation protocol for existing and future bids in compliance with the Public Utility Code and WCE's least cost best-fit analysis.
2020 Draft RPS Plan: Section 11.	Safety Considerations	Added clarification for WCE's approach to safety when contracting for resources that are not owned or operated by WCE.
2020 Draft RPS Plan: Section 12.	Consideration of Price Adjustment Mechanisms	Added clarity for how WCE may consider price adjustment mechanisms for undeveloped projects with lead times greater than 24 months.
2020 Draft RPS Plan: Section 13.	Curtailment Frequency and Forecasting Costs	Updated curtailment information based on 2020 Spring data from CAISO, included quantitative analysis of curtailment and negative pricing.
2020 Draft RPS Plan: Section 14.	Cost Quantification	Updated for the only currently executed renewable contract.
2020 Draft RPS Plan: Section 15.	Coordination with IRP Proceeding	New section.

2. EXECUTIVE SUMMARY

2.A. Introduction

In accordance with the California Public Utilities Commission's ("Commission") May 6, 2020 Assigned Commissioner and Assigned Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2020 Renewables Portfolio Standard Procurement Plans ("ACR") and the May 13, 2020 E-Mail Ruling Modifying Schedule of Review for 2020 RPS Procurement Plans Issued in the May 6, 2020 RPS Plan Ruling, Western Community Energy ("WCE") submitted 2020 Renewables Portfolio Standard Procurement Plan ("RPS Procurement

Plan”) on July 6, 2020. As directed by the ACR, the RPS Procurement Plan included responses for the issues expressed in ACR.

Upon filing of the RPS Procurement Plan, it was discovered that the plan was inadvertently filed at 5:13 p.m. and was missing certain exhibits. After consultation with the CPUC Docket Office, WCE notified Administrative Law Judge Lakhanpal of the late filing and errors, in a letter posted to the service list on July 9, 2019, requesting a July 6, 2020 correction to the filing date and re-filing of the plan. The RPS Procurement Plan was subsequently accepted by the CPUC Docket Office; however the accompanying confidentiality motion was rejected because the RPS Procurement Plan did not contain confidential information due to the missing exhibits. The undersigned’s staff has been working diligently with the CPUC Docket Office to correct the plan, and hereby files an amended and complete RPS Procurement Plan and confidentiality motion, with a continuing request for a filing date of July 6, 2020.

2.B. Background

WCE is a California joint powers authority located within the geographic boundaries of Riverside County, formed in 2018 to offer rate savings to electricity customers and develop and implement sustainable energy initiatives, and began servicing load in April and May 2020. These initiatives aim to reduce energy demand, increase energy efficiency and advance the use of clean, efficient and renewable resources available in the region. WCE’s member agencies include seven cities located in Riverside County – the Cities of Canyon Lake, Eastvale, Hemet, Jurupa Valley, Norco, Perris, and Wildomar. The City of Canyon Lake has not begun service and may not until 2022. WCE members desire to further WCE goals by implementing and administering a common community choice aggregation (“CCA”) program (“Program”) available to members that elect to become Program participants (“CCA Members”).

WCE submitted its Implementation Plan and Statement of Intent to the Commission on December 20, 2018, with an anticipated launch date of April 2020. WCE had provided the anticipated launch date to the Commission and SCE through informal discussion as early as March 2018. On March 7, 2019, SCE notified WCE through the meet and confer process established by Resolution E-4907 that SCE's Customer Service Re-Platform ("CSRP") project would freeze all CCAs from launching in the first half of 2020 (and late 2019), and that WCE could launch in July 2020 or thereafter, with a suggested risk preference that newly certified CCAs should launch in the fall of 2020. Both SCE and WCE brought the implementation issues to the attention of Energy Division staff.

On June 21, 2019, WCE submitted its 2019 RPS Plan with the Commission noting the CSRP implementation issue and that a change in WCE's launch date was the subject of discussions between WCE, SCE and Commission staff. On August 22, 2019, SCE filed Advice Letter 4058-E stating that WCE would move its launch date to July 2020 and that SCE would allocate resource adequacy on WCE's behalf for 2020 and transfer RA to WCE for its 2021 and 2022 compliance obligations. On August 16, 2019, WCE filed its amended load forecast noting the revised July 2020 launch date and that SCE was allocating RA on WCE's behalf for the three-year RA compliance obligation. SCE included WCE's load in its forecast for 2020, 2021, and 2022 compliance. Subsequently, WCE and SCE agreed that it was technically and economically prudent to have WCE launch around its original April 2020 timeframe due to CSRP implementation schedule changes. On December 11, 2019, SCE filed Advice Letter 4058-E-B as a supplement to Advice 4058-E revising WCE's launch date whereby three member cities (Cities of Norco, Perris and Wildomar) will begin service in April 2020, and three additional member cities (Cities of Eastvale, Hemet and Jurupa Valley) will begin service in May

2020.

The advice letters were approved, and WCE launched three cities in April 2020 and the following three cities in May 2020. The other member city, Canyon Lake, is evaluating a launch in 2022. Under this plan, only six of the seven cities are included as Canyon Lake has not yet committed to a 2022 launch.

3. SUMMARY OF LEGISLATIVE COMPLIANCE

The WCE Board voted to set its Renewables Portfolio Standard compliance percentage for the 2020 period at 37%. This percentage exceeds the state-mandated compliance of 33.8%. Based upon WCE's forecasted usage for 2020 will result in a target of 403,000 MWh's to be in line with the 37% target goal. Therefore, WCE's targets for procurement for the 2020 campaign will be a minimum of 302,000 MWh's of PCC1, a maximum of 61,000 MWh's of PCC2, and only 40,000 MWh's of PCC3. WCE has entered a contract for 34,000 MWh of PCC3 RECs to help WCE meet RPS mandates over the next 10.5 years. WCE has also submitted a bid to SDG&E's request for renewable bids for RECs that would help satisfy the short-term portion allowed for WCE's RPS requirements. WCE submitted its bid on June 22, 2020 and, if successful, expects it will be notified by July 20, 2020. Deliveries would begin January 2021. The offer presented is based upon a forecast schedule of 1,500,000 MWh's consumed in 2021 and 2% annual growth factor for the ten-year period. WCE is seeking to procure an average of 468,700 MWh's annually to meet the SB350 compliance mandate. At the time of this filing, the results of the RFO are still pending.

For PCC1 and PCC2, WCE plans to present an RFO for the 2020 compliance year volumes, which is due for distribution during the third quarter of 2020 to meet the respective amounts.

4. ASSESSMENT OF RPS PORTFOLIO SUPPLIES AND DEMAND

4.A. Portfolio Supply and Demand

WCE expects to launch its program with 37% RPS resources to meet its 2020 RPS compliance obligations (33.8%) and will continue to meet its RPS compliance obligations during the coming ten-year timeframe. The exact portfolio characteristics selected may vary depending on legislative and policy changes, technological improvements, and preferences of the community, as well as other key local developments, such as the potential launch of the City of Canyon Lake in 2022.

WCE is currently focused on rounding out its portfolio of resources, including renewable resources for 2020 and beyond, as well as monitoring the potential launch of Canyon Lake in 2022. WCE is currently in negotiations for long-term renewable resources that will help WCE meet Compliance Period 3 (2020) and 4 (2021-24) obligations, which are the first period for which a long-term contract obligation exists. Load data issues that were only recently remedied by SCE in May 2020 delayed the RFO for renewable energy. The load discrepancies delayed the release of renewable RFO so that WCE could avoid over procurement based on inaccurate data.

WCE will continue to examine and estimate supply and customer demand and will structure its future procurement efforts to balance customer demand with resource commitments for current loads as well as the potential for future expansion. This examination of customer demand and other market developments will help reduce costs and assist in meeting planned procurement for the period reflected in the 2020 RPS Procurement Plans.

4.A.1 Portfolio Optimization

WCE has issued three RFOs for power supply since January 2020. The first two supplied baseload energy to WCE customers. The last, discussed in more detail in 4.B.1., was for long-

term renewable resources.

In June 2020, eleven CCAs released a Joint Request for Information (RFI) for long-duration storage resources. It is expected that WCE will join a joint RFO for storage technologies in August 2020 as a result of the Joint RFI. Additionally, WCE issued an RFP for Demand Response programs on April 29, 2020, with responses due May 26, 2020. WCE is in the process of evaluating the responses.

4.B. Responsiveness to Policies, Regulations, and Statutes

WCE is a joint powers authority and local agency, as defined by state law, that is subject to the control of the WCE Board of Directors and is directly accountable to its ratepayers and the communities it serves. WCE strongly supports and is committed to meeting the state's GHG reduction and renewable procurement goals. Within the RPS multi-year compliance period, WCE will be well-positioned to meet the procurement quantity, portfolio balance and, long-term procurement requirements of the RPS program with an additional margin of over-procurement.

4.B.1. Long-Term Procurement

WCE is aware of its requirements under SB 350, including the obligation to procure at least 65% of the state-mandated level of renewable energy under long-term contracts of at least ten years in length beginning in 2021. In addition, WCE must meet the long-term contract requirements for 2020 set at 0.25% of load. WCE has contracted for long-term PCC3 resources to begin delivery in June 2020 to meet the 2020 long-term contract requirement.

WCE has developed and maintains a 10-year projection of load and renewable energy requirements for the period of 2021-2030. For Compliance Period 4 (2021-24), WCE is currently forecasting a total of 2,489 gigawatt-hours of energy that will need to be procured from renewable generating resources with 1,618 gigawatt-hours needing to be procured under a long-

term agreement to meet WCE's RPS compliance obligations.

Over the remainder of 2020, WCE intends to plan for the procurement of longer-term PCC1 contracts. This planning is necessary to comply with the renewable procurement requirements of SB 350. The fact that new renewable generating facilities typically require long-term PPAs with terms ranging from 10 to 25 years. WCE's goal is to reach a steady state of procurement in which it contracts 4% to 8% of its projected annual PCC1 requirements each year via long-term contracts. Doing so will provide specific benefits, including allowing WCE to steadily reduce its exposure to renewable energy and energy market price risks in a manner similar to the programmatic hedging approach for Fixed-Price Block Energy, and ensuring that WCE is in a position to make strategic procurement decisions and, if appropriate, commitments every year.

The WCE Board of Directors has not yet finalized a formal planning margin to for contingency against a generator under-performing relative to expectations or loads exceeding expectations. WCE is tentatively considering a 2% margin and has also committed to provide power supply that exceeds the SCE renewable content portfolio.

Given the multi-year compliance structure, and in consideration of the potential to partner with other CCAs or ESPs and run its own renewable solicitation, WCE is positioned to meet its procurement obligations. WCE has issued RFOs for long-term renewable contracts and has responded to SDG&E's request for bids.

4.C. Portfolio Diversity and Reliability

WCE plans to consider the deliverability characteristics of its resources (such as the resource's dispatchability and available capacity) and to review the respective risks associated with short and long-term purchases as part of its forecasting and procurement processes. These

efforts will lead to a more diverse resource mix, address grid integration issues and provide value to the local community. As noted previously WCE plans to evaluate several resource options through the RFP process including conventional base load, storage, demand-side, short-term, and long-term renewables.

4.D. Lessons Learned

WCE has just begun its competitive solicitations for power supply and does not have lessons learned to share at this time.

5. PROJECT DEVELOPMENT STATUS

Since WCE is in the initial phases of procurement, it has not entered contracts with facilities that are not yet in commercial operation. WCE has entered a long-term contract for PCC3 RECs from post-construction resources. This long-term contract will assist WCE in meeting its long-term procurement requirements and will also limit future quantities of PCC3 RECs WCE could purchase in the future to satisfy its RPS requirement. WCE is now focused on contracting for PCC1 and PCC2 RECs for the remainder of its initial renewable procurement phase. Both of these category renewables will be sourced from post-construction resources. Future solicitations may result in contracts with resources that are in earlier phases of construction, depending on pricing and availability of existing resources, technology attributes, and portfolio diversity. This section will be updated as WCE broadens its portfolio with resources that are in various stages of construction.

6. POTENTIAL COMPLIANCE DELAYS

WCE does not anticipate any compliance delays for this compliance period. If a future compliance issue is identified, then WCE will address those issues and then describe them in a subsequent RPS Procurement Plan. Potential future issues may include inadequate transmission

capacity, permitting delays, insufficient eligible energy resources supply, unanticipated curtailment, and unanticipated increase in retail sales.

7. RISK ASSESSMENT

Since WCE is in the initial phases of power procurement, it has not entered into contracts with facilities that are not yet in commercial operation. As noted in Public Utilities Code section 399.13(a)(5)(A) and the ACR, generation variability and resource availability may impact the amount of future electricity delivered. On October 11, 2019, WCE adopted an Energy Risk Management Policy, which examines potential risk in forecasting as well as during procurement review and decision making. This Energy Risk Management Policy was developed through a thorough understanding of lessons learned.

In general terms, WCE's process for minimizing and avoiding risk commences with the development of its renewable energy solicitations as to its bid requirements and evaluation criteria. This criteria is intended to identify suppliers that have demonstrated a strong track record of successful project completion and ongoing project operation. Such counterparties are more likely to timely complete project development activities and successfully operate projects placed under contract. Key risk factors are considered during evaluation of each prospective renewable energy seller, including counterparty credit rating and general financial standing; California-based project development experience; prior experience with CCA off-takers; commercial viability of the proposed generating technology; and progress towards key development milestones such as interconnection status, deliverability studies, siting, zoning, permitting and financing requirements. To the extent that a prospective renewable energy procurement opportunity comes to fruition and a contract is executed, development will be rigorously monitored by WCE's power supply resources team.

WCE also seeks to minimize unnecessary financial exposure and general planning risk by assembling a diversified portfolio of renewable generating resources and products that are intended to complement the way its customers use electric power. Additionally, WCE believes it is important to manage temporal risks associated with 1) disproportionate exposure to prevailing market conditions at any point in time, and 2) lack of diversity related to contract start dates, end dates or term lengths within its renewable energy portfolio. WCE intends to regularly administer renewable energy solicitations over time, which should diversify its exposure to ever-changing market conditions, like the “dollar cost averaging” methodology that is regularly employed within the financial sector. WCE’s contracting approach will endeavor to “sample” the market at regular intervals, avoiding large contractual commitments in high-priced environments or missed opportunities in low-priced environments. WCE also plans to stagger contract start/end dates and related term lengths in order to avoid planning “cliffs” that could occur if contracts of similar lengths and start dates were all executed at the same time. The assembly of short-, medium- and long-term contracts further diversifies risk within WCE’s renewable supply portfolio, and while increased long-term RPS contracting requirements will inevitably exacerbate such risks, WCE will continue to pursue portfolio diversity by thoughtfully considering these temporal considerations during ongoing procurement processes.

Specific risks further analyzed in this section are described briefly below.

- **Peak Shifting** – Resources such as behind-the-meter solar shift peaking periods to the later part of the day. In order to mitigate the impacts of these resources WCE has initiated the process to obtain energy storage resources, and WCE has implemented time-of-use rates that reflect the cost of energy procurement during peak periods. WCE is considering a CPP program that that incentivizes

participants to shift loads away from the highest summer demand periods.

- Load Departure or Growth – WCE’s load growth is impacted by future behind-the-meter capacity growth, demand-side management programs, the addition of new cities, economic circumstances, and the ability of WCE to compete with SCE rates. WCE regularly maintains a long-term load forecast that informs its procurement strategies reducing the risk of having to resell energy after procurement, or the risk of not meeting compliance requirements due to unexpected changes in retail sales. WCE’s load forecast is evaluated through regression analysis to periodically assess the various potential risks. Specifically, the energy industry has felt the impacts of COVID-19 over the last several months. The outbreak has contributed to the dampening demand for energy, specifically in the industrial and commercial sectors. In addition, the pandemic has also resulted in changed behavior for residential load affecting daily and weekly load shapes as well as increased consumption overall in those rate classes. WCE uses an econometric forecasting model estimate near-term and medium-term loads. The model has the ability to simulate the load forecast for future disruption events including one such as COVID-19. In modeling the COVID-19 scenario, WCE is able to adjust consumption behaviors between rate classes, lowering or raising consumption specific to commercial/industrial and residential customers. This analysis has helped identify changes to the load forecast and also the impact on cash flows and profitability of WCE. WCE continually updates the simulation model adjusting for the length of COVID effects as well as several

other parameters including weather, demand-side management investment, and program opt-out rates.

- Variable Generation – WCE has offered a quantitative analysis on curtailment in Section 13 of this Plan. Wind projects are typically associated with the greatest amount of generation variability. WCE does currently hold contracts for wind resources; however, the potential for storage would mitigate variable generation risks associated with all variable generation projects.
- Resource Availability – WCE does not currently hold contracts with resources that have significant availability risks such as biofuel or hydroelectric. WCE does recognize that resource availability for other projects (especially large hydro) will impact the larger wholesale energy market and WCE’s Energy Risk Management Policy addresses this concern.
- System Reliability – WCE’s portfolio diversity goals and compliance with the Resource Adequacy (RA) program will ensure WCE’s portfolio supports grid stability and reliability. As the penetration of renewable energy resources increases on both the system and in WCE’s portfolio, WCE will likely need to increase its procurement of each type of RA (local, system, flex). To this end, WCE evaluates the value of capacity for each proposed project based on the market value at SP15, and project contribution to fulfilling WCE’s RA requirements. While WCE plans to procure its own RA, the recent decision (D. 20-06-002_) renders SCE the Central Procurement Entity for WCE’s service area. In the event WCE is unable to procure to meet its RA requirements, WCE may elect to have SCE acquire RA on its behalf.

Since WCE is in an initial procurement phase, and in terms of its ability to demonstrate compliance with California's RPS procurement mandates, WCE does not anticipate any particular development or operational risks that would materially impact its planned progress in this regard. This perspective is bolstered by WCE's internally adopted renewable energy procurement target, which seeks to meet and exceed California's RPS mandate by a minimum of 2% and a maximum of 10%. WCE's planning criteria is reflected in its quantitative response in Section 8 and the attached appendices. WCE has not performed a risk assessment of its renewable portfolio as the portfolio consists of only one contract at the time of this filing. WCE is working to filling out its renewable portfolio and relies on its Energy Risk Management Policy, internal goals, and lessons learned to manage the procurement risks mentioned in this section.

8. RENEWABLE NET SHORT CALCULATION

Because WCE is still in the process of initial procurement, the risk assessment does not directly impact the renewable net short calculation (RNSC). The RNSC reflects WCE's commitment to procure 37% RPS for the year 2020. It also includes an assumption that WCE will over procure RPS resources by 2% beginning in 2021. WCE will continually update this margin throughout subsequent IRPs and RPS Procurement Plans as WCE enters into contracts associated with specific projects. It is highly speculative to include a risk assessment prior to securing contracts with specific RPS resources. A generic risk assessment indicates that over procurement is an appropriate initial approach to managing generic risks.

9. MINIMUM MARGIN OF PROCUREMENT (MMOP)

WCE is committed to delivering the renewable content that it will advertise to the local community and has been approved by its Board of Directors. To meet the requirements of SB 100, WCE has established a 2020 renewable target of 37% and a 2030 renewable target of 60%.

To account for variability in load and uncertainty in supply, WCE will typically over-procure to provide a cushion to meet its objectives. Additionally, WCE has committed, in the near-term, to provide power supply that exceeds the share of renewable energy content offered by SCE. For 2020, WCE plans to procure 37% from renewable resources, which exceeds the 2020 requirement of 33.8% by 3.2%. At this time, WCE has selected a MMoP of 2% for 2022 and beyond. This procurement margin will mitigate compliance risk for existing resources and covers the current expected curtailment rate of 1%. As WCE contracts for pre-construction resources, WCE's MMoP will likely be adjusted as the risk to WCE increases by adding development risk to WCE's power portfolio. Changes to the MMoP will be communicated in future RPS Procurement Plans.

As conditions change and the need arises, WCE will use the market to procure short-term RECs to meet any possible shortfalls. As long-term renewables come online, it is presumed that there will be less need to rely on the short-term market. If WCE's Board of Directors engages in additional discussion regarding this concern and adopts related policy guidelines, such information will be communicated in a future RPS Plan.

9.A. MMoP Methodology and Inputs

WCE's Board of Directors approved a renewable content of 37% for the years 2020 and 2021. Beyond 2022, WCE will seek to exceed the renewable portfolio content provided by SCE. Formally WCE will, at a minimum, seek to over procure its RPS procurement requirement by at least 2%. This minimum margin reflects operating risks for existing resources and curtailment risk, currently expected to be 1% in the near-term. Curtailment risk by resource is evaluated further in section 13.

9.B. MMoP Scenarios

Because WCE is only in the initial phases of RPS procurement, WCE did not prepare scenarios for the MMoP. WCE has also not formally adopted a MMoP, as WCE expects risk of deliveries to change based on the resources WCE contracts with. WCE has not yet contracted with specific renewable resources. Specific resource generation profiles, construction status, and project location should all be factored into a MMoP strategy. A MMoP of 2% is included in WCE's response to Section 8. As stated in Section 4.B.1., WCE's goal is to reach a steady state of procurement in which it contracts 4% to 8% of its projected annual PCC1 requirements each year via long-term contract. These long-term contracts will impact future MMoP analysis.

10. BID SOLICITATION PROTOCOL

Consistent with section 399.13(a)(5)(C), WCE plans to conduct bid solicitations for procuring energy resources that include specific needs for eligible renewable energy resources, generating capacity, locational preferences and required online dates to assist in determining what resources fit best within a portfolio. Since CCA governing boards are comprised of local elected officials, solicitation and procurement decisions are overseen by elected representatives of the community. These solicitation and procurement decisions seek to comply with locally set targets that tend to exceed the RPS requirement and provide value to the community by focusing on carbon-free resources. In addition, the WCE Board of Directors has elected to offer a 100 percent renewable product option for its customers.

WCE plans to employ a continuous bid solicitation process that will seek offers for a variety of resource technologies and power supply products. This continuous process will include specific solicitations for resources such as dispatchable demand response, energy storage technologies located locally to the WCE service area, existing and preconstruction renewable

resources. WCE solicitations state that preference is given to projects that are local, long-term, online by a certain date, or have other benefits to local and disadvantaged communities such as reduced emissions from renewable energy choice. WCE is also in the process of reviewing its solicitation process in terms of safety considerations and may give preference to projects that reduce fire hazards in the State.

10.A. Solicitation Protocols for Renewable Sales

At the time of this filing, selling renewable energy products is not part of WCE's strategy to meet its risk adjusted RPS procurement.

10.B. Bid Selection Protocols

As noted above, in June 2020, WCE along with ten other CCAs released a request for information (RFI) on long-duration storage technologies. The RFI materials are available here: <https://www.peninsulacleanenergy.com/current-rfp-rfo/rfi-long-duration-storage/>. Specific requirements for project eligibility include: resource capability to discharge at full capacity for a minimum of 8 hours; resources must interconnect directly to the transmission or distribution system (in front of the meter) and be able to participate directly in the California Independent System Operator (CAISO) electricity markets; resources must meet minimum California Public Utilities Commission and CAISO requirements for participation in the Resource Adequacy Program. Technologies may include battery storage, mechanical storage, thermal storage, and chemical storage. The Joint CCA preference is for projects that can achieve commercial operation by January 1, 2026 and are commercially available. Responses to this RFI were due on July 1, 2020. Depending on the information gathered through the responses, WCE may follow this RFI with a joint solicitation with other CCAs for long-duration storage.

10.C. LCBF Criteria

In its LCBF evaluation process, WCE performs a quantitative assessment of each proposal and subsequently ranks them based on each proposal's benefit and cost relationship. The result of the quantitative analysis is a rank order of all complete and conforming proposals' net levelized benefit that help define the preliminary shortlist. Following the quantitative analysis, WCE will assess the top proposals' qualitative attributes. These qualitative attributes, including factors such as local reliability, resource diversity, and nominal contract payments, are considered to either eliminate or add projects to the final shortlist or to determine tiebreakers, if any. Once a project is added to the shortlist, WCE may enter into a PPA with the project. By taking many quantitative and qualitative factors into consideration, WCE ensures that it will select projects best suited for its portfolio in order to meet customer needs and attain the State's RPS goals.

A specific example includes the joint solicitation described in 10.B. The solicitation asks potential bidders to include information that will assist in evaluation of several key project attributes including:

- Energy storage capabilities or parameters
- Location and interconnection
- Ability to charge with renewable or greenhouse gas free energy
- Environmental considerations for lifecycle impacts
- Commercial availability status
- Financing opportunities and available grants or preferential lending or tax credits
- Project economics and potential monetary streams

WCE, along with the other CCAs, will evaluate responses regarding the following considerations: development and operation risk, benefit-cost, technological capabilities, non-energy related benefits or impacts, and other appropriate criteria. Consistent with § 399.13(a)(8), WCE will give preference to projects that provide economic or environmental benefits to communities affected with high poverty, unemployment, or poor air quality.

11. SAFETY CONSIDERATIONS

WCE holds safety as a top priority. There are no unique safety issues related to WCE's procurement of resources. Because WCE does not currently own, operate or control generation facilities, there are no direct safety considerations to report. Nevertheless, WCE is committed to address peripheral safety considerations in its procurement activities. With regard to the SB 901 requirement that biomass procurement be expanded by retail sellers, WCE will evaluate biomass resource contracts and is considering issuing RFPs targeting biomass technologies local to the Riverside County.

12. CONSIDERATION OF PRICE ADJUSTMENT MECHANISMS

Consistent with SB 350, WCE reviews the prospects of incorporating price adjustments into contracts with online dates more than 24 months after the date of contract execution. As noted in the ACR, such price adjustments could include price indexing to key components or to the Consumer Price Index. Price adjustments allow for preconstruction projects to continue when changes in the wholesale power markets or transmission system limitations result in increased development costs. By allowing for some cost increases, development risk is reduced which will impact the minimum margin of procurement and may ultimately lead to lower costs to rate payers. At the date of this filing, WCE is not yet in the process of negotiating contracts for projects that are not online. In the coming months, WCE will review cost adjustment

methodology, and best practices, and apply its own adjustments in a manner that favors preferred resource attributes such as location, generation profile, or compliance eligibility for long-term requirements, storage, biomass, demand-side management, or others.

13. CURTAILMENT FREQUENCY, FORECASTING, COSTS

Due in large part to the rapid increase in the amount of wind and solar generating facilities that have been brought online throughout the western United States, the California Independent System Operator's ("CAISO") balancing authority area has experienced an increasing frequency and magnitude of curtailment and negative pricing events. As of the end of 2019, California had over 12,300 MW of solar, over 10,000 MW of behind-the-meter solar and 5,800 MW of wind. Additionally, 2019 building standards require rooftop solar installations for most homes built in 2020 or later. This increased capacity has resulted in discrete periods where the majority of load in the CAISO is served by solar and wind resources. Over the last two years, the monthly maximum load served by wind and solar in the CAISO regularly exceeded 50%, and in April of 2019 it exceeded 68%.¹ To address the resulting instances of excess supply, the amount of curtailment of wind and solar in the CAISO has significantly increased each year totaling 187,000 MWh in 2015, 308,000 MWh in 2016, 407,000 MWh in 2017, 461,000 MWh in 2018, and 960,000 MWh in 2019. Curtailment is typically the highest during the months of March, April and May when hydroelectric generation is historically at its highest. Due to the above-average snowpack in the past few years, the impact of hydroelectric generation on curtailment has been exacerbated. Compounding these issues in 2020 was the impact of reduced loads given COVID-19 and California's stay at home order. CAISO reported curtailment of over 570,000 MWh in just the months of April and May.

¹ CAISO, Monthly Renewables Performance Report, April 2019, *available at* <http://www.caiso.com/Documents/MonthlyRenewablesPerformanceReport-Apr2019.html>.

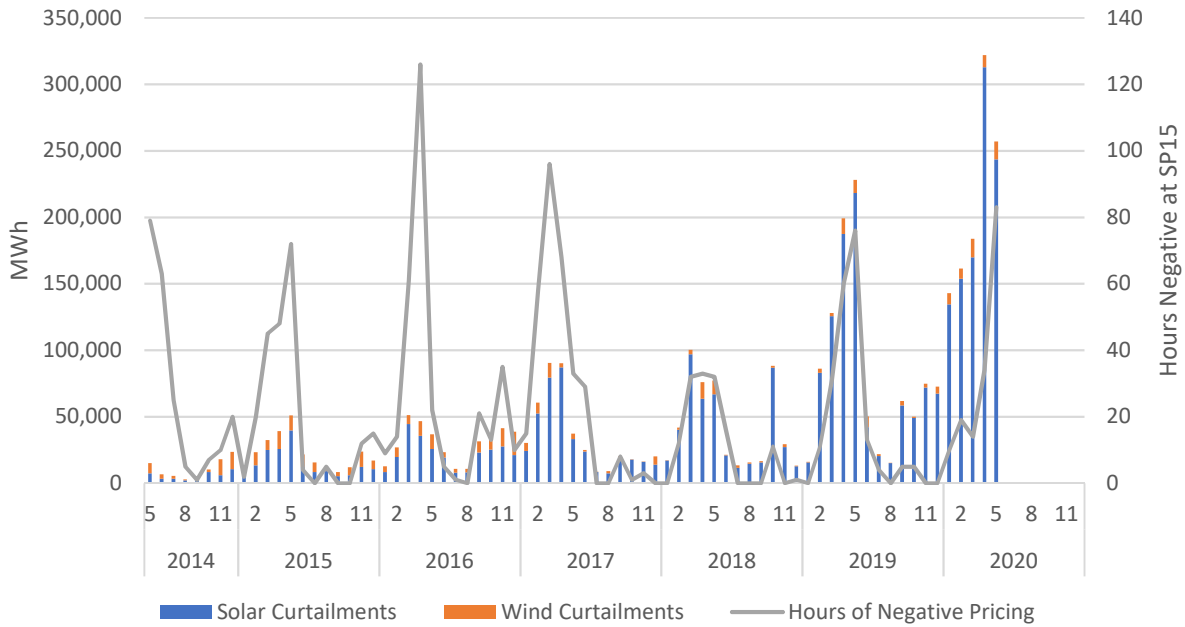
While curtailment is a viable renewable integration strategy that is generally more cost effective than other options, there are potential negative consequences from excessive curtailment. Curtailment of solar and wind represents a lost opportunity to generate zero GHG emitting electricity, and excessive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

WCE will consider the impact of curtailment and negative pricing on its planned individual portfolio and factor potential curtailment into its long-term planning. Due to the difficulty in accurately forecasting curtailment, WCE plans to actively review the historical data on curtailment and negative pricing for the regions where WCE is considering future procurement for contracted or owned generating resources. As WCE evaluates new

procurement, the potential amount of future curtailment is one factor that WCE will consider. Although WCE does not plan to develop an individualized forecast of future curtailment, WCE will factor potential curtailment into both its planned minimum margin of procurement and risk assessment (as described in Sections 7 and 9). In addition, WCE will take actions to limit the impacts of curtailment on its ratepayers as it procures. WCE plans to pursue contract terms that recognize and limit the potential financial impacts of negative pricing and give WCE greater flexibility to direct economic curtailment.

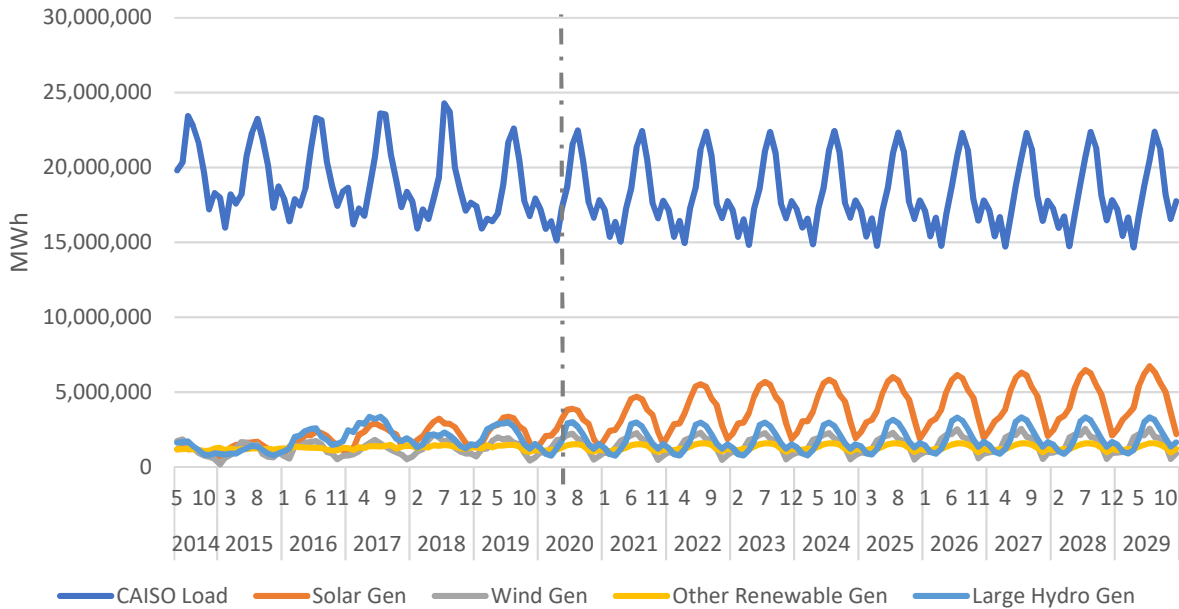
Negative pricing is a concern to WCE. WCE performed a quantitative analysis on negative pricing over the next ten years. Figure 1 compares the number of hours of negative electric pricing for SP15 to the quantity of solar and wind curtailments. While curtailments have grown over time, the amount of negative pricing hours, while peaking in 2016, has remained relatively flat. There is, however, a relationship between the amount of renewable generation, curtailment and negative pricing. WCE has estimated the number of negative pricing hours through 2030 for the SP15 trading hub.

Figure 1
Renewable Curtailments and Negative SP15 Pricing



To estimate negative pricing renewable generation is forecast. A third party (S&P Global) CIASO yearly forecast by fuel type was sourced as a baseline forecast. This forecast is based on actual planned and under construction projects and is not based on projections or retirements. Therefore, a linear growth rate by fuel type was included in the out-years where no planned projects exist. A CAISO load forecast was also estimated using a linear growth rate. Forecasts by fuel type are show below where the dashed vertical line distinguishes actual values from forecasted. Large hydro production is assumed based on average water years and does not factor in potential resource retirements.

Figure 2
CAISO Load and Generation: Actual and Forecast



To estimate the relationship between load, renewable generation and negative pricing hours, a Poisson regression was fit to the actual values shown above in Figure 2. A Poisson regression is appropriate and is used to model count variables. The regression was performed at the daily level, where daily solar, wind, other renewable generation and large hydro was weighted against daily CAISO load and regressed against a count of the negative hours per day. The regression equation included month fixed effects to control for seasonal factors outside of those captured by the independent variables discussed above. The annual estimate of negative pricing hours is shown below.

Table 1
Negative SP15 Pricing Hours, by year

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Hours Negative	223	317	311	137	205	160*									
Forecasted						290	335	400	409	419	442	479	491	504	520

*through May 31, 2020

Negative pricing hours pose some difficulty in estimating. They occur relatively

infrequently, making up on average just 2.7 percent of annual hourly prices. Although renewable generation weighted by CAISO load is a statistically significant predictor, there is considerable variation in renewable generation, the majority of which does not result in negative market pricing. Figures 1 and 2 illustrate that while renewable generation has grown there has been a diminishing impact on negative pricing. The estimates in Table 1 assume the relationship over the past five years to hold into the future. It is likely that the market will adjust as storage is implemented resulting in fewer hours with negative pricing.

In order to manage the cost impact of increasing overgeneration, WCE has issued a joint RFI for energy storage technologies that are commercially available and can be online before January 1, 2026. Responses are due July 1, 2020 and it is expected that WCE will issue joint RFO in August 2020 as a result of the RFI. As part of its portfolio management, WCE will continue to issue solicitations for storage technologies and potential renewable baseload resources that are typically not curtailed (geothermal).

14. COST QUANTIFICATION

To date, WCE has entered into one contract for renewable energy and has provided that information throughout this plan and in the Cost Quantification Worksheet.

15. COORDINATION WITH THE IRP PROCEEDING

The Table below is provided to demonstrate how this Draft RPS Procurement Plan and WCE's initial IRP analyses (Due September 1, 2020) are aligned.

IRP Section Subsection	RPS Alignment in IRPs
III. Study Results	Both of WCE's Conforming Portfolios (46 and 38 MMT) rely heavily on the procurement of renewable energy.
A. Conforming and	Major differences in the two conforming portfolios are the relative share of wind and battery storage that would need

IRP Section Subsection	RPS Alignment in IRPs
Alternative Portfolios	<p>to be procured in the outyears for the 38 MMT portfolio. WCE’s renewable energy procurement plan relies on contracting with new and existing solar, wind, battery storage, and shed demand response.</p> <p>In order to procure a portfolio consistent with either conforming portfolio, WCE has focused its procurement on long-term and short-term renewable resources and demand response in the near term, and storage resources for the medium term (by 2025). In addition to conventional solar and wind projects, WCE is committed to investing in demand response, customer-side solar (through NEM programs), and long-duration storage technologies as detailed in Sections 10.B and 10.C of this Plan.</p>
<p>IV. Action Plan</p> <p>A. Proposed Activities</p>	<p>WCE’s conforming portfolios have resulted in the following Action Plan Recommendations:</p> <ul style="list-style-type: none"> • Procure Regional Renewable Resources through RFI and RFO process including solar, wind, long-duration storage, and feed-in-tariffs • The Western Riverside Council of Governments (WRCOG) provides administrative and management services to WCE and plans to complete the CPUC application process for administrating energy efficiency programs. • Implement Demand response programs. WCE has issued an RFP for third-party administration of demand response programs and is currently evaluating responses. • Distributed Generation is promoted by WCE through its NEM program which provides greater incentives than the current SCE NEM rate schedules. <p>Potential barriers have been identified in WCE’s IRP and include the risks associated with power procurement which are addressed in WCE’s Energy Risk Management Policy. Some of the specific risks to acquiring either Conforming Portfolio are provided below:</p> <ul style="list-style-type: none"> • Potential for delayed development for new resources especially battery storage resources • Local potential for resource build-out in constrained COVID19 credit markets • Other outside economic impacts.

IRP Section Subsection	RPS Alignment in IRPs
	<ul style="list-style-type: none"> • Curtailment and negative pricing within CAISO WCE will mitigate these and other impacts through a diversified renewable energy and demand-side management portfolio. Along these lines, WCE's procurement activities seeking long-duration storage will mitigate renewable energy curtailment impacts.
<p>IV. Action Plan</p> <p>B. Procurement Activities</p>	<p>WCE has issued initial solicitations for renewable power supply consistent with both of the conformings portfolio and will implement continual solicitations for renewable resources of various contract periods, lengths and resource types.</p> <p>Conforming Portfolio Resources:</p> <p>Solar and Wind: WCE plans to issue an RFO for PCC1 and PCC2, for the 2020 compliance year volumes. That RFO is due to go out within the third quarter of 2020 to meet the respective amounts. WCE will also plan to issue RFOs for eligible renewable resources at least annually in order to procure the quantities needed to meet both its RPS requirement, long-term contract requirement, and to result in progress toward the Conforming Portfolios.</p> <p>Storage: WCE joined 10 other CCAs in a joint solicitation for storage technologies. Bids were due July 1, 2020. Based on the responses, WCE may enter into contracts for storage resources with other CCAs or alone. The objective of the solicitation is to inform the CCAs on available technologies, performance, cost, commercial availability, and other potential ancillary benefits. This solicitation seeks responses with projects that can be online prior to January 1, 2026.</p> <p>Demand Response: WCE issued an RFP for demand response programs designed and administered by a third party. At the time of this filing, WCE is reviewing the responses and has not yet entered into a contract. The goal of the solicitation is to acquire demand response resources that may be implemented as soon as 2021.</p>
<p>IV. Action Plan</p> <p>C. Potential Barriers</p>	<p>Potential barriers have been identified in WCE's IRP and include the risks associated with power procurement which are addressed in WCE's Energy Risk Management Policy. Some of the specific risks to acquiring either Conforming Portfolio are provided below:</p>

IRP Section Subsection	RPS Alignment in IRPs
	<ul style="list-style-type: none"> • Potential for delayed development for new resources especially battery storage resources • Local potential for resource build-out in constrained COVID19 credit markets • Other outside economic impacts. • Resource Retirement • Curtailment and negative pricing within CAISO <p>WCE will mitigate these and other impacts through a diversified renewable energy and demand-side management portfolio. Along these lines, WCE’s procurement activities seeking long-duration storage will mitigate renewable energy curtailment impacts. WCE will also implement its Energy Risk Management Policy by regularly sampling the energy market avoiding large contractual commitments in high-priced environments or missed opportunities in low-priced environments. WCE also plans to stagger contract start/end dates and related term lengths in order to avoid planning “cliffs” that could occur if contracts of similar lengths and start dates were all executed at the same time. The assembly of short-, medium- and long-term contracts further diversifies risk within WCE’s renewable supply portfolio, and while increased long-term RPS contracting requirements will inevitably exacerbate such risks, WCE will continue to pursue portfolio diversity by thoughtfully considering these temporal considerations during ongoing procurement processes.</p>

Respectfully submitted,



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Attorneys for
WESTERN COMMUNITY ENERGY

September 4, 2020

VERIFICATION

I, Barbara Spoonhour, am authorized to make this Verification on behalf of Western Community Energy. I declare under penalty of perjury that the statements in the foregoing 2020 Renewables Portfolio Standard Procurement Plan are true of my own knowledge, except as to matters which are therein stated on information or belief, and as to those matters I believe them to be true.

Executed on July . 2020 at Riverside, California.

—  —

Barbara Spoonhour
Deputy Executive Director – Operations
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APPENDIX A

[Redlined Version of Draft 2020 RPS Plan]

**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

**~~2019~~AMENDED 2020 RENEWABLES PORTFOLIO STANDARD PROCUREMENT
PLAN OF WESTERN COMMUNITY ENERGY**

**PUBLIC VERSION
(Appendix E Redacted)**

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~~June 21~~September 4, 2019~~2020~~

**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

**~~2019~~AMENDED 2020 RENEWABLES PORTFOLIO STANDARD PROCUREMENT
PLAN OF WESTERN COMMUNITY ENERGY**

**PUBLIC VERSION
(Appendix E Redacted)
~~I. INTRODUCTION~~**

1. MAJOR CHANGES TO RPS PLAN

**Table 1
Major Changes from Final 2019 RPS Procurement Plan to
Draft 2020 RPS Procurement Plan**

<u>Plan Reference</u>	<u>Plan Section</u>	<u>Summary/Justification of Change</u>
<u>2020 Draft RPS Plan: Section 2.A.</u>	<u>Introduction</u>	<u>New Ruling replaced 2019 Rulings.</u>
<u>2020 Draft RPS Plan: Section 2.B.</u>	<u>Background</u>	<u>Updated background now that WCE commenced service and provided information and power supply solicitations and status.</u>
<u>2020 Draft RPS Plan: Section 3.</u>	<u>Summary of Legislative Compliance</u>	<u>Updated for new contracts, pending bids, and planned RFO.</u>
<u>2020 Draft RPS Plan: Section 4.A.</u>	<u>Portfolio Supply and Demand</u>	<u>Load forecast description updated to reflect new information from Southern California Edison (SCE)</u>
<u>2020 Draft RPS Plan: Section 4.A.1.</u>	<u>Portfolio Optimization</u>	<u>Added information on recent solicitations for diverse power supply</u>
<u>2020 Draft RPS Plan: Section 4.B.1.</u>	<u>Long-Term Procurement</u>	<u>Information on WCE long-term contract added</u>
<u>2020 Draft RPS Plan: Section</u>	<u>Portfolio Diversity and</u>	<u>Added information on recent solicitations for diverse power supply</u>

<u>Plan Reference</u>	<u>Plan Section</u>	<u>Summary/Justification of Change</u>
<u>4.C.</u>	<u>Reliability</u>	
<u>2020 Draft RPS Plan: Section 5.</u>	<u>Project Development Status</u>	<u>Updated with PCC3 contract and how that contract impacts WCE’s future compliance obligation with regard to Project Development Status</u>
<u>2020 Draft RPS Plan: Section 7.</u>	<u>Risk Assessment</u>	<u>Added additional narrative on risks and management</u>
<u>2020 Draft RPS Plan: Section 8.</u>	<u>Renewable Net Short Calculation</u>	<u>Updated with WCE MMoP for future years</u>
<u>2020 Draft RPS Plan: Sections 9, 9.A., and 9.B.</u>	<u>Minimum Margin of Procurement</u>	<u>Clarified WCE approach to MMoP and assumptions included for Section 8 response.</u>
<u>2020 Draft RPS Plan: Sections 10., 10.B., and 10.C.</u>	<u>Bid Solicitation Protocol</u>	<u>Added bid valuation protocol for existing and future bids in compliance with the Public Utility Code and WCE’s least cost best-fit analysis.</u>
<u>2020 Draft RPS Plan: Section 11.</u>	<u>Safety Considerations</u>	<u>Added clarification for WCE’s approach to safety when contracting for resources that are not owned or operated by WCE.</u>
<u>2020 Draft RPS Plan: Section 12.</u>	<u>Consideration of Price Adjustment Mechanisms</u>	<u>Added clarity for how WCE may consider price adjustment mechanisms for undeveloped projects with lead times greater than 24 months.</u>
<u>2020 Draft RPS Plan: Section 13.</u>	<u>Curtailment Frequency and Forecasting Costs</u>	<u>Updated curtailment information based on 2020 Spring data from CAISO, included quantitative analysis of curtailment and negative pricing.</u>
<u>2020 Draft RPS Plan: Section 14.</u>	<u>Cost Quantification</u>	<u>Updated for the only currently executed renewable contract.</u>
<u>2020 Draft RPS Plan: Section 15.</u>	<u>Coordination with IRP Proceeding</u>	<u>New section.</u>

2. EXECUTIVE SUMMARY

2.A. Introduction

~~Western Community Energy (“WCE”) hereby submits this 2019 Renewables Portfolio Standard Procurement Plan (“RPS Plan”) in~~In accordance with the California Public Utilities Commission’s (“Commission”) ~~April 19, 2019~~May 6, 2020 Assigned Commissioner and Assigned Administrative Law Judge’s Ruling Identifying Issues and Schedule of Review for ~~2019~~2020 Renewables Portfolio Standard Procurement Plans (“ACR”) and the May 13, 2020 E-Mail Ruling Modifying Schedule of Review for 2020 RPS Procurement Plans Issued in the May 6, 2020 RPS

Plan Ruling, Western Community Energy (“WCE”) submitted its 2020 Renewables Portfolio Standard Procurement Plan (“RPS Procurement Plan”) on July 6, 2020. As directed by the ACR, ~~this~~the RPS Procurement Plan ~~includes~~included responses for the issues expressed in ACR ~~sections 5.1–5.13.~~

Upon filing of the RPS Procurement Plan, it was discovered that the plan was inadvertently filed at 5:13 p.m. and was missing certain exhibits. After consultation with the CPUC Docket Office, WCE notified Administrative Law Judge Lakhanpal of the late filing and errors, in a letter posted to the service list on July 9, 2019, requesting a July 6, 2020 correction to the filing date and re-filing of the plan. The RPS Procurement Plan was subsequently accepted by the CPUC Docket Office; however the accompanying confidentiality motion was rejected because the RPS Procurement Plan did not contain confidential information due to the missing exhibits. The undersigned’s staff has been working diligently with the CPUC Docket Office to correct the plan, and hereby files an amended and complete RPS Procurement Plan and confidentiality motion, with a continuing request for a filing date of July 6, 2020.

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

H. BACKGROUND

2.B. Background

~~Western Community Energy (WCE)~~ is a ~~public~~California joint powers ~~agency~~authority located within the geographic boundaries of Riverside County, formed in ~~2017 for the purpose of offering~~2018 to offer rate savings to electricity customers and ~~developing—and implementing~~develop and implement sustainable energy initiatives ~~that, and began servicing load in April and May 2020. These initiatives aim to~~ reduce energy demand, increase energy efficiency; and advance the use of clean, efficient and renewable resources available in the region. ~~Member~~ WCE's member agencies ~~of WCE~~ include seven ~~(7)~~ cities located in Riverside County – the Cities of Canyon Lake, Eastvale, Hemet, Jurupa Valley, Norco, Perris, and Wildomar ~~and. The City of Canyon Lake~~ has not begun service and may not until 2022. WCE members desire to further WCE goals by implementing and administering a common community choice aggregation (“CCA”) program (“Program”) available to members that elect to become Program participants (“CCA Members”).

~~In December 2018, the WCE Board approved the~~ submitted its Implementation Plan ~~which included a~~ and Statement of Intent to the Commission on December 20, 2018, with an anticipated launch date in of April 2020. ~~While WCE intended to launch in April 2020, WCE and SCE are discussing delaying this launch plan due to limitations imposed by~~ had provided the anticipated launch date to the Commission and SCE through informal discussion as early as March 2018. On March 7, 2019, SCE notified WCE through the meet and confer process established by Resolution E-4907 that SCE's Customer Service Re-Platform ~~launch in early 2020; WCE will instead launch customers in July 2020. For 2020, WCE anticipates launching with six (6) of the seven (7) member cities;~~ (“CSR”) project would freeze all CCAs from launching in the first half of 2020 (and late 2019), and that WCE could launch in July 2020 or thereafter, with a suggested risk preference that

newly certified CCAs should launch in the fall of 2020. Both SCE and WCE brought the implementation issues to the attention of Energy Division staff.

On June 21, 2019, WCE submitted its 2019 RPS Plan with the Commission noting the CSRP implementation issue and that a change in WCE's launch date was the subject of discussions between WCE, SCE and Commission staff. On August 22, 2019, SCE filed Advice Letter 4058-E stating that WCE would move its launch date to July 2020 and that SCE would allocate resource adequacy on WCE's behalf for 2020 and transfer RA to WCE for its 2021 and 2022 compliance obligations. On August 16, 2019, WCE filed its amended load forecast noting the revised July 2020 launch date and that SCE was allocating RA on WCE's behalf for the three-year RA compliance obligation. SCE included WCE's load in its forecast for 2020, 2021, and 2022 compliance. Subsequently, WCE and SCE agreed that it was technically and economically prudent to have WCE launch around its original April 2020 timeframe due to CSRP implementation schedule changes. On December 11, 2019, SCE filed Advice Letter 4058-E-B as a supplement to Advice 4058-E revising WCE's launch date whereby three member cities (Cities of Norco, Perris and Wildomar) will begin service in April 2020, and three additional member cities (Cities of Eastvale, Hemet and Jurupa Valley) will begin service in May 2020.

~~the~~The advice letters were approved, and WCE launched three cities in April 2020 and the following three cities in May 2020. The other member city, Canyon Lake, is evaluating a launch in 2021. For purposes of 2022. Under this plan, only six of the seven cities are included as Canyon Lake has not yet committed to a 2022 launch.

III. RPS PROCUREMENT PLAN

3. SUMMARY OF LEGISLATIVE COMPLIANCE

The WCE Board voted to set its Renewables Portfolio Standard compliance percentage for the 2020 period at 37%. This percentage exceeds the state-mandated compliance of 33.8%. Based

upon WCE's forecasted usage for 2020 will result in a target of 403,000 MWh's to be in line with the 37% target goal. Therefore, WCE's targets for procurement for the 2020 campaign will be a minimum of 302,000 MWh's of PCC1, a maximum of 61,000 MWh's of PCC2, and only 40,000 MWh's of PCC3. WCE has entered a contract for 34,000 MWh of PCC3 RECs to help WCE meet RPS mandates over the next 10.5 years. WCE has also submitted a bid to SDG&E's request for renewable bids for RECs that would help satisfy the short-term portion allowed for WCE's RPS requirements. WCE submitted its bid on June 22, 2020 and, if successful, expects it will be notified by July 20, 2020. Deliveries would begin January 2021. The offer presented is based upon a forecast schedule of 1,500,000 MWh's consumed in 2021 and 2% annual growth factor for the ten-year period. WCE is seeking to procure an average of 468,700 MWh's annually to meet the SB350 compliance mandate. At the time of this filing, the results of the RFO are still pending.

For PCC1 and PCC2, WCE plans to present an RFO for the 2020 compliance year volumes, which is due for distribution during the third quarter of 2020 to meet the respective amounts.

4. ~~**5.1**~~ **ASSESSMENT OF RPS PORTFOLIO SUPPLIES AND DEMAND** ~~§~~
~~399.13(a)(5)(A)~~

5.1.14.A. Portfolio Supply and Demand

~~WCE has not yet entered into any power supply agreements to meet its future RPS compliance obligations.~~ WCE expects to launch its program with ~~sufficient~~ 37% RPS resources to meet its 2020 RPS compliance obligations; (33.8%) and will continue to meet its RPS compliance obligations during the coming ~~twenty-year~~ ten-year timeframe. The exact portfolio characteristics selected may vary depending on legislative and policy changes, technological improvements, and preferences of the community, as well as other key local developments, such as the potential launch of the City of Canyon Lake in 2021 ~~2022~~.

~~Presently,~~ WCE is currently focused on ~~developing its planned~~rounding out its portfolio of resources, including renewable resources; ~~for its launch of the six (6) member cities in 2020 and beyond,~~ as well as monitoring the potential launch of Canyon Lake in ~~2021.~~ ~~WCE's launch in 2020, as well as its potential expansion in Riverside County in 2021 provides time for WCE to enter into~~2022. WCE is currently in negotiations for long-term renewable ~~contracts consistent with resources that will help WCE meet~~ Compliance Period 3 (2020) and 4 (2021-24) obligations, which ~~is~~are the first period for which a long-term contract obligation exists. ~~WCE is considering a number of different paths for procurement of long term renewable generation, including potentially partnering with other already operating CCAs or ESPs in the procurement of long term renewable generation, or issuing its own solicitation following the WCE program launch in 2020.~~ Load data issues that were only recently remedied by SCE in May 2020 delayed the RFO for renewable energy. The load discrepancies delayed the release of renewable RFO so that WCE could avoid over procurement based on inaccurate data.

WCE will continue to examine and estimate supply and customer demand; and will structure its future procurement efforts to balance customer demand with resource commitments ~~in the face of the future uncertainty regarding its launch date in 2020,~~for current loads as well as the potential for future expansion ~~in Riverside County.~~ This examination of customer demand and other market developments will help reduce costs and assist in meeting planned procurement for the period reflected in the ~~2019~~2020 RPS Procurement Plans.

4.A.1 Portfolio Optimization

WCE has issued three RFOs for power supply since January 2020. The first two supplied baseload energy to WCE customers. The last, discussed in more detail in 4.B.1., was for long-term renewable resources.

In June 2020, eleven CCAs released a Joint Request for Information (RFI) for long-duration storage resources. It is expected that WCE will join a joint RFO for storage technologies in August 2020 as a result of the Joint RFI. Additionally, WCE issued an RFP for Demand Response programs on April 29, 2020, with responses due May 26, 2020. WCE is in the process of evaluating the responses.

~~5.1.2 Alignment with Load Curves~~

~~WCE will procure renewable energy, carbon-free energy (large hydroelectric generation), system energy, as well as Resource Adequacy capacity to ensure that the future needs of its customers are met in a reliable and cost-effective manner, consistent with mandates established by the state of California, as well as portfolio objectives established by the WCE Board. The WCE Board has established a base renewable energy portfolio content target of 33 percent.~~

~~WCE anticipates that its supply portfolio will increase in complexity over time. With respect to aligning generation and load profiles, WCE will evaluate its hourly load requirements throughout the year to capture both the seasonal and temporal needs of its customers. WCE recognizes that aligning renewable generation with its hourly load profiles will require WCE to enter into multiple long-term supply agreements with different renewable technologies to capture the different generating profiles offered by each technology. A combination of baseload (e.g., run-of-river small hydro, landfill gas, or geothermal), off-peak (e.g., wind) and peak (e.g., solar) will be necessary to meet the program's goals. Acquisition of energy storage will also be evaluated to help manage instances when there are forecast differences between generation and load.~~

~~WCE recognizes the complexity of building a portfolio of resources to align generation and load profiles. Addressing this complexity, combined with the cost and risk reduction benefits of acquiring a diverse portfolio of renewable technologies and suppliers will be a key component in WCE's planned strategy for future procurement.~~

**~~5.1.3 RPS Plan~~4.B. Responsiveness to ~~LSE Policies and Goals, Statutes~~Regulations,
and ~~Commission Policies~~Statutes**

WCE is a joint powers authority and local ~~governmental~~ agency, as defined by state law, that is subject to the control of the WCE Board of Directors and is directly accountable to ~~the community that~~its ratepayers and the communities it serves. WCE strongly supports and is committed to meeting the state's GHG reduction and renewable procurement goals. Within the RPS multi-year compliance period~~structure of the RPS~~, WCE ~~is~~will be well-positioned to meet the procurement quantity~~requirements~~, portfolio balance ~~requirements,~~ and, long-term procurement requirements of the RPS program with an additional margin of over-procurement; ~~that is yet to be defined.~~

~~5.1.44.B.1.~~ Long-Term Procurement~~Requirement~~

WCE is aware of its requirements under SB 350, including the ~~requirement~~obligation to procure at least 65~~percent~~% of the state-mandated level of renewable energy under long-term contracts of at least ~~10~~ten years in length; beginning in 2021. In addition, WCE must meet the long-term contract requirements for 2020 set at 0.25% of load. WCE has contracted for long-term PCC3 resources to begin delivery in June 2020 to meet the 2020 long-term contract requirement.

WCE has developed and maintains a 10-year projection of load and renewable energy requirements for the period of 2021-30~~2030~~. For Compliance Period 4 (2021-24), WCE is currently forecasting a total of ~~2,620~~2,489 gigawatt-hours of energy that will need to be procured

from renewable generating resources with ~~1,703~~1,618 gigawatt-hours needing to be procured under a long-term agreement to meet WCE's RPS compliance obligations,~~as shown in Appendix A.~~

Over the remainder of 2020, WCE intends to plan for the procurement of longer-term PCC1 contracts. This planning is necessary to comply with the renewable procurement requirements of SB 350. The fact that new renewable generating facilities typically require long-term PPAs with terms ranging from 10 to 25 years. WCE's goal is to reach a steady state of procurement in which it contracts 4% to 8% of its projected annual PCC1 requirements each year via long-term contracts. Doing so will provide specific benefits, including allowing WCE to steadily reduce its exposure to renewable energy and energy market price risks in a manner similar to the programmatic hedging approach for Fixed-Price Block Energy, and ensuring that WCE is in a position to make strategic procurement decisions and, if appropriate, commitments every year.

The WCE Board of Directors has not yet finalized a formal planning margin to ~~build in~~ a~~for~~ contingency against a generator under-performing relative to expectations, or loads exceeding expectations. WCE is tentatively considering a ~~5 to 10 percent margin~~2% margin and has also committed to provide power supply that exceeds the SCE renewable content portfolio.

Given the multi-year compliance structure, and in consideration of the potential to partner with other CCAs or ESPs ~~or~~and run its own renewable solicitation~~following program launch in 2020~~, WCE is ~~well~~-positioned to meet its procurement obligations. WCE ~~anticipates making a decision by the end of 2020 regarding whether to move forward in partnership with another CCA or ESP, or, alternatively, issue its own solicitation~~has issued RFOs for long-term renewable ~~generation~~contracts and has responded to SDG&E's request for bids.

~~5.1.5~~ 4.C. Portfolio Diversity and Reliability

WCE ~~also~~ plans to consider the deliverability characteristics of its resources (such as the resource's dispatchability and available capacity) and to review the respective risks associated with short and long-term purchases as part of its forecasting and procurement processes. These efforts will lead to a more diverse resource mix, address grid integration issues, and provide value to the local community. ~~A quantitative description of this forecast is attached to the RPS Procurement Plan in Appendix A.~~ As noted previously WCE plans to evaluate several resource options through the RFP process including conventional base load, storage, demand-side, short-term, and long-term renewables.

~~5.1.6 Conformance with IRP~~

~~WCE has not yet submitted an Integrated Resource Plan to the Commission.~~

~~5.1.74.D.~~ **Lessons Learned**

WCE has just begun its competitive solicitations for power supply and does not have ~~any specific~~ lessons learned to share at this ~~point in~~ time.

5. PROJECT DEVELOPMENT STATUS

Since WCE is in the initial phases of procurement, it has not entered contracts with facilities that are not yet in commercial operation. WCE has entered a long-term contract for PCC3 RECs from post-construction resources. This long-term contract will assist WCE in meeting its long-term procurement requirements and will also limit future quantities of PCC3 RECs WCE could purchase in the future to satisfy its RPS requirement. WCE is now focused on contracting for PCC1 and PCC2 RECs for the remainder of its initial renewable procurement phase. Both of these category renewables will be sourced from post-construction resources. Future solicitations may result in contracts with resources that are in earlier phases of construction, depending on pricing and availability of existing resources, technology attributes, and portfolio diversity. This section

will be updated as WCE broadens its portfolio with resources that are in various stages of construction.

6. POTENTIAL COMPLIANCE DELAYS

~~5.2 Project Development Status Update—§ 399.13(a)(5)(D)~~

~~WCE has not entered into contracts with facilities that are not yet in commercial operation.~~

~~WCE has attached the Project Development Status Update Report as Appendix B.~~

~~5.3 Potential Compliance Delays—§ 399.13(a)(5)(B)~~

WCE does not anticipate any compliance delays for this compliance period. If a future compliance issue is identified, then WCE will address those issues and then describe them in a subsequent RPS ~~Plan~~Procurement Plan. Potential future issues may include inadequate transmission capacity, permitting delays, insufficient eligible energy resources supply, unanticipated curtailment, and unanticipated increase in retail sales.

7. 5.4 RISK ASSESSMENT—§ 399.13(a)(5)(F)

Since WCE is in the initial phases of power procurement, it has not entered into contracts with facilities that are not yet in commercial operation. As noted in Public Utilities Code section 399.13(a)(5)(A) and the ACR, generation variability and resource availability may impact the amount of future electricity delivered. ~~WCE plans to consider this~~On October 11, 2019, WCE adopted an Energy Risk Management Policy, which examines potential risk in forecasting as well as during procurement review and decision making. This Energy Risk Management Policy was developed through a thorough understanding of lessons learned.

~~WCE anticipates using a combination of factors to assess the risk of different renewable generation projects. Risk analysis will include both qualitative (e.g., project development status, developer experience and credit worthiness), as well as quantitative risk criteria (e.g., PPA price, forecast revenue/congestion, and generation profile versus hourly net load requirements).~~

~~Congestion will be modeled looking at historical congestion at nearby p-nodes and fitting that hourly congestion based on market heat rates relative to forward prices. Congestion is then extended into future years by using a production costing model (e.g., Aurora) to forecast future market heat rates and then testing future market price scenarios considering a range of future natural gas prices provided by third parties. Potential generation curtailment risk can be modeled based on actual experience for similar units and a probability-based analysis.~~

~~WCE expects to benefit from power procurement consultant experience in power markets in assessing the risk of potential projects.~~

In general terms, WCE's process for minimizing and avoiding risk commences with the development of its renewable energy solicitations as to its bid requirements and evaluation criteria. This criteria is intended to identify suppliers that have demonstrated a strong track record of successful project completion and ongoing project operation. Such counterparties are more likely to timely complete project development activities and successfully operate projects placed under contract. Key risk factors are considered during evaluation of each prospective renewable energy seller, including counterparty credit rating and general financial standing; California-based project development experience; prior experience with CCA off-takers; commercial viability of the proposed generating technology; and progress towards key development milestones such as interconnection status, deliverability studies, siting, zoning, permitting and financing requirements. To the extent that a prospective renewable energy procurement opportunity comes to fruition and a contract is executed, development will be rigorously monitored by WCE's power supply resources team.

WCE also seeks to minimize unnecessary financial exposure and general planning risk by assembling a diversified portfolio of renewable generating resources and products that are intended

to complement the way its customers use electric power. Additionally, WCE believes it is important to manage temporal risks associated with 1) disproportionate exposure to prevailing market conditions at any point in time, and 2) lack of diversity related to contract start dates, end dates or term lengths within its renewable energy portfolio. WCE intends to regularly administer renewable energy solicitations over time, which should diversify its exposure to ever-changing market conditions, like the “dollar cost averaging” methodology that is regularly employed within the financial sector. WCE’s contracting approach will endeavor to “sample” the market at regular intervals, avoiding large contractual commitments in high-priced environments or missed opportunities in low-priced environments. WCE also plans to stagger contract start/end dates and related term lengths in order to avoid planning “cliffs” that could occur if contracts of similar lengths and start dates were all executed at the same time. The assembly of short-, medium- and long-term contracts further diversifies risk within WCE’s renewable supply portfolio, and while increased long-term RPS contracting requirements will inevitably exacerbate such risks, WCE will continue to pursue portfolio diversity by thoughtfully considering these temporal considerations during ongoing procurement processes.

Specific risks further analyzed in this section are described briefly below.

- Peak Shifting – Resources such as behind-the-meter solar shift peaking periods to the later part of the day. In order to mitigate the impacts of these resources WCE has initiated the process to obtain energy storage resources, and WCE has implemented time-of-use rates that reflect the cost of energy procurement during peak periods. WCE is considering a CPP program that that incentivizes participants to shift loads away from the highest summer demand periods.

- Load Departure or Growth – WCE’s load growth is impacted by future behind-the-meter capacity growth, demand-side management programs, the addition of new cities, economic circumstances, and the ability of WCE to compete with SCE rates. WCE regularly maintains a long-term load forecast that informs its procurement strategies reducing the risk of having to resell energy after procurement, or the risk of not meeting compliance requirements due to unexpected changes in retail sales. WCE’s load forecast is evaluated through regression analysis to periodically assess the various potential risks. Specifically, the energy industry has felt the impacts of COVID-19 over the last several months. The outbreak has contributed to the dampening demand for energy, specifically in the industrial and commercial sectors. In addition, the pandemic has also resulted in changed behavior for residential load affecting daily and weekly load shapes as well as increased consumption overall in those rate classes. WCE uses an econometric forecasting model estimate near-term and medium-term loads. The model has the ability to simulate the load forecast for future disruption events including one such as COVID-19. In modeling the COVID-19 scenario, WCE is able to adjust consumption behaviors between rate classes, lowering or raising consumption specific to commercial/industrial and residential customers. This analysis has helped identify changes to the load forecast and also the impact on cash flows and profitability of WCE. WCE continually updates the simulation model adjusting for the length of COVID effects as well as several other parameters including weather, demand-side management investment, and program opt-out rates.
- Variable Generation – WCE has offered a quantitative analysis on curtailment in

Section 13 of this Plan. Wind projects are typically associated with the greatest amount of generation variability. WCE does currently hold contracts for wind resources; however, the potential for storage would mitigate variable generation risks associated with all variable generation projects.

- Resource Availability – WCE does not currently hold contracts with resources that have significant availability risks such as biofuel or hydroelectric. WCE does recognize that resource availability for other projects (especially large hydro) will impact the larger wholesale energy market and WCE’s Energy Risk Management Policy addresses this concern.
- System Reliability – WCE’s portfolio diversity goals and compliance with the Resource Adequacy (RA) program will ensure WCE’s portfolio supports grid stability and reliability. As the penetration of renewable energy resources increases on both the system and in WCE’s portfolio, WCE will likely need to increase its procurement of each type of RA (local, system, flex). To this end, WCE evaluates the value of capacity for each proposed project based on the market value at SP15, and project contribution to fulfilling WCE’s RA requirements. While WCE plans to procure its own RA, the recent decision (D. 20-06-002) renders SCE the Central Procurement Entity for WCE’s service area. In the event WCE is unable to procure to meet its RA requirements, WCE may elect to have SCE acquire RA on its behalf.

Since WCE is in an initial procurement phase, and in terms of its ability to demonstrate compliance with California’s RPS procurement mandates, WCE does not anticipate any particular development or operational risks that would materially impact its planned progress in this regard. This perspective is bolstered by WCE’s internally adopted renewable energy procurement target,

which seeks to meet and exceed California's RPS mandate by a minimum of 2% and a maximum of 10%. WCE's planning criteria is reflected in its quantitative response in Section 8 and the attached appendices. WCE has not performed a risk assessment of its renewable portfolio as the portfolio consists of only one contract at the time of this filing. WCE is working to filling out its renewable portfolio and relies on its Energy Risk Management Policy, internal goals, and lessons learned to manage the procurement risks mentioned in this section.

8. RENEWABLE NET SHORT CALCULATION

Because WCE is still in the process of initial procurement, the risk assessment does not directly impact the renewable net short calculation (RNSC). The RNSC reflects WCE's commitment to procure 37% RPS for the year 2020. It also includes an assumption that WCE will over procure RPS resources by 2% beginning in 2021. WCE will continually update this margin throughout subsequent IRPs and RPS Procurement Plans as WCE enters into contracts associated with specific projects. It is highly speculative to include a risk assessment prior to securing contracts with specific RPS resources. A generic risk assessment indicates that over procurement is an appropriate initial approach to managing generic risks.

~~5.5 Quantitative Information—§§ 399.13(a)(5)(A), (B), (D) and (F)~~

~~WCE has provided a quantitative assessment to support the qualitative descriptions provided in this RPS Procurement Plan, which is attached as Appendix A.~~

9. 5.6 MINIMUM MARGIN OF PROCUREMENT ~~—§399.13(a)(4)(D)~~ **MMOP**

WCE is committed to delivering the renewable content that it will advertise to the local community and has been approved by its Board of Directors. To meet the requirements of SB 100, WCE has established a 2020 renewable target of 37% and a 2030 renewable target ~~to~~ of 60 percent~~0%.~~ To account for variability in load and uncertainty in supply, WCE will typically over-procure to provide a cushion to meet its objectives. ~~As~~Additionally, WCE has committed, in the

near-term, to provide power supply that exceeds the share of renewable energy content offered by SCE. For 2020, WCE plans to procure 37% from renewable resources, which exceeds the 2020 requirement of 33.8% by 3.2%. At this time, WCE has selected a MMoP of 2% for 2022 and beyond. This procurement margin will mitigate compliance risk for existing resources and covers the current expected curtailment rate of 1%. As WCE contracts for pre-construction resources, WCE's MMoP will likely be adjusted as the risk to WCE increases by adding development risk to WCE's power portfolio. Changes to the MMoP will be communicated in future RPS Procurement Plans.

As conditions change and the need arises, WCE will ~~go to~~use the market to procure short-term RECs to meet any possible shortfalls. As long-term renewables come online, it is presumed that there will be less need to rely on the short-term market. If WCE's Board of Directors engages in additional discussion regarding this concern and adopts related policy guidelines, such information will be communicated in a future RPS Plan.

9.A. MMoP Methodology and Inputs

WCE's Board of Directors approved a renewable content of 37% for the years 2020 and 2021. Beyond 2022, WCE will seek to exceed the renewable portfolio content provided by SCE. Formally WCE will, at a minimum, seek to over procure its RPS procurement requirement by at least 2%. This minimum margin reflects operating risks for existing resources and curtailment risk, currently expected to be 1% in the near-term. Curtailment risk by resource is evaluated further in section 13.

~~5.7 Bid Solicitation Protocol, Including Least Cost Best Fit Methodologies -- § 399.13(a)(5)(C) and D.04-07-029~~

9.B. MMoP Scenarios

Because WCE is only in the initial phases of RPS procurement, WCE did not prepare scenarios for the MMoP. WCE has also not formally adopted a MMoP, as WCE expects risk of deliveries to change based on the resources WCE contracts with. WCE has not yet contracted with specific renewable resources. Specific resource generation profiles, construction status, and project location should all be factored into a MMoP strategy. A MMoP of 2% is included in WCE's response to Section 8. As stated in Section 4.B.1., WCE's goal is to reach a steady state of procurement in which it contracts 4% to 8% of its projected annual PCC1 requirements each year via long-term contract. These long-term contracts will impact future MMoP analysis.

10. BID SOLICITATION PROTOCOL

Consistent with section 399.13(a)(5)(C), WCE plans to conduct bid solicitations for procuring energy resources that include specific needs for eligible renewable energy resources, generating capacity, locational preferences, and required online dates to assist in determining what resources fit best within a portfolio. Since CCA governing boards are comprised of local elected officials, ~~these~~ solicitation and procurement decisions ~~will be~~are overseen by elected representatives of the community. These solicitation and procurement decisions seek to comply with ~~locally set~~locally set targets that tend to exceed the RPS requirement and provide value to the community by focusing on carbon-free resources. ~~The~~In addition, the WCE Board of Directors has elected to offer a 100 percent renewable product option for its customers.

WCE plans to employ a continuous bid solicitation process that will seek offers for a variety of resource technologies and power supply products. This continuous process will include specific solicitations for resources such as dispatchable demand response, energy storage technologies located locally to the WCE service area, existing and preconstruction renewable resources. WCE solicitations state that preference is given to projects that are local, long-term,

online by a certain date, or have other benefits to local and disadvantaged communities such as reduced emissions from renewable energy choice. WCE is also in the process of reviewing its solicitation process in terms of safety considerations and may give preference to projects that reduce fire hazards in the State.

10.A. Solicitation Protocols for Renewable Sales

At the time of this filing, selling renewable energy products is not part of WCE's strategy to meet its risk adjusted RPS procurement.

10.B. Bid Selection Protocols

As noted above, in June 2020, WCE along with ten other CCAs released a request for information (RFI) on long-duration storage technologies. The RFI materials are available here: <https://www.peninsulacleanenergy.com/current-rfp-rfo/rfi-long-duration-storage/>. Specific requirements for project eligibility include: resource capability to discharge at full capacity for a minimum of 8 hours; resources must interconnect directly to the transmission or distribution system (in front of the meter) and be able to participate directly in the California Independent System Operator (CAISO) electricity markets; resources must meet minimum California Public Utilities Commission and CAISO requirements for participation in the Resource Adequacy Program. Technologies may include battery storage, mechanical storage, thermal storage, and chemical storage. The Joint CCA preference is for projects that can achieve commercial operation by January 1, 2026 and are commercially available. Responses to this RFI were due on July 1, 2020. Depending on the information gathered through the responses, WCE may follow this RFI with a joint solicitation with other CCAs for long-duration storage.

10.C. LCBF Criteria

In its LCBF evaluation process, WCE performs a quantitative assessment of each proposal and subsequently ranks them based on each proposal's benefit and cost relationship. The result of the quantitative analysis is a rank order of all complete and conforming proposals' net leveled benefit that help define the preliminary shortlist. Following the quantitative analysis, WCE will assess the top proposals' qualitative attributes. These qualitative attributes, including factors such as local reliability, resource diversity, and nominal contract payments, are considered to either eliminate or add projects to the final shortlist or to determine tiebreakers, if any. Once a project is added to the shortlist, WCE may enter into a PPA with the project. By taking many quantitative and qualitative factors into consideration, WCE ensures that it will select projects best suited for its portfolio in order to meet customer needs and attain the State's RPS goals.

A specific example includes the joint solicitation described in 10.B. The solicitation asks potential bidders to include information that will assist in evaluation of several key project attributes including:

- Energy storage capabilities or parameters
- Location and interconnection
- Ability to charge with renewable or greenhouse gas free energy
- Environmental considerations for lifecycle impacts
- Commercial availability status
- Financing opportunities and available grants or preferential lending or tax credits
- Project economics and potential monetary streams

WCE, along with the other CCAs, will evaluate responses regarding the following considerations: development and operation risk, benefit-cost, technological capabilities, non-

energy related benefits or impacts, and other appropriate criteria. Consistent with § 399.13(a)(8), WCE will give preference to projects that provide economic or environmental benefits to communities affected with high poverty, unemployment, or poor air quality.

11. SAFETY CONSIDERATIONS

WCE holds safety as a top priority. There are no unique safety issues related to WCE's procurement of resources. Because WCE does not currently own, operate or control generation facilities, there are no direct safety considerations to report. Nevertheless, WCE is committed to address peripheral safety considerations in its procurement activities. With regard to the SB 901 requirement that biomass procurement be expanded by retail sellers, WCE will evaluate biomass resource contracts and is considering issuing RFPs targeting biomass technologies local to the Riverside County.

12. ~~5.8~~ CONSIDERATION OF PRICE ADJUSTMENT ~~Mechanisms—§~~ **399.13(a)(5)(E) MECHANISMS**

Consistent with SB 350, WCE reviews the prospects of incorporating price adjustments into contracts with online dates more than 24 months after the date of contract execution. As noted in the ACR, such price adjustments could include price indexing to key components or to the Consumer Price Index. Price adjustments allow for preconstruction projects to continue when changes in the wholesale power markets or transmission system limitations result in increased development costs. By allowing for some cost increases, development risk is reduced which will impact the minimum margin of procurement and may ultimately lead to lower costs to rate payers. At the date of this filing, WCE is not yet in the process of negotiating contracts for projects that are not online. In the coming months, WCE will review cost adjustment methodology, and best practices, and apply its own adjustments in a manner that favors preferred resource attributes such

as location, generation profile, or compliance eligibility for long-term requirements, storage, biomass, demand-side management, or others.

13. 5.9 CURTAILMENT FREQUENCY, ~~Cost and~~ FORECASTING, COSTS

Due in large part to the rapid increase in the amount of wind and solar generating facilities that have been brought ~~on-line~~online throughout the western United States, the California Independent System Operator's ("CAISO") balancing authority area has experienced an increasing frequency and magnitude of curtailment and negative pricing events. As of the end of ~~2018~~2019, California ~~has had~~ over ~~11,100~~12,300 MW of solar, ~~7,900~~over 10,000 MW of behind-the-meter solar, and 5,800 MW of wind. Additionally, 2019 building standards require rooftop solar installations for most homes built in 2020 or later. This increased capacity has resulted in discrete periods where the majority of load in the CAISO is served by solar and wind resources. Over the last two years, the monthly maximum load served by wind and solar in the CAISO regularly exceeded 50~~-percent~~%, and in April of 2019, it exceeded 68~~-percent~~%.¹ To address the resulting instances of excess supply, the amount of curtailment of wind and solar in the CAISO has significantly increased each year, totaling 187,000 MWh in 2015, 308,000 MWh in 2016, ~~358,000~~, 407,000 MWh in 2017, ~~and~~, 461,000 MWh in 2018. ~~As of the end of April, the total curtailment of solar and wind to date in 2019 is already 407,000 MWh, and 960,000 MWh in 2019.~~ Curtailment is typically the highest during the months of March, April, and May when hydroelectric generation is historically at its highest. Due to the above-average ~~snow~~ ~~pack~~snowpack in the past few years, the impact of hydroelectric generation on curtailment has been exacerbated. Compounding these issues in 2020 was the impact of reduced loads given

¹ CAISO, Monthly Renewables Performance Report, April 2019, *available at* <http://www.caiso.com/Documents/MonthlyRenewablesPerformanceReport-Apr2019.html>.

[COVID-19 and California's stay at home order. CAISO reported curtailment of over 570,000 MWh in just the months of April and May.](#)

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

WCE will consider the impact of curtailment and negative pricing on its planned individual portfolio and ~~factors~~[factor](#) potential curtailment into its long-term planning. Due to the difficulty in accurately forecasting curtailment, WCE plans to actively review the historical data on curtailment and negative pricing for the regions where WCE is considering future procurement for

contracted or owned generating resources. As WCE evaluates new procurement, the potential amount of future curtailment is one factor that WCE will consider. ~~While~~Although WCE does not plan to develop an individualized forecast of future curtailment, WCE will factor potential curtailment into both its planned minimum margin of procurement (~~yet to be determined~~) and risk assessment (as described in ~~Section 5.4~~). ~~Additionally~~Sections 7 and 9. In addition, WCE will take actions to limit the impacts of curtailment on its ratepayers as it procures. WCE plans to pursue contract terms that recognize and limit the potential financial impacts of negative pricing and give WCE greater flexibility to direct economic curtailment.

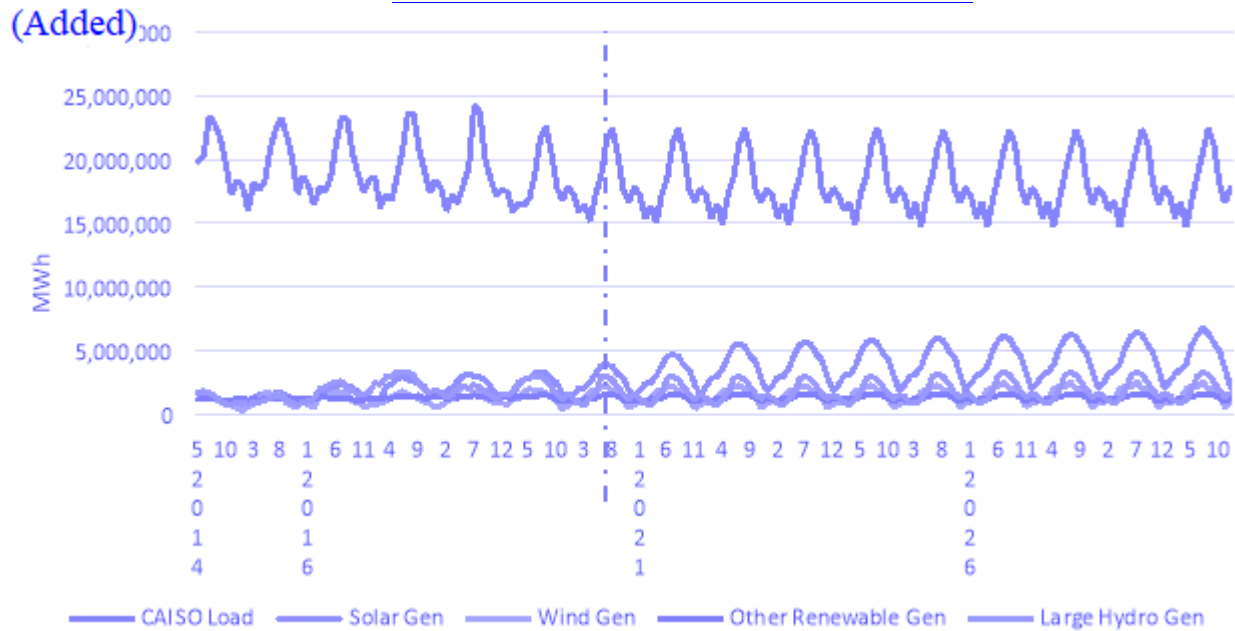
Negative pricing is a concern to WCE. WCE performed a quantitative analysis on negative pricing over the next ten years. Figure 1 compares the number of hours of negative electric pricing for SP15 to the quantity of solar and wind curtailments. While curtailments have grown over time, the amount of negative pricing hours, while peaking in 2016, has remained relatively flat. There is, however, a relationship between the amount of renewable generation, curtailment and negative pricing. WCE has estimated the number of negative pricing hours through 2030 for the SP15 trading hub.

The chart displays three data series over a period from May 2nd to May 11th:

- Solar Curtailments (Blue Bars):** Measured in MWh on the left axis. Major peaks occur on May 4th and May 5th, reaching approximately 300,000 MWh.
- Wind Curtailments (Orange Bars):** Measured in MWh on the left axis. These are generally low, with a notable peak around May 10th reaching about 150,000 MWh.
- Hours of Negative Pricing at SP15 (Green Line):** Measured on the right axis. The chart shows multiple periods of negative pricing, with the longest duration occurring on May 5th, exceeding 120 hours.

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Figure 2
CAISO Load and Generation: Actual and Forecast



To estimate the relationship between load, renewable generation and negative pricing hours, a Poisson regression was fit to the actual values shown above in Figure 2. A Poisson regression is appropriate and is used to model count variables. The regression was performed at the daily level, where daily solar, wind, other renewable generation and large hydro was weighted against daily CAISO load and regressed against a count of the negative hours per day. The regression equation included month fixed effects to control for seasonal factors outside of those captured by the independent variables discussed above. The annual estimate of negative pricing hours is shown below.

Table 1
Negative SP15 Pricing Hours, by year

(Add)	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Hours Negative	223	317	311	137	205	160*									
Forecasted						290	335	400	409	419	442	479	491	504	520

*through May 31, 2020

Negative pricing hours pose some difficulty in estimating. They occur relatively

infrequently, making up on average just 2.7 percent of annual hourly prices. Although renewable generation weighted by CAISO load is a statistically significant predictor, there is considerable variation in renewable generation, the majority of which does not result in negative market pricing. Figures 1 and 2 illustrate that while renewable generation has grown there has been a diminishing impact on negative pricing. The estimates in Table 1 assume the relationship over the past five years to hold into the future. It is likely that the market will adjust as storage is implemented resulting in fewer hours with negative pricing.

In order to manage the cost impact of increasing overgeneration, WCE has issued a joint RFI for energy storage technologies that are commercially available and can be online before January 1, 2026. Responses are due July 1, 2020 and it is expected that WCE will issue joint RFO in August 2020 as a result of the RFI. As part of its portfolio management, WCE will continue to issue solicitations for storage technologies and potential renewable baseload resources that are typically not curtailed (geothermal).

14. ~~5.10~~ **COST QUANTIFICATION**

To date, WCE has entered into one contract for renewable energy and has provided that information throughout this plan and in the Cost Quantification Worksheet.

~~WCE is currently considering voluntarily submitting cost quantification data to Commission staff through an informal filing, subject to further guidance from the Commission on the ability of a CCA to submit the requested data under seal.~~

~~5.11 Important Changes to Plans Noted~~

~~WCE has no important changes other than the revised launch date and load forecast as described in Section II.~~

~~5.12 Redlined Copy of Plans Required~~

~~WCE has attached a redline copy of last year's Plan as Appendix C.~~

~~5.13 Safety Considerations~~

~~WCE holds safety as a top priority. There are no unique safety issues related to WCE's~~

~~procurement of resources. Because WCE does not currently own, operate, or control generation facilities, there are no safety considerations to report.~~

15. COORDINATION WITH THE IRP PROCEEDING

The Table below is provided to demonstrate how this Draft RPS Procurement Plan and WCE's initial IRP analyses (Due September 1, 2020) are aligned.

<u>IRP Section Subsection</u>	<u>RPS Alignment in IRPs</u>
<u>III. Study Results</u> <u>A. Conforming and Alternative Portfolios</u>	<p><u>Both of WCE's Conforming Portfolios (46 and 38 MMT) rely heavily on the procurement of renewable energy. Major differences in the two conforming portfolios are the relative share of wind and battery storage that would need to be procured in the outyears for the 38 MMT portfolio. WCE's renewable energy procurement plan relies on contracting with new and existing solar, wind, battery storage, and shed demand response.</u></p> <p><u>In order to procure a portfolio consistent with either conforming portfolio, WCE has focused its procurement on long-term and short-term renewable resources and demand response in the near term, and storage resources for the medium term (by 2025). In addition to conventional solar and wind projects, WCE is committed to investing in demand response, customer-side solar (through NEM programs), and long-duration storage technologies as detailed in Sections 10.B and 10.C of this Plan.</u></p>
<u>IV. Action Plan</u> <u>A. Proposed Activities</u>	<p><u>WCE's conforming portfolios have resulted in the following Action Plan Recommendations:</u></p> <ul style="list-style-type: none"> <u>• Procure Regional Renewable Resources through RFI and RFO process including solar, wind, long-duration storage, and feed-in-tariffs</u> <u>• The Western Riverside Council of Governments (WRCOG) provides administrative and management services to WCE and plans to complete the CPUC application process for administering energy efficiency programs.</u> <u>• Implement Demand response programs. WCE has issued an RFP for third-party administration of demand response programs and is currently evaluating responses.</u>

<u>IRP Section Subsection</u>	<u>RPS Alignment in IRPs</u>
	<ul style="list-style-type: none"> • <u>Distributed Generation is promoted by WCE through its NEM program which provides greater incentives than the current SCE NEM rate schedules.</u> <p><u>Potential barriers have been identified in WCE’s IRP and include the risks associated with power procurement which are addressed in WCE’s Energy Risk Management Policy. Some of the specific risks to acquiring either Conforming Portfolio are provided below:</u></p> <ul style="list-style-type: none"> • <u>Potential for delayed development for new resources especially battery storage resources</u> • <u>Local potential for resource build-out in constrained COVID19 credit markets</u> • <u>Other outside economic impacts.</u> • <u>Curtailment and negative pricing within CAISO</u> <p><u>WCE will mitigate these and other impacts through a diversified renewable energy and demand-side management portfolio. Along these lines, WCE’s procurement activities seeking long-duration storage will mitigate renewable energy curtailment impacts.</u></p>
<p><u>IV. Action Plan</u></p> <p><u>B. Procurement Activities</u></p>	<p><u>WCE has issued initial solicitations for renewable power supply consistent with both of the conformings portfolio and will implement continual solicitations for renewable resources of various contract periods, lengths and resource types.</u></p> <p><u>Conforming Portfolio Resources:</u></p> <p><u>Solar and Wind: WCE plans to issue an RFO for PCC1 and PCC2, for the 2020 compliance year volumes. That RFO is due to go out within the third quarter of 2020 to meet the respective amounts. WCE will also plan to issue RFOs for eligible renewable resources at least annually in order to procure the quantities needed to meet both its RPS requirement, long-term contract requirement, and to result in progress toward the Conforming Portfolios.</u></p> <p><u>Storage: WCE joined 10 other CCAs in a joint solicitation for storage technologies. Bids were due July 1, 2020. Based on the responses, WCE may enter into contracts for storage resources with other CCAs or alone. The objective of the solicitation is to inform the CCAs on available technologies, performance, cost, commercial availability, and other potential ancillary benefits. This solicitation</u></p>

<u>IRP Section Subsection</u>	<u>RPS Alignment in IRPs</u>
	<p><u>seeks responses with projects that can be online prior to January 1, 2026.</u></p> <p><u>Demand Response: WCE issued an RFP for demand response programs designed and administered by a third party. At the time of this filing, WCE is reviewing the responses and has not yet entered into a contract. The goal of the solicitation is to acquire demand response resources that may be implemented as soon as 2021.</u></p>
<p><u>IV. Action Plan</u></p> <p><u>C. Potential Barriers</u></p>	<p><u>Potential barriers have been identified in WCE’s IRP and include the risks associated with power procurement which are addressed in WCE’s Energy Risk Management Policy. Some of the specific risks to acquiring either Conforming Portfolio are provided below:</u></p> <ul style="list-style-type: none"> <u>• Potential for delayed development for new resources especially battery storage resources</u> <u>• Local potential for resource build-out in constrained COVID19 credit markets</u> <u>• Other outside economic impacts.</u> <u>• Resource Retirement</u> <u>• Curtailment and negative pricing within CAISO</u> <p><u>WCE will mitigate these and other impacts through a diversified renewable energy and demand-side management portfolio. Along these lines, WCE’s procurement activities seeking long-duration storage will mitigate renewable energy curtailment impacts. WCE will also implement its Energy Risk Management Policy by regularly sampling the energy market avoiding large contractual commitments in high-priced environments or missed opportunities in low-priced environments. WCE also plans to stagger contract start/end dates and related term lengths in order to avoid planning “cliffs” that could occur if contracts of similar lengths and start dates were all executed at the same time. The assembly of short-, medium- and long-term contracts further diversifies risk within WCE’s renewable supply portfolio, and while increased long-term RPS contracting requirements will inevitably exacerbate such risks, WCE will continue to pursue portfolio diversity by thoughtfully considering these temporal considerations during ongoing procurement processes.</u></p>

Respectfully submitted,

(Add)


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~~Attorney~~ Attorneys for
WESTERN COMMUNITY ENERGY

September 4, 2020 ~~June 21, 2019~~

~~APPENDIX~~APPENDIX A

[Redlined Version of Draft 2020 RPS Plan]

[Link-to-previous setting changed from on in original to off in modified.]

~~QUANTITATIVE RESPONSE~~ **APPENDIX B**

[2020 RPS Procurement Plan Checklist and Verification]

APPENDIX C

[Renewable Net Short Calculation]

APPENDIX D

[Project Development Status Update]

APPENDIX E

[Cost Quantification (Public Version)]

Summary report: Litera® Change-Pro for Word 10.8.2.11 Document comparison done on 9/4/2020 3:18:55 PM	
Style name: Default Style	
Intelligent Table Comparison: Active	
Original filename: WCE RPS Procurement Plan 2019.DOCX	
Modified filename: Amended 2020 Renewables Portfolio Standard Procurement Plan.docx	
Changes:	
<u>Add</u>	243
Delete	187
Move From	0
<u>Move To</u>	0
<u>Table Insert</u>	2
Table Delete	0
<u>Table moves to</u>	0
Table moves from	0
Embedded Graphics (Visio, ChemDraw, Images etc.)	4
Embedded Excel	0
Format changes	0
Total Changes:	436

APPENDIX B

[2020 RPS Procurement Plan Checklist and Verification]

2020 RPS Procurement Plan Checklist- Task Completed

	Retail seller name: Western Community Energy	YES/NO	NOTES
1.	Major Changes to RPS Plan	Y	
2.	Executive Summary	Y	
3.	Summary of Legislative Compliance	Y	
4.	Assessment of RPS Portfolio Supplies and Demand	Y	
4.A	Portfolio Supply and Demand	Y	
4.A.1	Portfolio Optimization	Y	
4.B.	Responsive to Policies, Regulations, and Statutes	Y	
4.B.1	Long-term Procurement	Y	
4.C	Portfolio Diversity and Reliability	Y	
4.D	Lessons Learned	Y	
5.	Project Development Status	Y	
6.	Potential Compliance Delays	Y	
7.	Risk Assessment	Y	
8.	Renewable Net Short Calculation	Y	
9.	Minimum Margin of Procurement (MMoP)	Y	
9.A	MMoP Methodology and Inputs	Y	
9.B	MMoP Scenarios	Y	
10.	Bid Solicitation Protocol	Y	
10.A	Solicitation Protocol for Renewables Sales	Y	
10.B	Bid Selection Protocols	Y	
10.C	LCBF Criteria	Y	
11.	Safety Considerations	Y	
12.	Consideration of Price Adjustment Mechanisms	Y	

	Retail seller name: Western Community Energy	YES/NO	NOTES
13.	Curtailment Frequency, Forecasting, Costs	Y	
14.	Cost Quantification	Y	
15.	Coordination with Integrated Resource Planning Proceeding	Y	
Appendix A: Redlined Version of the Draft 2020 RPS Plan		Y	
Appendix B: 2020 RPS Procurement Plan Checklist and Verification		Y	
Appendix C: Renewable Net Short Calculation		Y	
Appendix D: Project Development Status Update		Y	
Appendix E: Cost Quantification		Y	

APPENDIX C

[Renewable Net Short Calculation]

CALIFORNIA'S RENEWABLES PORTFOLIO STANDARDS

RPS Procurement Plan: Renewable Net Short Quantitative Responses

Renewable Net Short calculations are to be submitted by all retail sellers each year with their RPS Procurement Plan. For more information on RPS Procurement Plan requirements, see Public Utilities Code 399.13 and Commission decisions, notably, Decision (D.) 11-12-020, D.11-12-052, D.12-06-038 **concerning the contents or formulas within this spreadsheet should be directed to the Energy Division.**

Procedural Guidelines

- 1) Public Utilities Code 399.13(a)(1) requires Investor-Owned Utilities (IOUs), Small Electric Service Providers (ESPs), and Community Choice Aggregators (CCAs) to submit Quantitative Responses each year to the CPUC to demonstrate that a sufficient amount of renewable energy obligations of the California RPS Program requirements.
- 2) Quantitative Responses must be submitted as part of a retail seller's RPS Procurement Plan as specified in the Assigned Commissioner Ruling directing filing of RPS Procurement Plan with the Administrative Law Judge's Ruling on Renewable Net Short, issued in R.11-05-001 (http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M091/K331/91331194.PDF).
 - a) **If a PDF version (vs. Excel file) is included in retail seller's RPS Plan, then a retail seller who seeks confidentiality of any portion of the data, the retail seller is responsible for that confidentiality.**
 - b) **Submit a confidential Excel version of this spreadsheet to the Energy Division (https://kwftp.cpuc.ca.gov).** Please only submit this file in .xls or .xlsx format and email rpscompliance@cpuc.ca.gov with any questions.

STANDARD PROGRAM

Re Response

Procurement Plans, as required by the Public Utilities
Commission, D.14-12-023, and D.16-12-040. **Any questions**
on RPS team at rpscompliance@cpuc.ca.gov.

Small and Multi-Jurisdictional Utilities (SMJUs),
to submit an RPS Procurement Plan each
year. If a utility has been procured to meet the

Procurement Plan to the Commission as
required by the RPS Procurement Plans, and the May 21, 2014 Ruling,
D.14-12-005,
(DF)

All pages must be legible. If a retail sellers
submit a plan for maintaining confidentiality when

submit via the CPUC Secure FTP site
to the FTP site and contact



Renewable Net Short Calculations - 2020 RPS Procurement Plans

LSE Name:	Western Community Energy		Input required		No input required		Hard-coded
Date Filed:	29-Jun-20						

Variable	Calculation	Item	2017 Actual	2018 Actual	2019 Actual	2020 Forecast	2017-2020	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2021-2024	2025 Forecast	2026 Forecast	2027 Forecast	2025-2027	2028 Forecast	2029 Forecast	2030 Forecast	2028-2030
		Forecast Year				1	CP 3	2	3	4	5	CP 4	6	7	8	CP 5	9	10	11	CP 6
Annual RPS Requirement																				
A		Total Retail Sales (MWh)				1,090,000	1,090,000	1,500,000	1,530,000	1,560,600	1,591,812	6,182,412	1,623,648	1,656,121	1,689,243	4,969,012	1,723,028	1,757,488	1,792,638	5,273,154
B		RPS Procurement Quantity Requirement (%)	27.0%	29.0%	31.0%	33.0%	33.0%	35.8%	38.5%	41.3%	44.0%	39.9%	46.7%	49.3%	52.0%	49.4%	54.7%	57.3%	60.0%	57.4%
C	A*B	Gross RPS Procurement Quantity Requirement (MWh)	-	-	-	359,700	359,700.0	536,250	589,050	643,748	700,397	2,469,444.8	757,757	816,964	878,406	2,453,127.4	941,979	1,007,568	1,075,583	3,025,130.1
D		Voluntary Margin of Over-procurement (MWh)				43,600	43,600	18,750				18,750				-				-
E	C+D	Net RPS Procurement Need (MWh)	-	-	-	403,300	403,300	555,000	589,050	643,748	700,397	2,488,195	757,757	816,964	878,406	2,453,127	941,979	1,007,568	1,075,583	3,025,130
RPS-Eligible Procurement																				
Fa		Risk-Adjusted RECs from Online Generation (MWh)					-					-				-				-
Faa		Forecast Failure Rate for Online Generation (%)					#DIV/0!					#DIV/0!				#DIV/0!				#DIV/0!
Fb		Risk-Adjusted RECs from RPS Facilities in Development (MWh)					-					-				-				-
Fbb		Forecast Failure Rate for RPS Facilities in Development (%)					#DIV/0!					#DIV/0!				#DIV/0!				#DIV/0!
Fc		Pre-Approved Generic RECs (MWh)					-					-				-				-
Fd		Executed REC Sales (MWh)					-					-				-				-
F	Fa+Fb+Fc-Fd	Total RPS Eligible Procurement (MWh)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
F0		Category 0 RECs					-					-				-				-
F1		Category 1 RECs					-					-				-				-
F2		Category 2 RECs					-					-				-				-
F3		Category 3 RECs				33,000	33,000	100	100	100	100	400	100	100	100	300	100	100	100	300
Gross RPS Position (Physical Net Short)																				
Ga	F-E	Annual Gross RPS Position (MWh)	-	-	-	(403,300)	(403,300)	(555,000)	(589,050)	(643,748)	(700,397)	(2,488,195)	(757,757)	(816,964)	(878,406)	(2,453,127)	(941,979)	(1,007,568)	(1,075,583)	(3,025,130)
Gb	F/A	Annual Gross RPS Position (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
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)	-	-	-	(403,300)	(403,300)	(555,000)	(589,050)	(643,748)	(700,397)	(2,488,195)	(757,757)	(816,964)	(878,406)	(2,453,127)	(941,979)	(1,007,568)	(1,075,583)	(3,025,130)
Lb	(F+Ia-Ib-Hc)/A	Annual Net RPS Position after Bank Optimization (%)	#DIV/0!	#DIV/0!	#DIV/0!	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: All values are to be input in MWhs

APPENDIX D

[Project Development Status Update]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

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[illegible]

[illegible]

[illegible]

[illegible]

Field Name
Reporting LSE Name
RPS Contract ID
Project or Contract Name
Technology Type
Project Development Phase
City
County
State
Zip Code
Latitude
Longitude
Contract Length (Years)
Contract Execution Date
Contract Start Date

Contract End Date
Contract Capacity
Expected Annual Generation
Total Contract Volume

Data Input Instructions
Name of Load Serving Entity. Select from drop-down list.
Unique identification number for the contract in the RPS Compliance Report submissions and the RPS Plan Project Development Status Template. This is a required field. Create new CPUC RPS ID for each contract following this format: LSE name abbreviation as specified in the drop-down list of "Reporting LSE Name" + 5 digit numbers (sequential) starting with "Technology Code Number." The technology code numbers are based on the technology type and are assigned as follows: - 1: Landfill Gas, Biogas, Digester Gas - 2: Biomass, Biodiesel,
Input the name of the contract as presented in the RPS Compliance Report.
<p>Technology type or the generating system. Examples include: Biodiesel: Fuel chemically derived from plant or animal oils that can be used in a diesel-fired engine</p> <p>Biogas: Pipeline gas from the decomposition of organic material. Choose this selection when LSE is purchasing the biogas directly not electricity produced from biogas.</p> <p>Biomass: Wood, Wood Waste, Other Solid Waste: Covers purpose-grown energy crops, multitudes of woody materials generated by an industrial process or provided directly by forestry and agriculture as wastes (rice husks, nut shells, etc.)</p> <p>Conduit Hydro: Man-made canals or pipelines, pertaining to water agencies and/or irrigation districts. If unsure as to whether a project is small hydro or conduit hydro, select small.</p> <p>Digester Gas: Gas composed principally of methane and CO2 produced by anaerobic digestion and combusted to produce power. Anaerobic digestion (or fermentation) occurs naturally or with a man-made digester. Biodegradable materials include biomass, manure, etc.</p> <p>Geothermal: Energy available as heat emitted from within the earth's crust, usually in the form of hot water or steam.</p> <p>Hybrid: Select If PPA combines two or more technology types and specify what technology types those are in the Project Notes column.</p> <p>Landfill Gas: Produced by wet organic waste decomposing under anaerobic conditions in a landfill. Select this category for contracts that are with a landfill company, otherwise select digester. This is subset of 'Digester' type.</p> <p>Municipal Solid Waste: Waste produced by the residential, commercial and public services sectors and incinerated in specific installations to produce heat and/or power. The key here is that the contract is with a municipality, as distinct from 'Biomass' category.</p> <p>Ocean/ Tidal: Mechanical energy derived from tidal movement, wave motion or ocean current and exploited for electricity generation.</p> <p>Small Hydro: Nameplate/Installed capacity <30 MWs, Electric power generated by using the gravitational energy available when water flows from a higher to a lower elevation.</p> <p>Solar PV - Rooftop: Generates electric power by using photovoltaic (PV) cells to convert energy from the sun into electricity. (Select if Rooftop). This includes concentrating PV</p>
Select from the list of drop-down options (pre-construction, construction, post-construction)
Input City the project is located in.
Input County the project is located in.
Input State the project is located in. Use two letter abbreviation (CA, OR, WA). Input "Multiple" for contracts with
Input the zip code where the project is located.
For PPAs: Input latitude in decimal format. Input "Multiple" for contracts with various sites and list the sites in the
For PPAs: Input longitude in decimal format. Input "Multiple" for contracts with various sites and list the sites in th
For projects with executed contract, include Delivery Term per the contract. For projects in the Overall Contract S
The date when the original RPS contract/PPA was executed.
The date when deliveries begin under the contract.

The date when deliveries end under the contract.

- Enter nameplate capacity if the contract receives energy from the full facility.
- Enter 0 if the contract only indicates the volume of energy to be received without any facilities listed
- Enter the value that is the nameplate capacity times % of output if contract receives energy from a portion of a single facility
- Enter value that is the nameplate capacity times % of output for each facility if the contract receives only the volume of energy from many facilities listed in the contract

Amount of electricity the project is expected to generate on an annual basis. This value does not change based on the actual energy generation but always reflects the expected annual generation. LSEs may approximate the

Total energy generation as specified in the contract for all contract years. For projects in the Overall Contract Status "Under Negotiation" and "In Development" enter expected contract volume. Leave blank REC Only

multiple sites. If outside the US, input state equivalent. Input "TBD" if not yet determined.

: Project Notes column. Input "TBD" if site not yet determined.

ne Project Notes column. Input "TBD" if site not yet determined.

tatus "Under Negotiation" or "In Development", include expected Term.

APPENDIX E

[Cost Quantification (Public Version)]

