Decision **REVISED PROPOSED DECISION OF ALJ SIMON (Mailed 12/23/2009)**

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop Additional Methods to Implement the California Renewables Portfolio Standard Program.	Rulemaking 06-02-012 (Filed February 16, 2006)

(See Appendix E for a list of appearances.)

DECISION AUTHORIZING USE OF RENEWABLE ENERGY CREDITS FOR COMPLIANCE WITH THE CALIFORNIA RENEWABLES PORTFOLIO STANDARD

TABLE OF CONTENTS

Title **Page**

TABLE OF CONTENTS
(Cont'd)

Title **Page**

DECISION AUTHORIZING USE OF RENEWABLE ENERGY CREDITS FOR COMPLIANCE WITH THE CALIFORNIA RENEWABLES PORTFOLIO STANDARD

1. Summary

This decision authorizes the procurement and use of tradable renewable energy credit (TRECs) for compliance with the California renewables portfolio standard (RPS) program. It also delineates the structure and rules for a TREC market and for the integration of TRECs into the RPS flexible compliance system.

The use of TRECs for RPS compliance will provide more options and flexibility for RPS-obligated load-serving entities to comply with RPS mandates in both the near and longer term. Over time, it will also provide additional flexibility and incentives for the development of RPS-eligible generation by supplying useful revenue options for generation developers.

The market and compliance rules are developed with a view to simplicity, transparency, fairness, and ease of administration. These market and compliance structures are intended to remain the framework for the use of TRECs into the future. Although the TREC market may be modest in the next two or three years, the market rules put in place in this decision will both allow a new market to develop and provide robust rules for a mature TREC market.

The rules create a market in which participation in TREC transactions is not restricted, though participants must meet the requirements set forth by this Commission for TREC trading, as well as any requirements for participation set by the Western Renewable Energy Generation Information System (WREGIS).

The decision distinguishes between bundled (energy plus renewable energy credits (RECs)) transactions and TREC (or REC-only) transactions used for RPS compliance by finding that a bundled transaction must serve California

customer load, without needing any intermediary energy transactions that in effect substitute energy that is not RPS-eligible for energy that is. The decision concludes that bundled transactions with renewable energy -- or those which serve California customer load -- are those where:

- the RPS-eligible generator's first point of interconnection with the Western Electricity Coordinating Council (WECC) interconnected transmission system is with a California balancing authority, or
- the RPS-eligible energy from the transaction is dynamically transferred to a California balancing authority.

The decision classifies all other RPS-eligible transactions as REC-only. However, because the Commission seeks to classify as bundled all transactions that can be demonstrated to serve California customer load, the decision authorizes the Director of Energy Division to further explore whether transactions using firm transmission but not dynamic transfer should also be classified as bundled.

To promote market liquidity while preserving the value of TRECs for RPS procurement planning, the decision requires that TRECs must be tracked in WREGIS and retired in WREGIS for RPS compliance within three calendar years of the year the electricity associated with the TRECs was generated. Once committed to RPS compliance, TRECs will be treated in substantially the same way as bundled energy purchases for reporting and compliance purposes. This includes application of most flexible compliance mechanisms, with the principal exception that only some TREC contracts may be earmarked for use to make up RPS procurement shortfalls. In order to promote a robust TREC market, the decision allows TRECs from future years of existing RPS contracts to be unbundled and sold under certain conditions.

To maximize the benefit of RPS-eligible generation to California customers, this decision provides a temporary limit on the use of TRECs to meet RPS procurement obligations. Under this limit, the three large California utilities may use TRECs to meet no more than 25 percent of their annual RPS procurement obligations. To protect ratepayers from excessive payments for TRECs in the early stages of the TREC market, the decision imposes a transitional price cap of $50/REC in REC-only contracts used for RPS compliance by all investor-owned utilities. Both limits will expire December 31, 2011, unless the Commission acts to modify, extend, or terminate the limits prior to that date.

To aid the Commission in evaluating the use of TRECs, this decision directs Energy Division staff to collect information about the TREC market and the use of TRECs for RPS compliance, and to provide a report with recommendations to the Commission within 16 months of the date of this decision. Regarding whether the usage limit and price cap should be retained, adjusted, or allowed to sunset.

In order to facilitate the integration of TRECs into the RPS program, this decision authorizes the consideration of changes to RPS procurement planning and bid evaluation in Rulemaking 08-08-009. It also authorizes Energy Division staff to develop methods to review and evaluate REC-only transactions and to make any necessary revisions to the RPS compliance documents and reporting protocols.

Finally, the decision sets forth two standard terms and conditions (STCs) related to RECs and one additional STC governing Commission approval of utilities' REC-only contracts that must be used in all RPS contracts that have not been approved by the Commission prior to this decision.

2. Introduction

In Pub. Util. Code § 399.11,[1] the Legislature set up the renewables portfolio standard (RPS) program

> [i]n order to attain a target of generating 20 percent of total retail sales of electricity in California from eligible renewable energy resources by December 31, 2010, and for the purposes of increasing the diversity, reliability, public health and environmental benefits of the energy mix. . . (§ 399.11(a).)[2]

In Senate Bill (SB) 107 (Simitian), Stats. 2006, ch. 464, the Legislature gave this Commission express authority to allow the use of tradable renewable energy credit (TRECs) for RPS compliance. Section 399.16 provides both the authorization and several conditions on its exercise.[3]

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[1] RPS legislation is codified at Pub. Util. Code §§ 399.11-399.20. Unless otherwise indicated, all subsequent citations to sections refer to the Public Utilities Code, and citations to rules refer to the Rules of Practice and Procedure, which are codified at Chapter 1, Division 1 of Title 20 of the California Code of Regulations.

[2] The Legislature also described the benefits to be expected from the RPS program:

> (b) Increasing California's reliance on eligible renewable energy resources may promote stable electricity prices, protect public health, improve environmental quality, stimulate sustainable economic development, create new employment opportunities, and reduce reliance on imported fuels.
>
> (c) The development of eligible renewable energy resources and the delivery of the electricity generated by those resources to customers in California may ameliorate air quality problems throughout the state and improve public health by reducing the burning of fossil fuels and the associated environmental impacts and by reducing in-state fossil fuel consumption.
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> (d) The California Renewables Portfolio Standard Program is intended to complement the Renewable Energy Resources Program administered by the State Energy Resources Conservation and Development Commission and established pursuant to Chapter 8.6 (commencing with Section 25740) of Division 15 of the Public Resources Code.

[3] For ease of reference, § 399.16 is reproduced as Appendix A.

This decision implements this authorization in light of the overarching purposes of the RPS program. It seeks to improve compliance opportunities for RPS-obligated load-serving entities (LSEs) and to provide incentives for the construction of new RPS-eligible generation. The decision builds on several years of experience with planning, procurement, reporting, and compliance in the use of bundled energy contracts (contracts for delivery of energy and renewable energy credits (RECs)) for RPS compliance. It relies on the tools provided by the Western Renewable Energy Generation Information System (WREGIS) for recording, tracking, and trading TRECs in order to develop the market rules and integrate the use of TRECs into the RPS compliance framework.

3. Procedural Background

The history of the consideration of the use of TRECs in the RPS program was presented in detail in Decision (D.) 08-08-028 and will not be repeated here. This section addresses the procedural steps in this proceeding.

Rulemaking (R.) 06-02-012, the Order Instituting Rulemaking (OIR) for this proceeding, was issued in the framework of the original RPS legislation, Senate Bill (SB) 1078 (Sher), Stats. 2002, ch. 516. In the OIR, the Commission identified TRECs as an important component of the proceeding. The Scoping Memo and Ruling of Assigned Commissioner (April 28, 2006) set out a number of issues related to TRECs, and assigned them to the second portion of this proceeding.

A staff white paper, "Renewable Energy Certificates and the California Renewables Portfolio Standard Program" (REC white paper), was published

April 20, 2006.[4] Comments on the REC white paper were filed in late May 2006; reply comments were filed on June 14, 2006.[5]

Among other things, the REC white paper set out definitions of terms that have been used throughout the subsequent consideration of the use of RECs for RPS compliance. The Commission adopted the white paper's definitions of "unbundled" RECs and "tradable" RECs in D.06-10-019:

> Under an unbundled REC regime, claim over the renewable attributes of energy produced by eligible renewable technologies can be transferred from the renewable generator to one LSE while the energy is delivered to another. However, once this transfer occurs, claim over the attributes cannot be resold. In contrast, under a tradable REC regime, although the concept of selling the energy and claim over the attributes to different parties remains intact, RECs may be transferred from the renewable generator to any third party, not just obligated LSEs. In addition, these attributes can be resold subsequent to the initial sale.[6]

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[4] The REC white paper may be found at http://www.cpuc.ca.gov/word_pdf/REPORT/55606.doc.

[5] Comments were filed by Central California Power; Sustainable Conservation; Powerex Corp. (Powerex); California Solar Energy Industries Association (CalSEIA), Clean Power Markets, Inc., PV NOW, Vote Solar Initiative (jointly); Pacific Gas and Electric Company (PG&E); Mountain Utilities (MU); Division of Ratepayer Advocates (DRA); Southern California Edison Company (SCE); San Diego Gas & Electric Company (SDG&E), Pilot Power Group, Inc. (Pilot Power); Alliance for Retail Energy Markets (AReM), Western Power Trading Forum (WPTF) (jointly); Aglet Consumer Alliance (Aglet); Green Power Institute (GPI); Center for Energy Efficiency and Renewable Technologies (CEERT); Independent Energy Producers Association (IEP); Union of Concerned Scientists (UCS); The Utility Reform Network (TURN); and California Large Energy Consumers Association and California Manufacturers and Technology Association (jointly).

Reply comments were filed by Central California Power, CEERT, GPI, Aglet, Pilot Power, AReM, SDG&E, SCE, MU, UCS, TURN, PG&E, Powerex, and IEP.

[6] REC white paper at 1, n. 1; D.06-10-019 at 33.

In D.06-10-019, the Commission decided not to authorize the use of unbundled RECs for RPS compliance at that time. We stated that we would consider the use of unbundled and/or tradable RECs later in this proceeding.[7]

The Amended Scoping Memo and Ruling of Assigned Commissioner (December 29, 2006) (Amended Scoping Memo) revised the tasks for this proceeding, in light of prior work and the enactment of SB 107, effective January 1, 2007. The Amended Scoping Memo identified three areas related to TRECs:

- Exploring the use of tradable RECs for RPS compliance by all RPS-obligated LSEs, including determining what attributes should be included in a REC;
- Determining the appropriate treatment of RECs associated with energy generated by renewable customer-side distributed generation, after examination of two important issues—measurement of renewable output from customer-side distributed generation, and analysis of the impact of ratepayer subsidies of renewable distributed generation—in R.06-03-004; and
- Determining the status of RECs associated with renewable energy generated by qualifying facilities (QFs) under contract with California utilities.

The Second Amended Scoping Memo and Ruling of Assigned Commissioner (February 25, 2008) noted several developments related to the use of TRECs for RPS compliance since the issuance of the Amended Scoping Memo.

[7] In view of our decision to authorize the use of tradable RECs, we will not use the category of "unbundled REC" in this decision. We will refer to transactions in which only TRECs (not energy) are bought or sold as "TREC transactions" or "REC-only transactions." If the context requires a reference to "RECs" because, for example, the RECs were procured through a bundled contract, the RECs so referenced should be presumed to be tradable (unless they are RECs governed by §§ 399.16(a)(5) or (6), as explained in § 4.8, below).

These changes resolved some of the previously identified issues, added new tasks, and moved other issues forward.

In D.07-01-018, issued in R.06-03-004, the Commission determined that RECs associated with customer-side renewable distributed generation (DG) belong to the DG system owner, irrespective of participation in net energy metering, the California Solar Initiative, or the Self-Generation Incentive Program (SGIP).

SB 107 resolved the status of RECs for renewable energy generated by QFs by prohibiting the creation of RECs associated with energy generated by QFs under contracts pursuant to the Public Utility Regulatory Policies Act of 1978 (Public Law 95-617) (PURPA) executed after January 1, 2005. It also allowed the creation of RECs associated with energy generated under any contract with a California RPS-obligated LSE or publicly owned utility (POU) prior to January 1, 2005 only if the contract explicitly addressed the ownership of RECs.[8]

SB 107 also added the requirement that, in order for us to authorize the use of TRECs for RPS compliance, this Commission and the California Energy Commission (CEC) must each make a determination that the CEC's RPS tracking system (including WREGIS) is ready to support the use of tradable RECs for RPS compliance.[9] Staff of the two agencies jointly produced a report. The joint staff report was adopted by this Commission in Resolution (Res.) E-4178 (November 21, 2008).[10] It was adopted by the CEC at its business meeting on December 3, 2008.[11]

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[8] Pub. Util. Code §§ 399.16(a)(6), (5).

[9] Section 399.16(a)(1).

[10] The resolution and attached final report are available at

Footnote continued on next page

Energy Division staff held a comprehensive workshop on TRECs and RPS compliance on September 5-7, 2007 (TRECs workshop).[12] Parties filed and served pre-workshop comments on August 17, 2007.[13] After the workshop, staff prepared a revised straw proposal (Straw Proposal) covering a number of TREC market and compliance issues. The Straw Proposal was circulated to parties with the Administrative Law Judge's (ALJ) Ruling Requesting Post-Workshop Comments on Tradable Renewable Energy Credits (October 16, 2007) (post-workshop ruling). Post-workshop comments were filed on November 13, 2007.[14] Post-workshop reply comments were filed on December 5, 2007.[15]

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http://docs.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/94349.PDF.

[11] See http://energy.ca.gov/2008publications/CEC-300-2008-001/CEC-300-2008-001-CMF.PDF.

[12] The workshop notice and the assigned Administrative Law Judge's rulings seeking pre-workshop and post-workshop comments were circulated to the service lists in this proceeding, R.06-05-027 (RPS administration), R.06-03-004 (distributed generation and California Solar Initiative), and R.06-04-009 (greenhouse gas policy). The workshop presentations are available at http://www.cpuc.ca.gov/PUC/energy/electric/RenewableEnergy/misc/recpresentations.htm.

[13] Pre-workshop comments in response to the ALJ's Ruling Requesting Pre-Workshop Comments on Tradable Renewable Energy Credits (July 19, 2007) were filed by Central California Power; Powerex, Solar Alliance; PacifiCorp; CEERT; Sustainable Conservation; AReM and WPTF (jointly); CalpinePowerAmerica-CA, LLC (Calpine); Coral Power, LLC; SDG&E; Aglet; IEP; PG&E; UCS; SCE; GPI; PPM Energy, Inc.; CPV Renewable Energy Company, LLC; and Sempra Energy Solutions.

[14] Post-workshop comments were filed by PG&E; GPI; Powerex; SDG&E; Golden State Water Company; IEP; Pilot Power; Central California Power; EcoSecurities; DRA; CEERT; Calpine Corporation and Calpine (jointly); AReM and WPTF (jointly); MU; SCE; TURN; PacifiCorp; California Farm Bureau Federation and Sustainable Conservation (jointly); Solar Alliance and CalSEIA (jointly).

[15] Post-workshop reply comments were filed by Central California Power; PacifiCorp; Aglet; UCS; California Farm Bureau Federation, Inland Empire Utilities Agency,

Footnote continued on next page

At the prehearing conference held December 10, 2007, some parties suggested that parties interested in the subject might try to develop a consensus recommendation on the definition and attributes of a TREC. Informal discussions among the parties were publicized to the service lists in this proceeding, R.06-05-027, R.06-03-004, and R.06-04-009. The discussions did not result in the filing of any recommendations on this topic. On May 9, 2008, the Center for Resource Solutions (CRS) filed a Motion for Leave to File Additional Comments related to REC definition and attributes. This motion was granted by an ALJ's ruling on June 6, 2008.[16] The ruling allowed reply comments to be filed not later than June 11, 2008.[17] Following this round of comments, the Commission issued D.08-08-028, on the definition and attributes of a REC.[18]

Several significant developments have occurred since the TRECs workshop, including issuance of D.08-08-028; ongoing implementation of the California Global Warming Solutions Act of 2006; Assembly Bill (AB) 32 (Núñez/Pavley), Stats. 2006, ch. 488; and the CEC's revisions to its criteria for delivery of RPS-eligible generation in its *Renewables Portfolio Standard Eligibility*

Sustainable Conservation (jointly); Recurrent Energy, Inc., Solar Alliance, CalSEIA (jointly); Calpine Corporation and Calpine (jointly); TURN; IEP; AReM; SCE; MU; CEERT; SDG&E; DRA; GPI; and PG&E.

[16] Parties were notified informally by e-mail on May 28, 2008.

[17] Reply comments were filed on June 11, 2008 by AReM and WPTF (jointly; collectively, AReM); DRA; GPI; IEP; SCE, PG&E, PacifiCorp, Sierra Pacific, and SDG&E (jointly; collectively, IOUs); Solar Alliance and CalSEIA; TURN; and UCS.

[18] Although the definition of a REC is central to the tradability of a REC, the details of D.08-08-028 are largely not relevant to this decision. One convention that should be kept in mind throughout the discussion, however, is that one REC represents the environmental and renewable attributes associated with one megawatt-hour (MWh) of RPS-eligible generation. See WREGIS Operating Rules, section 2, which may be found at http://www.wregis.org/content/blogcategory/26/47/.

Guidebook (RPS Eligibility Guidebook) at 23-26 (3d ed. December 19, 2007).[19] In order to allow parties an opportunity to update their positions on TRECs, the ALJ issued a Ruling Requesting Supplemental Comments on the Use of Tradable Renewable Energy Credits for the Renewables Portfolio Standard Program (supplemental comment ruling) on September 4, 2008. Comments were filed on September 12, 2008[20] and reply comments were filed on September 18, 2008.[21]

A proposed decision (PD) on the use of TRECs was issued for comment on October 29, 2008. That PD was withdrawn March 26, 2009 and a new PD was issued the same day. Comments on the PD issued March 26, 2009 (March PD) were filed on April 15, 2009.[22] Reply comments were filed on April 20, 2009.[23]

The March PD has been revised in light of comments and subsequent Commission decisions. In view of the passage of time since March 2009, this revised proposed decision was circulated for a full period of comments and reply comments.

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[19] The *RPS Eligibility Guidebook* is available at http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF.

[20] Comments were filed by Aglet, AReM, Bear Valley Electric Service (BVES), Calpine, CEERT, DRA, GPI, Horizon Wind Energy and Iberdrola Renewables (jointly; collectively, Horizon), IEP, MU, PG&E, PacifiCorp, Powerex, SDG&E, Sacramento Municipal Utility District (SMUD), SCE, UCS, and Wal-Mart.

[21] Reply comments were filed by Aglet, AReM, IEP, Large-scale Solar Association, PG&E, SCE, SDG&E, TURN, and UCS.

[22] Comments were filed by Aglet, BVES, SCE, PacifiCorp, Solar Alliance, NaturEner USA LLC, CEERT, SDG&E, Evolution Markets, Inc., AReM and WPTF (jointly; collectively, AReM), UCS, SMUD, IEP, Horizon, PG&E, DRA, TURN, GPI, and Large Scale Solar Association (LSA).

[23] Reply comments were filed by Aglet, Iberdrola, PacifiCorp, PG&E, AReM, MU, BVES, Large Scale Solar Association, SCE, UCS, CEERT, and NaturEner.

Finally, the Assigned Commissioner's Ruling Transferring Consideration of Certain Issues from R.06-02-012 to R.08-08-009 (April 3, 2009) transferred all issues remaining in this proceeding other than those addressed in this decision to R.08-08-009.[24]

4. Discussion

The RPS statute authorizes but does not require this Commission to allow the use of TRECs for RPS compliance, subject to certain statutorily imposed conditions. It also provides specific direction on the treatment of several aspects of the use of TRECs for RPS compliance. Since the specific statutory guidance is relevant only if the use of TRECs is authorized, we begin with the issue of whether to authorize the use of TRECs for RPS compliance.

4.1. RPS Regulatory Framework

Authorizing the use of TRECs for RPS compliance gives RPS-obligated LSEs an additional mode of RPS procurement. This expansion of procurement options fits within the existing RPS program and its requirements.

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[24] The transferred issues are:

a. The revision of utilities' least-cost best-fit methodologies to include evaluation of REC-only contracts.

b. The process of approval of utilities' bundled energy and REC-only short-term contracts (whether bilateral or the result of solicitations) and long-term bilateral contracts.

c. The development of price benchmarks for evaluating the reasonableness of utilities' short-term bundled contracts (whether bilateral or the result of solicitations) and long-term bilateral bundled contracts.

The latter two issues were resolved in D.09-06-050, with the exception of short-term REC-only contracts. The first is pending in R.08-08-009.

SB 107, the decisions of this Commission implementing that statute, and the CEC's guidance on participation in the RPS program[25] provide the framework into which the use of TRECs must be integrated. The most important aspects of the RPS framework for this decision are:

- the requirements for RPS-eligible generation set out in Pub. Res. Code § 25741(b) and elaborated in the *RPS Eligibility Guidebook*;
- the requirements for delivery to California of RPS-eligible generation set out in Pub. Res. Code § 25741(a) and elaborated in the *RPS Eligibility Guidebook*;
- the authorization provided by § 399.16 for this Commission to allow the use of TRECs for RPS compliance;
- the authorization and requirements for the CEC's RPS certification, tracking, and verification responsibilities set out in § 399.13 and elaborated in the *RPS Eligibility Guidebook* and the WREGIS Operating Rules (June 4, 2007, as amended)[26] ; and
- this Commission's responsibility to oversee RPS procurement and compliance by RPS-obligated LSEs.[27]

The CEC certifies generators as RPS-eligible if they meet the criteria for RPS generation set out in the *RPS Eligibility Guidebook*.[28] RPS-eligible energy must also be delivered to California customers in order to be counted for RPS

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[25] The most important CEC guidance for purposes of this decision is found in the CEC's *RPS Eligibility Guidebook*.

[26] The WREGIS Operating Rules may be found at http://wregis.org/Documents.php.

[27] See, e.g., § 399.14; D.03-06-071; D.05-07-039.

[28] See Pub. Res. Code § 25741(b). The CEC's guidance on these requirements is provided in the *RPS Eligibility Guidebook* at 7-23.

compliance.[29] The energy associated with the RECs in a REC-only transaction must also meet the CEC's requirements.

The CEC also verifies claims of RPS procurement.[30] To carry out its tracking and verification responsibilities, the CEC makes use of WREGIS for all RPS procurement transactions occurring on or after January 1, 2009; for RPS procurement in prior years, the CEC uses its own tracking system.

This Commission requires RPS-obligated LSEs to undertake procurement to meet their RPS obligations and to report on their compliance with RPS goals. The Commission uses the verification information provided by the CEC to determine whether an RPS-obligated LSE has met its compliance obligations.[31]

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[29] Pub. Res. Code § 25741(a) provides:

> "Delivered" and "delivery" mean the electricity output of an in-state renewable electricity generation facility that is used to serve end-use retail customers located within the state. Subject to verification by the accounting system established by the commission pursuant to subdivision (b) of Section 399.13 of the Public Utilities Code, electricity shall be deemed delivered if it is either generated at a location within the state, or is scheduled for consumption by California end-use retail customers. Subject to criteria adopted by the commission, electricity generated by an eligible renewable energy resource may be considered "delivered" regardless of whether the electricity is generated at a different time from consumption by a California end-use customer.

The CEC's implementation of these requirements is set out in the *RPS Eligibility Guidebook* at 22-26.

[30] See, e.g., *Renewables Portfolio Standard 2005 Procurement Verification* (August 2007), which may be found at http://www.energy.ca.gov/2007publications/CEC-300-2007-001/CEC-300-2007-001-CMF.PDF.

[31] The system for reporting and compliance determination is set forth in D.06-10-050.

4.2. Authorization

The RPS statute does not set out any criteria or standards by which this Commission should judge whether to authorize the use of TRECs, thus leaving this fundamental matter in our discretion. Almost all parties urge that the use of TRECs for RPS compliance be authorized. They advance a variety of reasons, focused on facilitating RPS compliance and promoting development of new RPS-eligible generation. Several parties assert that the use of TRECs will allow RPS procurement to avoid problems of transmission congestion.[32] Some parties argue that the availability of TRECs will make the overall RPS procurement process more efficient, by providing LSEs with additional options for procurement.[33] According to some parties, the use of TRECs will make it easier for RPS-obligated LSEs[34] to achieve their annual procurement targets (APTs).[35] With the use of TRECs, overall compliance costs for RPS-obligated LSEs should be lower, some parties claim.[36] Finally, some parties assert, the availability of a revenue stream from TRECs and options that it may create for developers will promote development of new RPS-eligible generation.[37]

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[32] AReM, Central California Power, and IEP.

[33] AReM, Horizon, PacifiCorp, SDG&E, PG&E.

[34] RPS-obligated LSEs comprise regulated utilities, community choice aggregators (CCAs), and electric service providers (ESPs). In this decision, utilities are sometimes referred to in groupings of "large utilities" (PG&E, SCE, SDG&E), "small utilities" (Bear Valley Electric Service and Mountain Utilities), and "multi-jurisdictional utilities" (PacifiCorp and Sierra Pacific).

[35] AReM, IEP, PG&E, and SDG&E. GPI and UCS are less certain, but suggest this could be a benefit.

[36] CEERT, IEP, PG&E, and SDG&E.

[37] AReM, CEERT, Coral Power, Horizon, IEP, PG&E, and SDG&E.

DRA and TURN are skeptical about the use of TRECs for RPS compliance; Aglet opposes it outright. These parties believe that use of TRECs will not improve the RPS program and is unlikely to lead to development of new RPS-eligible generation.

TURN and DRA express concern that the TREC pricing experience in other jurisdictions suggests that TREC prices are likely to be volatile. This would harm consumers and would not provide reliable financing for new renewable projects. Aglet, DRA, and TURN suggest that the use of TRECs would lead to a market that overpays for TRECs from existing facilities, and thus would harm consumers and not contribute to new generation. Aglet asserts that the availability of transmission is a major constraint for the development of new RPS-eligible generation; TRECs cannot solve that problem, because a new generation facility will not be built if transmission is not available. Both TURN and Aglet express concern that reliance on TRECs rather than long-term bundled contracts will reduce what they describe as the physical hedging value of RPS procurement. TURN also raises questions about possible hoarding of TRECs and exercise of market power within the TRECs market.

Several of the TREC proponents' arguments are somewhat overstated and do not acknowledge some real problems. It is true that TRECs can expand RPS compliance options, but without new RPS-eligible generation, a robust TREC market to deliver TRECs for RPS compliance will not develop quickly. It is true that TRECs can allow transfer of RPS credit without regard to constrained transmission pathways, but only if there are both RPS-eligible generation to produce the energy associated with the REC and new transmission pathways for the electricity. Current RPS flexible compliance rules also allow LSEs to take

delivery of RPS-eligible energy anywhere in the state, thus reducing the impact of transmission constraints.

The TREC skeptics, on the other hand, focus solely on negative possibilities, such as hoarding of TRECs and loss of interest in the development of new RPS-eligible generation in California. They also argue that consumers may be harmed by high or volatile TREC prices, and TURN proposes measures to mitigate those harms. But TURN does not appear to have confidence that the mitigation strategies it proposes will have a positive impact.

Considering all the arguments, the benefits of allowing the use of TRECs for RPS compliance substantially outweigh the potential harms. Greater compliance flexibility, procurement efficiency, and potentially lower costs are real benefits, even if they may be relatively small in the early years of a TREC market. The availability of a revenue stream from TRECs may encourage new renewable development. Though many other factors, such as transmission siting, are also important determinants of new renewable development, the possibility of more money, or money arranged more flexibly, is only a plus for possible development. Furthermore, a TREC market will provide important pricing information to developers and the investment community, potentially providing them greater confidence in the long-term financial viability of renewable energy projects.

The possible negative consequences of TRECs, such as high payments to existing facilities, market manipulation, or high prices, can be mitigated or removed by the rules this Commission sets for the use of TRECs and the design of the TREC market. Additionally, some of these problems, specifically high payments to existing facilities, are not inherent or unique to TRECs, but are problems that can exist in a bundled regime as well. Such issues might be better

resolved through changes in the relevant statutes or guidelines governing RPS eligibility. This decision sets rules to allow the best chance for a healthy TREC market to develop and aid in the attainment of California's RPS goals.

We therefore exercise the discretion granted to this Commission in § 399.16(a) to authorize the use of tradable RECs for RPS compliance, in accordance with the rules set forth in this decision.[38]

4.3. Sources of TRECs

Our decision to authorize the use of TRECs for RPS compliance is not based on any estimate of the probable quantity of TRECs that may be available in the near term. A brief review of that topic can, however, usefully inform our design of any interim, transitional rules or requirements for the market and for the RPS flexible compliance regime.

Parties were asked to present their best quantitative estimates of the sources of TRECs that could be available for California RPS compliance in the period ending January 1, 2012. From those estimates it is possible to develop a broad-brush picture of the TREC landscape for the near future.

4.3.1. Larger-Scale RPS-Eligible Generation

Calpine suggests that essentially all RPS-eligible generation in California that is or will be capable of delivering energy by the end of 2010 is already under contract to one of the large investor-owned utilities (IOUs). This assertion is not disputed.

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[38] This authorization is qualified by the restrictions on the use of RPS-eligible generation from facilities with contracts with California LSEs or POUs prior to 2005 in which the ownership of RECs is not specified, and from QFs with contracts with California utilities pursuant to PURPA signed after January 1, 2005. (§§ 399.16(a)(5), (6).) These restrictions are discussed further in § 4.8 below.

In response to a question posed in the ALJ's post-workshop ruling, several parties provided estimates, of varying precision, of possible sources of TRECs for the period until the end of 2011. Evolution Markets and UCS submitted the most substantial information, which was reasonably consistent. Evolution Markets estimates that existing RPS-eligible wind and biomass facilities in the Northwest might provide up to 1,100 megawatts (MW) of RPS-eligible nameplate capacity, while planned new geothermal, wind, biomass or biogas generation throughout the Western Electricity Coordinating Council (WECC) region could provide up to 7,500 MW of nameplate capacity. UCS estimates that the Northwest might supply up to 4,000 MW of new nameplate capacity. The timeframe within which any of the projects included in these estimates might be built, however, is not clear. Nor is it possible for the parties to suggest what proportion of such new generation might be available to California LSEs, whether in the form of bundled energy contracts or REC-only purchases.

Other parties[39] point to smaller and more diffuse potential sources. These include small hydropower generation, excess renewable generation from POUs, or RPS-eligible QFs whose contracts under PURPA with large utilities expire and are not renewed, but which still will produce RPS-eligible generation.[40]

PG&E and SCE each state that new merchant RPS-eligible generation is not a reasonable source of TRECs prior to 2012 because of the long lead time needed to make the business decision to build a merchant plant and to design and develop the project. SCE also notes that the large IOUs are unlikely to be in a

[39] These parties include AReM, BVES, DRA, IEP, SDG&E, and TURN.

[40] Pursuant to § 399.16(a)(6), RPS-eligible generation from a QF under a California PURPA contract may count for RPS compliance, but may not be the basis of a TREC.

position to sell RECs to other LSEs prior to attaining the 20% goal. No party disputes these comments.

4.3.2. Distributed Generation

AReM, BVES, PG&E, SCE, and TURN suggest that various forms of DG may provide some available TRECs, though not at a very large scale over the next few years.

There are several types of renewable DG projects. These include on-site RPS-eligible generation at customers; solar photovoltaic (PV) installations, largely constructed under the aegis of the California Solar Initiative (CSI) and the SGIP administered by this Commission and the New Solar Homes Partnership (NSHP) administered by the CEC; generation using biodiesel or biogas; and small biomass facilities.[41]

The availability of TRECs from such installations has been addressed in a variety of contexts. In D.07-01-018, the Commission determined that owners of DG installations own the RECs associated with the generation, and can therefore sell them, regardless of whether the DG owners participate in net metering, CSI, or the SGIP.[42] In D.07-07-027 and D.08-09-033, implementing § 399.20, the

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[41] Formal determination of the RPS eligibility of types of generation or particular systems is made by the CEC. The most current statement of CEC guidance is the *RPS Eligibility Guidebook*, (3d ed., December 2007), available at http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF. The *RPS Eligibility Guidebook* provides that "[t]he Energy Commission will not certify distributed generation facilities as RPS-eligible unless the CPUC authorizes tradable RECs to be applied toward the RPS." (at 18.)

We anticipate that the CEC will review the issue of the RPS eligibility of DG during its next revision of the *RPS Eligibility Guidebook*.

[42] The CEC has likewise determined that RECs associated with customer-side DG belong to the DG system owner, irrespective of participation in the NSHP. See *New*

Footnote continued on next page

Commission provided for tariffs or standard contracts for utilities' bundled purchase of RPS-eligible generation from DG of not more than 1.5 MW in size located at public water and wastewater facilities and other customers, with an overall statewide limit on such purchases. The generation so acquired counts toward the utilities' RPS targets. In this program, customers may sell to the utility either the full output of the DG facility (energy and RECs) or only the excess (energy and RECs) not used for on-site consumption. In the latter case, the RECs associated with the energy used on-site remain with the system owner.[43]

AReM states that the CSI program estimates that the program will have installed about 800 gigawatt hours (GWh) of generation by 2010. AReM additionally estimates that CSI will have provided incentives for approximately 1,100 GWh by 2011. No other party provides quantitative DG estimates. [44]

Solar Homes Partnership Guidebook (revised 2d edition August 2008) at 7-8. This guidebook is available at http://www.energy.ca.gov/2008publications/CEC-300-2008-006/CEC-300-2008-006.PDF.

[43] TRECs from RPS-eligible DG installations that are tracked in WREGIS are, for RPS compliance purposes, the same as TRECs from RPS-eligible utility-scale generation. No matter the type of DG generation or the kind of transaction, RECs associated with RPS-eligible DG—like RECs from any other RPS-eligible generation—"shall be counted only once for compliance with the renewables portfolio standard of this state or any other state, or for verifying retail product claims in this state or any other state." (§ 399.16(a)(2).)

[44] In D.09-06-049, the Commission approved a new SCE program to procure RPS-eligible energy from rooftop solar PV installations of one to two MW in size. Because the program is new, it is not currently possible to know what, if any, impact it will have on DG as a resource for RPS procurement over the next two to three years.

4.3.2.1. WREGIS Requirements for DG

In order for RECs from any source to be available for RPS compliance, they must be recognized in WREGIS. The requirements for WREGIS are set forth in the WREGIS Operating Rules. Several of the rules have implications for the availability of RECs from DG installations for RPS compliance. WREGIS cannot register a system smaller than one kilowatt, so some owners of very small DG systems may not be able to participate.[45] Another WREGIS rule states that RECs cannot be recognized in WREGIS unless the energy associated with the RECs is metered to an accuracy of +/-2%.[46] DG installations that do not provide metering accuracy to that level are not currently eligible for the creation of a REC in WREGIS (called a WREGIS Certificate).[47]

4.3.3. Availability of TRECs

Summarizing this information, it appears that existing RPS-eligible generation in California is largely already included in utilities' portfolios. Many utility-scale projects are under contract, but are not yet built and delivering energy. The construction of new RPS-eligible generation not located in California

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[45] With respect specifically to solar PV installations, Appendix F to the Operating Rules allows aggregation of rooftop solar installations in certain circumstances. Appendix F may be found at http://www.wregis.org/Documents.php.

[46] Operating Rules 9.3.3. The WREGIS rules allow government regulators or voluntary program administrators to make exceptions to this rule.

[47] For example, a CSI-subsidized installation taking advantage of the expected performance based buydown (EPBB) program is required to have a meter accurate only to +/-5%. Projects using the CSI performance-based incentives are required to have a meter accurate to +/-2%. Unless the owner of a project with an EPBB incentive voluntarily installs the more accurate (and more expensive) meter, WREGIS would not, under its current rules, allow any RECs to be registered from that facility without an exception authorized by a regulatory agency. For California RPS purposes, the CEC is the relevant agency, since it determines RPS eligibility.

is uncertain, and the availability of TRECs from that generation is similarly unknown.[48] The use of TRECs from new DG installations is dependent both upon the technical requirements of WREGIS and upon whether the DG owner wishes to retain the RECs to support its own green claims. Since TRECs come from RPS-eligible generation, and the supply of new RPS-eligible generation not already committed to RPS compliance is likely to be limited, the supply of TRECs in the next few years will be similarly limited.

4.4. Guiding Principles

Before, during, and after the TRECs workshop, staff offered several proposals, including guiding principles, to provide guidance and food for thought to the parties. Because these staff proposals form the basis for many of the parties' suggestions and comments, we briefly review them to provide a background for the rules this decision adopts.

The proposed Guiding Principles distributed in the July 19, 2007 ALJ's Ruling Requesting Pre-Workshop Comments are:

1. Use of REC trading for RPS compliance should be consistent with the legislative goals for the RPS program.
2. REC trading should result in minimal disruption to the current RPS program.
3. REC trading should not increase the cost of RPS compliance in the near term, and should lower the cost of RPS compliance over the longer term.
4. REC trading should promote development of new infrastructure in California and neighboring states for renewable energy generation.

[48] Pub. Res. Code § 25741(b)(2)(B) allows RPS-eligible generation from facilities located outside California to count for RPS compliance provided, among other things, the facility began commercial operation after January 1, 2005.

5. REC trading rules, guidelines, and policies should not be inconsistent with the development of a regional REC trading regime.
6. REC trading rules, guidelines, and policies should take account of the process of implementing California's greenhouse gas (GHG) reduction policy and the potential for regional or federal programs for GHG reduction.
7. REC trading rules, guidelines, and policies should meet the Commission's requirements for REC trading set out in D.03-06-071.
8. REC trading rules, guidelines, and policies should be simple, transparent, easily administered, uniformly applied, and equitable to all LSEs.

Parties largely support or at least accept these guiding principles as laying the groundwork for thinking about a TREC market. Since these principles do not form the basis for this decision and are not part of the rules for the TREC market, it is not necessary to fine-tune them to accommodate all the views expressed by the parties.[49]

4.5. REC-Only Transactions

A critical component of authorizing REC-only transactions is identifying the difference between a bundled contract and a REC-only contract. The two types of contracts must each meet the requirements set out by the CEC for RPS eligibility of the generator and delivery of the energy associated with the RECs or with the bundled contract. Where these two types of RPS procurement differ most significantly is in whether the energy associated with the procurement will serve California customer load. We conclude, as explained more fully below,

[49] We do, however, note IEP's suggestion that the commitment to equity should be applied to all TREC market participants, not simply LSEs.

that for RPS procurement purposes we will treat as REC-only transactions those deals that:

1. Expressly convey only RECs and not energy; or
2. Transfer both energy and RECs, but the energy associated with the RECs cannot serve California customer load.

In order for a bundled transaction to serve California load, parties have argued that the generation facility must be:

- interconnected to a California balancing authority, or
- have a dynamic transfer agreement in place to allow the energy associated with the REC to be scheduled into a California balancing authority area, or
- the transaction must utilize firm transmission.

If a transaction has none of these features, renewable energy cannot be scheduled to serve California load; rather, a firm energy product must be substituted before delivery to California customers. As discussed below, parties have provided sufficient information for the Commission to determine that the first two of these three options do allow the renewable energy to serve California load. We thus consider them to be bundled transactions. On the current record, however, we are unable to conclude that a transaction utilizing firm transmission but not dynamic transfer also constitutes a bundled transaction.

The distinction between bundled and REC-only RPS-eligible procurement should turn on the availability of the energy in the transaction to serve California load. This approach grows out of our concern that California customers should not have to pay for RPS-eligible energy that they do not receive.

REC-only transactions in which the RPS-eligible energy does not serve California load provide to California consumers the general benefits of increased use of renewable energy, such as reduction in the emission of greenhouse gases and downward pressure on natural gas prices, that accrue because RPS-eligible

generation has occurred within the WECC. Use of TRECs as a procurement tool also provides the benefit to the renewable energy market of providing additional procurement flexibility to LSEs and potential additional revenue streams to developers of renewable generation projects. However, as defined here, REC-only transactions do not serve California load with RPS-eligible energy.

Transactions that convey both RECs and energy and in which the RPS-eligible energy is directly scheduled without firming and shaping to meet California load provide more specific benefits to California customers.[50] Renewable energy procured to serve California load diversifies the energy portfolios of the IOUs, and thus the energy mix of the state. Such transactions may also provide price stability benefits by reducing ratepayer exposure to volatile fossil fuel prices.[51] While such price stability benefits are not inherent in bundled renewable energy contracts *per se*, but rather of fixing the contract price of the energy, RPS contracts are generally fixed-price contracts. But, in order to create price stability by a fixed price for the RPS-eligible energy in an RPS procurement contract, the contract must deliver energy.[52]

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[50] Firming and shaping are methods of using other generation resources to supplement the delivery of power from intermittent renewable resources. A fuller explanation is provided in Appendix A of the REC White Paper. This is different from the necessary use of ancillary services within a balancing authority area to manage deliveries from intermittent resources, for example CAISO's Participating Intermittent Resources Program, discussed in D.06-10-019, at 37.

[51] Both resource diversification and price stability have been identified by the Legislature in § 399.11 as among the potential benefits of the RPS program.

[52] The large utilities point out that they can also provide hedging at the level of their entire portfolios. While true, this does not eliminate the value to ratepayers of fixed-

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We conclude that there is a difference in the benefits California ratepayers receive from a bundled contract for RPS-eligible energy and a REC-only contract. It is therefore important to identify the contracts that fall into each of these categories so that the Commission can evaluate utilities' RPS procurement planning and can review the reasonableness of RPS procurement contracts presented for Commission approval.

This clarification of the distinction between REC-only and bundled transactions incorporates information and perspectives provided by many parties over the course of the development of this RPD. Initially, parties focused on the application of the CEC's delivery criteria to transactions with generators not located in California to determine which transactions should be classified as REC-only. The parties analyzed and discussed the examples of firming and shaping arrangements for RPS-eligible transactions that are provided in the *RPS Eligibility Guidebook*.[53]

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price RPS contracts that deliver energy to California customer load as specific elements of an IOU's hedging portfolio.

[53] In full, the examples are:

1. The facility could provide firming and shaping services. For example, the retail seller could enter into a PPA with an RPS-eligible facility and, as part of the PPA, the facility would provide firming and shaping to deliver a firm or non-firm product into California.

2. A third party could provide firming and shaping services. For example: a retail seller could buy energy and RECs from an RPS-eligible facility and execute a second PPA to resell the energy from the RPS-eligible facility, but not the RECs, to a third party that provides firming and shaping services. Then, the third party could provide the retail seller with a firm schedule for delivery into California.

3. The retail seller could provide firming and shaping services. The retail seller could buy energy and RECs from an RPS-eligible facility, sell the energy back to the

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TURN argues, following a line of argument made by DRA in protest to some advice letters for RPS contracts,[54] that the CEC in its third example has made the requirement of delivery almost meaningless by sanctioning the delivery of any kind of power, including previously acquired coal-fired generation, to be "matched" with a REC to satisfy the delivery requirements. TURN observes that it is in any event difficult to determine whether new energy is serving California load in a firmed/shaped transaction. TURN also supports the assertions made by GPI and Aglet that allowing RECs to be counted for RPS compliance while the associated energy is not used in California will increase prices and increase price volatility by requiring the purchase of replacement energy to serve load in California.

CEERT, the large utilities, SMUD, Evolution Markets, and NaturEner oppose TURN's position. CEERT, NaturEner, and SCE emphasize that, in any event, the CEC's delivery criteria are not reviewable by this Commission.

The RPS statute gives the CEC the responsibility to determine RPS eligibility, including establishing the criteria for delivery of RPS-eligible electricity. (§ 399.13.) This decision does not seek to alter the CEC's criteria.

The parties' arguments about RPS eligibility criteria are not, in any event, relevant to the core of the distinction between REC-only and bundled RPS procurement, since both REC-only and bundled transactions must meet all RPS eligibility criteria. Further, as the large utilities point out, commercially viable

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facility, and "match" the RECs with energy delivery into California from a second PPA and/or with imports under a pre-existing PPA.
RPS Eligibility Guidebook, at 23-24, n. 21.

[54] TURN cites to DRA's Protest to PG&E Advice Letter 3183-E (January 10, 2008).

contracts may take many different forms. Although any deal, REC-only or bundled, must comply with the RPS delivery requirements, it is unnecessarily complicated and uncertain to make the classification as REC-only or bundled depend on how the delivery requirement is met. There are many commercially viable delivery options; this Commission should not have to put each one under a microscope in order to determine whether the procurement should be classified as REC-only.

In this decision, this Commission relies on its long-standing authority over all aspects of RPS procurement, including reviewing and approving utilities' RPS procurement plans and contracts, determining the market price referent, evaluating RPS procurement contracts for price reasonableness, and applying special procurement rules for multi-jurisdictional utilities. (§§ 399.14, 399.15, 399.17.) This Commission also has authority and discretion over the conditions for the use of TRECs for RPS compliance by all LSEs (§ 399.16(a)(7), (9)).[55]

[55] In light of the comprehensive statutory allocation of responsibility, we reject SMUD's unsupported assertion in its comments on the RPD that the CEC, rather than this Commission, has authority to designate a contract as REC-only or bundled.

Prior versions of the PD focused on the structure of the contract as the basis for clarifying which RPS-eligible deals are, for RPS procurement purposes, REC-only transactions. This approach won support from several parties, but support was far from unanimous. Lack of enthusiasm for this element of the March PD took varied forms, but most parties commenting on the REC-only transaction classification in the March PD argue that the classification determination was complicated and awkward.[56] The large utilities point out that the method in the March PD does not accurately track how electricity is actually bought and sold in the large and complex WECC market. Taken together, the

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[56] In comments filed in April 2009, DRA, GPI, Iberdrola/Horizon and UCS support the classification determination made in the March PD~~. Among parties opposing the classification determination, CEERT and NaturEner argue that the REC-only classification both usurps the authority of the CEC and would create market uncertainty. Evolution Markets argues that the classification was a misguided attempt to manage risk. PG&E asserts that the contract-based classification method was artificial; SDG&E also claims that it was too complex and involved too much analysis of contract details. SCE proposes a different classification method, based on the buying LSE's control over the treatment of the energy in the transaction. SMUD expresses concern about the impact of the classification method on GHG accounting~~.

TURN argues that the March PD does not provide a firm enough basis for making the bundled transaction/REC-only transaction distinction, which TURN would like strengthened.

Among parties opposing the classification determination, CEERT and NaturEner argue that the REC-only classification both usurps the authority of the CEC and would create market uncertainty. Evolution Markets argues that the classification was a misguided attempt to manage risk. PG&E asserts that the contract-based classification method was artificial; SDG&E also claims that it was too complex and involved too much analysis of contract details. SCE proposes a different classification method, based on the buying LSE's control over the treatment of the energy in the transaction. SMUD expresses concern about the impact of the classification method on GHG accounting.

comments suggest that a simpler, more direct method of delineating REC-only transactions would be better.

Initially, the RPD drew a bright line between transactions with RPS-eligible generators having a first point of interconnection with the WECC interconnected transmission system physically located within California or for which the first point of interconnection with the WECC lies in the California Independent System Operator (CAISO) or another California balancing authority area.[57] The RPD notes that as a general matter, transactions involving RPS-eligible facilities that do not meet these criteria do not provide the benefits of serving California customers with renewable energy, but do provide the more general benefits of renewable generation that are characteristic of REC-only transactions.

After reviewing numerous comments on this classification, we are persuaded that the fundamental principle that bundled transactions serve California load can be advanced by including in the "bundled transaction" category those transactions where the electricity is dynamically transferred for scheduling by the CAISO or another California balancing authority area. The parties agree that such

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[57] The North American Electricity Reliability Corporation (NERC) defines a balancing authority area as "[t]he collection of generation, transmission, and loads within the metered boundaries of the Balancing Authority. The Balancing Authority maintains load resource balance within this area." The balancing authority is "[t]he responsible entity that integrates resource plans ahead of time, maintains load-interchange-generation balance within a Balancing Authority Area, and supports Interconnection frequency in real time." NERC, Glossary of Terms Used in Reliability Standards, at 21 (February 12, 2008). This glossary may be found at http://www.nerc.com/files/Glossary_12Feb08.pdf.

For convenience only, we will sometimes refer to such generation as "not directly interconnected." This phrasing is not intended to create any new category of generation or transmission, nor to substitute for the generally accepted terms of art in the industry. It is intended solely to reduce readers' fatigue.

transactions are "electrically equivalent" to the generator having a first point of interconnection with a California balancing authority area.

There are two types of dynamic transfers: dynamic scheduling and pseudo ties. A dynamic schedule allows the host balancing authority that is receiving the output of the facility to adjust the schedule and dispatch of the facility if there are fluctuations in its output. The CAISO does not currently use dynamic scheduling for intermittent resources, but is actively studying its implementation.[58] A pseudo tie arrangement goes further than dynamic scheduling and effectively transfers the generator electrically into the attaining (receiving) balancing authority area,[59] which treats the facility like internal generation; i.e., the attaining balancing authority provides "control area services" such as scheduling, balancing, and outage coordination.

Based on our understanding of these arrangements, we find that dynamic scheduling and pseudo tie arrangements are equivalent to direct interconnection for RPS procurement purposes. The energy from these transactions can serve California load; i.e., substitution of a different, firm energy product is not required before delivery to California. Consequently, transactions that include dynamic transfer of RPS-eligible generation to a California balancing authority area would be considered bundled transactions. Additionally, further references in this decision to "direct interconnection" include dynamic transfers.

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[58] See CAISO Dynamic Transfer Issue Paper (Nov. 30, 2009) at 5-6, available at http://www.caiso.com/2476/2476ecfa5f550.pdf.

[59] As Sempra Generation notes, CAISO currently has one pseudo tie pilot project with an RPS eligible generator. The Commission approved the RPS procurement contract for that project in Res. E-4302 (Dec. 21, 2009), found at http://docs.cpuc.ca.gov/WORD_PDF/FINAL_RESOLUTION/111507.PDF.

Therefore, we conclude that a REC-only transaction for purposes of RPS compliance is one that either:

1. Expressly transfers only RECs, not energy;
2. Transfers RECs and energy but does not meet the Commission's criteria for a bundled RPS procurement transaction.

In order to carry out this determination, the Director of Energy Division is authorized to develop methods, in consultation with the parties and CAISO and other California balancing authorities, if relevant of reviewing and evaluating RPS procurement contracts in which a dynamic transfer is an element of the contract.[60]

After developing the methods to identify and review contracts using dynamic transfers, the Director of Energy Division is authorized to use those methods to evaluate RPS procurement contracts and to classify them as REC-only or bundled contracts, as appropriate. Until such methods are developed, Energy Division staff is authorized to use any and all current methods for review of RPS procurement contracts to review and evaluate contracts and to classify them as REC-only or bundled contracts, as appropriate.

The Director of Energy Division may require that documentation specifically related to the dynamic transfer be presented with the advice letter or application seeking approval of a contract. For those LSEs that do not submit procurement contracts for Commission approval, the Director of Energy Division is authorized to require submission of appropriate documentation if an LSE

[60] As UCS points out in its comments on the RPD, dynamic transfer is a rapidly changing area. We therefore expect Energy Division staff to make periodic updates to the methods described here, if that is necessary.

claims bundled status for deliveries made pursuant to a dynamic transfer with a California balancing authority area.

The fundamental characteristic of a bundled transaction is that the energy associated with the REC serves California load. Based on the record in this proceeding, we can say with assurance at this time that the following transactions belong in this bundled transaction classification:

1. Transactions where the RPS-eligible generator's first point of interconnection with the WECC interconnected transmission system is with a California balancing authority;
2. Transactions in which the RPS-eligible from the transaction is dynamically transferred to a California balancing authority.

A number of parties advance the argument that transactions with firm transmission arrangements also meet this fundamental requirement of serving California load.[61] As several parties note, a firm transmission arrangement involves the purchase of transmission services to deliver energy to a California balancing authority scheduling point. This should provide a strong indication that the energy will be available to serve California load.

However, firm transmission arrangements may not be enough in themselves to allow an RPS procurement transaction to be considered bundled, for at least two reasons. First, the buyer of firm transmission is not required to use it; in that case, the transmission provider can sell the transmission to another entity. Second, even when firm transmission is used to bring energy to a California balancing authority scheduling point, the buyer could enter into an arrangement to remarket the electricity from that point.

[61] They include AReM, Iberdrola, IEP, LSA, LS Power, SDG&E, and Sempra Generation.

It is not clear to us, based on the record in this proceeding, how often and under what circumstances these two situations may arise. It does, however, appear that transactions using firm transmission could meet the criteria for being bundled. Because a variety of remarketing mechanisms are available to LSEs, it is less clear on the present record how to address this issue. It is also not clear whether a contract using firm transmission can be reliably classified as bundled at the time it is submitted to the Commission for approval, which may be necessary in reviewing the reasonableness of the contract.

Nevertheless, we seek to include as bundled RPS procurement all those transactions that can be demonstrated to serve California load. We therefore have a policy preference to accept RPS procurement transactions using firm transmission arrangements as bundled RPS procurement, if Commission staff can identify appropriate technical and evaluative methods to allow a determination that such transactions serve California load and should thus be classified as bundled when the contract is submitted for Commission approval.
Because many technical and practical questions must be investigated and resolved before transactions of this type can be accepted as bundled RPS transactions, we will not now consider them as bundled. The Director of Energy Division shall treat such transactions as REC-only transactions at this time.

We authorize the following steps to be taken to develop the basis for considering (or rejecting) as bundled RPS procurement transactions those transactions with RPS-eligible generators using firm transmission arrangements:

1. Energy Division staff will convene a workshop or workshops, and seek comments from the parties, to obtain information that will
    a. enable a determination of how to classify such transactions for RPS procurement purposes, including but not limited to:

- information about verification and auditing of the use of firm transmission;
- information about the frequency with which firm transmission arrangements are used by California LSEs; and
- information about the range of remarketing practices for RPS-eligible energy and the frequency of their use by California LSEs.

b. allow the development of criteria for reviewing and evaluating RPS procurement contracts that use firm transmission arrangements and are presented for Commission approval;

c. provide recommendations, in the discretion of the Director of Energy Division, to the Commission about the classification and evaluation of such transactions. Such recommendations may be in the form of a report, or in the form of a resolution prepared for the Commission's consideration.

2. The assigned Commissioner in R.08-08-009 or its successor is authorized to include the use of firm transmission arrangements for RPS procurement transactions in the scope of that proceeding.

3. The assigned Commissioner or assigned ALJ in that proceeding may schedule comments or briefing by the parties to aid the Commission in making a definitive determination about the classification of RPS procurement transactions using firm transmission arrangements.

4. After reviewing the information provided from the steps outlined above, the Commission may issue a decision on the issue of RPS procurement transactions using firm transmission services, may adopt a resolution, or may decide not to take further action with respect to such transactions.

The determination of classification of RPS procurement contracts made in this decision applies to all contracts for RPS procurement. However, deliveries from such contracts that occurred prior to the effective date of this decision will continue to be considered bundled deliveries.

Although this application of the classification criteria is consistent with the RPS compliance regime, it is also important to recognize the legitimate expectations of the parties to RPS contracts now classified as REC-only that were *approved* by the Commission prior to the effective date of this decision. Therefore, the temporary limit on the use of TRECs for RPS compliance set out in § 4.6.3, below, should not apply to deliveries from a contract approved prior to the effective date of this decision, if those deliveries would cause an LSE to exceed the 25% usage limit in any year. Because the cap would be exceeded, however, no additional REC-only deliveries in excess of the usage limit would be allowed to count for RPS compliance in that year.

4.6. Market Structure and Rules

Drawing on the views of the parties and the ideas in the staff Guiding Principles, it is possible to set some basic goals for the TREC market. It must, at a minimum, enable compliance with California RPS requirements. It should not make RPS compliance more difficult or expensive than it currently is. It should put in place processes that can be used to improve RPS compliance options over time. Beyond compliance, the TREC market should be transparent and able to encourage development of new RPS-eligible generation and maximize the effective use of existing RPS-eligible generation resources. The TREC market should function in a way that protects ratepayers without unnecessarily confining innovation in the market. Finally, the market must allow accountability with respect to RPS flexible compliance rules, reporting, and verification.

4.6.1. Staff Straw Proposal

At the TRECs workshop, Energy Division staff presented a Straw Proposal addressing many areas of concern. That proposal was revised and attached to

the ALJ's post-workshop ruling for the parties' consideration. Most post-workshop commenters responded to some or all of the points in the Straw Proposal.[62] The Straw Proposal identifies five areas of concern:

- Market participants;
- Limits on TREC usage;
- Application of flexible compliance rules on banking and earmarking;
- Treatment of existing and future bundled RPS contracts; and
- Utility cost recovery, including bid evaluation, contract review, and price reasonableness.

We turn our consideration to these areas, though not necessarily in the order set out in the Straw Proposal.

4.6.2. Participants

Parties unanimously agree that there should be no restrictions on participation in a TREC market, and that the TREC trading rules should be the same for all participants. This will provide the foundation for a market that is transparent and fair, with the simplest possible rules and the largest range of participants. RPS-obligated LSEs, RPS-eligible generators, California POUs, parties that aggregate small numbers of RECs into larger packages, financial institutions, and other third parties will all be able to contribute to the developing TREC market. Although this decision places no formal restrictions on who can participate in the California TREC market, we note that, as a practical matter,

[62] For ease of reference, the Straw Proposal is attached as Appendix B. Appendix B does not contain the "rationale" sections provided with the straw proposal attached to the ALJ's ruling.

participants must meet the requirements for participation set by WREGIS, through which TREC trades will occur.

4.6.3. Temporary Limits on Use of TRECs

In response to direction in SB 107, in D.07-05-028, the Commission established, for a limited period of time, minimum quantities of RPS-eligible energy to be procured through contracts with new facilities[63] or long-term contracts[64] with existing facilities that are necessary in order for LSEs to count deliveries from short-term RPS-eligible contracts with existing facilities for RPS compliance.[65] This requirement will end when an LSE reaches its 20% RPS target.[66]

The Straw Proposal would extend a modified version of these requirements to the use of short-term contracts for TRECs from existing facilities.

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[63] Those that entered commercial operation on or after January 1, 2005.

UCS points out that this fixed date for determining whether a facility is "new" becomes less relevant with each passing year. Nothing in this decision depends on this determination, so we do not address it. We do, however, note that it would be useful to be able to determine more precisely when a "new" facility has become an "existing" facility.

[64] Contracts with durations of 10 years or more.

[65] Section 399.14(b) provides that:

> The commission may authorize a retail seller to enter into a contract of less than 10 years' duration with an eligible renewable energy resource, if the commission has established, for each retail seller, minimum quantities of eligible renewable energy resources to be procured either through contracts of at least 10 years' duration or from new facilities commencing commercial operations on or after January 1, 2005.

At the time D.07-05-028 was issued, this statutory requirement was found in § 399.14(b)(2). Prior § 399.14(b)(1) was repealed by SB 1036 (Perata), Stats. 2007, ch. 685 and the section was renumbered.

[66] D.07-05-028, Ordering Paragraph 5.

The Straw Proposal would require that, in order to count short-term TREC contracts with existing facilities, an LSE must in the same year sign long-term contracts or contracts with new facilities whose aggregated annual expected deliveries total at least 0.25% of the prior year's retail sales.[67]

Parties' responses to this proposal vary widely. Calpine, DRA, PG&E, SCE, TURN, and UCS urge that such an extension is justified for the same reasons it is useful for bundled energy contracts. Long-term contracts, they assert, are fundamentally necessary for new development of RPS-eligible generation. The Commission recognized this fact in D.06-10-019, and no party currently disputes it. It therefore makes sense, these parties urge, to apply similar requirements to encourage long-term contracting in the context of TREC contracts. UCS proposes an alternative restriction that short-term TREC transactions with existing facilities can make up no more than 50% of the MWh contracted for in any year by an RPS-obligated LSE. TURN supports this suggestion, arguing that it would reduce the harmful impact on long-term RPS contracting introduced by the use of TRECs.[68]

In comments submitted in response to the supplemental comment ruling, several parties addressed the question of how to balance the use of TRECs against the perceived benefits offered by long-term bundled RPS contracts. Aglet asserts that the benefits of long-term fixed price bundled RPS contracts include (1) reduced exposure to natural gas price volatility and (2) reduced dependence

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[67] UCS proposes that this figure be 0.75%, rather than 0.25%.

[68] Aglet makes a different type of proposal: that IOUs be allowed to engage in REC-only transactions with other IOUs, but only limited TREC transactions with other LSEs. Aglet does not address third-party market participants. No other party supports this proposal.

on spot market energy purchases. If the use of TRECs were to increase and displace bundled contracts, Aglet argues, the effects of RPS contracts on electric price stability would be reduced.[69] GPI also points out that only contracts for delivered energy, not TRECs, can contribute to price stability for ratepayers. UCS, while generally supportive of the use of TRECs, makes a similar point about price stability and argues in favor of more stringent limits on use of TRECs than those in the Straw Proposal. TURN agrees with these positions.

TURN also asserts that price stability is the "primary" economic advantage of renewable energy. This advantage would be undermined, TURN argues, if an LSE were forced to purchase electricity to make up for TREC purchases, assuming such electricity purchases are not likely to have a fixed, long-term price. SDG&E contends that these views of the benefits of RPS contracts are too narrow, and that other methods of guarding against the risk of increased costs, such as hedging on a portfolio-wide basis, may be as, or more, effective.

Most parties, consistent with their views that a nascent TREC market should have few if any regulatory requirements, oppose extension of the minimum quantity requirement. AReM, CEERT, GPI, Horizon, IEP, MU, PacifiCorp, and SDG&E all argue that such a requirement would reduce liquidity in the TREC market, tend to drive up TREC prices, and make it more difficult to move to a fully competitive TREC market. PacifiCorp asserts that limits on the use of TRECs will make it more difficult for LSEs to employ the least-cost alternatives in RPS procurement.

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[69] The parties sometimes use the term "price stability" and sometimes use the term "hedging" to refer to reducing the risk of uncertain cost impacts on ratepayers. In this decision, we will refer to price stability, consistent with the Legislature's finding that the RPS program "may promote stable electricity prices." (§ 399.11(b).)

CEERT, PG&E, and SCE oppose UCS' suggestion of a more stringent minimum quantity requirement. AReM, PG&E, and SCE oppose UCS' suggestion of a percentage usage limit. PG&E would prefer a minimum quantity requirement like that set forth in D.07-05-028. SCE argues that the UCS position is based on a theoretical concern that the use of TRECs could lead to a reduction in an LSE's commitment to long-term contracts. SCE asserts that essentially all parties acknowledge that the supply of TRECs will be limited in the near term; the primary source of short-term TRECs is likely to be facilities whose existing contracts with IOUs are expiring. Therefore, SCE argues, the kind of limits UCS proposes are simply unnecessary.

While the Legislature mandated that a minimum quantity requirement be established for the use of short-term bundled contracts with existing facilities, it did not impose a similar requirement for TREC contracts. We therefore take a fresh look at the desirability of limits on the use of TREC contracts.

The record in this proceeding indicates a wide divergence of opinion about the implications of REC-only transactions in the RPS program. Although these long-standing concerns cannot be resolved now, we believe the additional flexibility TRECs offer will enhance the market for RPS-eligible generation and facilitate achievement of the RPS goals. Nevertheless, important questions remain about whether, or to what extent, REC-only transactions might undermine some of the goals of the RPS program, including incentives for new renewable generation,[70] meaningful diversification of the utilities' energy

[70] See, for example, the concerns expressed in comments on the RPD and prior versions of the PD by Aglet, Calpine, DRA, PG&E, SCE, and TURN.

portfolios, and the value of the RPS program to ratepayers.[71] We therefore believe it is prudent to establish some limits on the use of TRECs for an initial period of time, to allow parties, staff, and the Commission an opportunity to see how the TREC market is working and to evaluate the overall role of TRECs in RPS compliance.

The issue of a limit on TRECs was framed in the Straw Proposal and in UCS' alternative proposals as a limit on contracting, like the minimum quantity requirement for bundled contracts. However, it is more appropriate to establish a limit on TRECs usage as a percentage of the LSE's APT.[72] The current RPS reporting process is based on APT, and LSEs are used to considering their RPS obligations in terms of APT. By contrast, the number of contracts signed in a year, and the amount of energy and/or RECs those contracts will procure, is variable and can not be estimated as accurately. It would therefore be more difficult for an LSE to have confidence that its TREC purchases would be within a limit based on annual contracting. It is more transparent, practical, and enforceable to impose a limit on the proportion of TRECs used to meet APT.

This limit will require that no more than 25% of the MWh used by PG&E, SCE, or SDG&E to meet APT in any year may be in the form of TRECs, beginning with the 2010 compliance year. This limitation, like the minimum quantity requirement for bundled contracts, is an annual limit. Each year, no more than

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[71] Aglet and DRA, for example, have presented their concerns about value to ratepayers from the earliest stages of our consideration of the use of TRECs for RPS compliance.

[72] APT for any year prior to 2010 is determined by taking the prior year's APT and adding 1% of the prior year's retail sales (the incremental procurement target, or IPT). D.06-10-050, Attachment A. For 2010 and later years in which APT is 20% of retail sales, APT is calculated as 20% of the current year's retail sales. D.09-11-028.

25% of APT may be met with TRECs. Also like the minimum quantity requirement for bundled contracts, if one of the large IOUs acquires more than 25% of APT as TRECs in any year, it may carry over the excess in TRECs for compliance in future years (subject to any TRECs usage limitation applicable to the later year).[73]

Although this limitation does not precisely correspond to any of the initial quantitative limits suggested by parties, it is consistent with a number of comments on the RPD.[74] This limit is significantly higher than the 5% of APT limit in the March PD. Most parties opposed any limit, though Aglet, DRA, LSA, TURN, and UCS supported it. A number of parties, including Evolution Markets, GPI,[75] Iberdrola/Horizon, IEP, and Solar Alliance, urged that, if a usage limitation were imposed, it should be higher. The 25% limit allows significant use of REC-only procurement but maintains bundled contracts as the source of the majority of RPS procurement in any year.

It is not unreasonable that this limitation will apply just to the three large utilities. They are responsible for the vast majority of RPS procurement in California; they provide contracts supporting new construction; and they have by far the largest number of customers. They also have the largest array of RPS procurement options and resources, enabling them to have greater flexibility

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[73] As explained in § 4.5, above, if the deliveries from a contract approved prior to the effective date of this decision would put a utility over the 25% usage limit in any year, the limit will not apply to the deliveries from the previously approved contract.

[74] These include Aglet, LSA, TURN, and UCS.

[75] GPI presented calculations suggesting that the limit of 5% of APT would not allow the use of TRECs to make any significant contribution to the attainment of the 20% goal by 2010 (or later, applying the flexible compliance rules) on a statewide basis.

incorporating the TREC limitation of 25% of APT into their procurement planning. Since the limitation is temporary and transitional, the large utilities can take account of it in their longer-term RPS procurement strategies without being unduly constrained in those strategies.

For the two small California utilities, BVES and MU, benefit to their customers in the early years of the TREC market is more likely to be promoted by exempting them from the 25% limitation than by imposing it. As the small utilities have explained in several sets of comments, because of their remote locations and peak loads occurring in winter and at night (the inverse of those of the large utilities), their ability to contract for reasonably priced RPS-eligible resources is currently quite limited.[76] Their ratepayers would be better served by allowing as much RPS procurement flexibility as possible, within the general requirements of the program and the existing flexible compliance rules.[77] Moreover, including the small utilities in the 25% limit would have no practical impact on the potential for new renewable generation development, since their total RPS procurement is so small. We therefore will not now apply the 25% of APT limitation to the two small utilities.

The TREC usage limitation is fundamentally a protection for California utility ratepayers. This limitation applies to the multi-jurisdictional utilities (MJUs), PacifiCorp and Sierra Pacific, only in particular, limited circumstances.

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[76] Of course, because MU is not now connected to the California grid, it simply cannot procure electricity from third parties.

[77] In their supplemental comments, Calpine, DRA, and UCS all recognize the difficult situations of the small utilities, and make varying suggestions for providing them with more flexibility in meeting RPS requirements. We do not adopt any particular suggestion, but acknowledge the concerns of these parties.

This Commission does not generally approve their RPS procurement contracts. Further, the MJUs may proportionally allocate to California RPS compliance their system-wide RPS-eligible procurement. See § 399.17; D.08-05-029. Thus, the role of California-specific bundled RPS contracts in promoting price stability for MJU customers is much less significant, and much less within the sphere of our responsibility, than it is for California utilities. However, analogous to their bundled contracts,[78] if an MJU signs contracts for TRECs for use for California RPS compliance, such contracts would be subject to the limitation of 25% of APT.

Finally, this Commission has different responsibilities with respect to utilities, on the one hand, and ESPs and CCAs on the other. This Commission does not set the rates of ESPs or CCAs and has no responsibility to ensure that their charges to their customers are just and reasonable. If an ESP or CCA chooses to take the price risk associated with using TRECs rather than fixed-price bundled contracts for RPS compliance, that is a business decision whose consequences are borne solely by the ESP or CCA and its customers. Therefore, the limitation on the use of TRECs to 25% of APT will not now apply to ESPs or CCAs.[79]

This limit is enforceable through the existing RPS compliance reporting process. For each compliance year, LSEs would identify how many MWh

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[78] See D.08-05-029 at 34.

[79] SB 695 (Kehoe), Stats. 2009, ch. 337, added a requirement that, after certain steps have been taken for limited reopening of direct access, the Commission must undertake equalization of RPS requirements as between ESPs and the large IOUs. In its comments on the RPD, TURN strongly urges that we make the usage limit apply to ESPs in the same way as to large IOUs now. We prefer to approach equalization of RPS requirements through a comprehensive review of all program requirements to be undertaken in R.08-08-009, rather than by changing this one element of the RPD now.

applied to the LSE's APT were provided through REC-only transactions. Any MWh from TREC transactions that exceeded 25% of APT would be disallowed for RPS compliance in that year, but could be carried forward for compliance in succeeding years.[80] Energy Division staff is authorized to make any adjustments to the RPS compliance spreadsheet that are necessary to implement this limitation.

This limit on the use of TRECs for RPS compliance should be a temporary one. This usage limit will terminate December 31, 2011, unless the Commission acts to review, extend, or modify it, or to terminate the limit prior to its expiration. If there is a new legally binding RPS goal, the usage limitation may be reviewed in light of the new goal.

As the TREC market matures, it may also be desirable to move away from an approach that focuses on particularized limits, and toward a portfolio approach to the use of various types of RPS-eligible contracts in the RPS program. Parameters such as long-term and short-term, new facilities and existing facilities, TRECs and bundled procurement, could be used to develop a more holistic approach to RPS procurement. At this time, however, there is no experience with TRECs that could inform the development of such an approach. We focus now on getting the TREC market off to a good start.

[80] If the limit is exceeded in any year by virtue of deliveries from contracts approved by the Commission prior to the effective date of this decision, the limit will not be applied to those deliveries.

4.7. Cost Recovery

The various topics encompassed in the general rubric of cost recovery apply only to the IOUs—large, small, and multi-jurisdictional. The Commission has authority over their rates, and has responsibility to maintain just and reasonable rates for their ratepayers, while ensuring safe and reliable service and implementing the RPS program goals. This Commission does not have authority over the rates of ESPs or CCAs. Thus, this aspect of REC market and compliance design will not be the same, or even similar, for all RPS-obligated LSEs. This is not a repudiation of the Commission's commitment to equitable treatment of all RPS-obligated LSEs, but simply a reflection of the regulatory reality of the California hybrid energy market.

4.7.1. Contract Approval

The large utilities all support the Straw Proposal that contracts for TRECs be reviewed in the same way as analogous contracts for RPS-eligible bundled energy. No party opposes this fundamental principle. UCS supports eventually aligning the review of TREC contracts with short-term bundled contracts. Horizon, PG&E, and Shell all support aligning TREC contract approval with short-term fossil generation contract approval.

The review processes for RPS bundled contracts and TREC contracts should be similar, so far as possible. This promotes the values of administrative simplicity, transparency, and fairness. The review process for TREC contracts starts, as does the process for bundled contracts, with the Commission's review of the large utilities' RPS procurement plans (see § 399.14(a)) or the multi-jurisdictional utilities' supplements to their integrated resource plans. (See 399.17(d), D.08-05-029.) Going forward, the large utilities and the multi-

jurisdictional utilities should include in their procurement plans or supplements the extent to which they intend to use TRECs to meet their RPS obligations.

After the Commission has evaluated the RPS procurement plans and determined that they are consistent with the requirements set out in the RPS statute and Commission decisions, utilities may conduct solicitations to procure RPS-eligible resources in accordance with their plans. (See § 399.14(b).) When utilities submit RPS procurement contracts for approval, the Commission evaluates them with respect to, among other things, consistency with their approved RPS procurement plans and the reasonableness of the contract relative to other bids received by the IOU in the same time frame.

For the 2010 RPS procurement plans that have been submitted in R.08-08-009, all utilities that have submitted plans should amend those plans, on a schedule to be set by the assigned ALJ, to include their planning for the use of TRECs to meet RPS procurement obligations in 2010.[81] In amending these plans, the utilities should explain how their anticipated use of TRECs will facilitate additional renewable development in California and the WECC. This Commission places a high value on long-term contracting with newly constructed or planned RPS eligible facilities and to that end it is important that we understand how use of REC-only contracts advances this preference. In their amendments to their 2010 annual RPS procurement plans and in future procurement plans, the utilities should include a description of the TREC

[81] These amendments should include as much detail as currently possible on whether the utility intends to use long-term or short-term contracts, and whether the utility expects to contract with newly constructed generation, or acquire TRECs from facilities that are currently on line.

products they intend to solicit and explain how these transactions will promote the development of new renewable facilities in California and the WECC.

Although some parties have proposed a new pre-approval process for short-term TREC contracts, we are not changing current contract approval procedures in this decision. The fast-track process for approval of short-term contracts set out in D.09-06-050 would not now be applicable to TREC contracts. Because the price benchmark necessary for fast-track treatment pursuant to D.09-06-050 is calculated on an entirely different basis from the price cap on TRECs set out in § 4.7.3, below, the fast-track process cannot now be used for TREC contracts.[82] With this one exception, Energy Division staff may use all current methods of analyzing advice letters for bundled contracts and make any adaptations necessary for reviewing REC-only contracts.

For multi-jurisdictional utilities, the situation is somewhat more nuanced. This Commission does not generally approve their RPS procurement contracts for bundled energy. If, however, a multi-jurisdictional utility wishes to recover costs of a California-specific RPS contract, it must file an advice letter for approval of the costs of the contract. (See D.08-05-029 at 32.) TREC contracts should be treated similarly. If an MJU wishes to recover costs for any quantity of TRECs from a specific contract committed to its California RPS obligations, it must submit an advice letter demonstrating that the levelized price of the RECs does not exceed any price cap applicable to TREC transactions of IOUs, and conforms to any other requirements for TREC cost recovery by MJUs.

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[82] The possible development of an analogous process for short-term TREC contracts will be taken up in R.08-08-009.

4.7.2. Bid Evaluation

The Straw Proposal suggests that utilities revise their processes for RPS procurement to include requests for offers for REC-only contracts, as well as to revise their least-cost best-fit (LCBF) methodology to allow evaluation of REC-only bids. IEP, PG&E, and TURN generally support this proposal, arguing that it would facilitate the integration of REC-only bids into the RPS procurement process. It would also allow direct comparison of bids for bundled energy and bids for REC-only transactions, giving utilities a better way to evaluate the REC-only option. This change in methodology would not require utilities to shortlist any REC-only contracts; rather, it would provide a more complete LCBF evaluation.

Consideration of improvements to the RPS bid evaluation LCBF methodology has been identified as one of the tasks in R.08-08-009.[83] REC-only contracts should be included in all aspects of LCBF review. That review should include how to incorporate into LCBF methods (and how to express in the large utilities' annual RPS procurement plans) the Commission's preference for RPS procurement through long-term contracts with newly constructed or planned RPS-eligible generation facilities. Because this Commission has a strong preference for RPS contracting that results in the development of additional renewable resources in California and the WECC, it is important that in revising the LCBF methodology to include REC-only transactions we specifically consider changes that will encourage greater reliance on transactions that lead to increased RPS-eligible capacity. Prior to full consideration of this issue in R.08-08-009 (or

[83] See Scoping Memo and Ruling of Assigned Commissioner (September 26, 2008) at 4.

its successor), utilities should explain their method for evaluating REC-only contracts in their advice letters seeking approval of such contracts.

4.7.3. Temporary Limit on Payment for TRECs

How much is too much for ratepayers to pay for a REC for RPS compliance? Is it possible to control the costs of TRECs to utility ratepayers without stunting or distorting the TREC market? These are among the most contentious issues on which parties commented.

The RPS statute allows a utility "to recover the reasonable costs of purchasing renewable energy credits in rates." (§ 399.16(b).) The Straw Proposal suggests that "reasonable costs" should be capped at $35.00 per REC for the cost of TRECs used for RPS compliance by RPS-obligated utilities. The cap would be an absolute limit on the price paid for a TREC that an IOU uses for RPS compliance; it would not merely be a limit on the amount of the TREC price that could be included in rates.[84]

Some evidence from states with current TREC markets, presented at the TRECs workshop and discussed in comments, suggests that TREC prices will fall to close to zero (the marginal cost for renewable generation) when demand is low. When demand is high (for example, when a compliance deadline looms),

[84] This aspect of the Straw Proposal seeks to remove the incentive for a utility to pay any price, however high, that it believes this Commission would allow it to recover in rates; or alternatively, to pay the Commission-allowed amount plus $49.99 (one cent less than the current penalty amount of $50/MWh) for a TREC, a scenario identified by SCE in its post-workshop comments. Even if shareholders paid the extra amount, the market price of TRECs could be driven beyond the reach of most RPS-obligated LSEs.

TREC prices will rise to the highest allowable cost.[85] TURN and UCS support the applicability of this "boom/bust" analysis to California. AReM, PG&E, SCE, and SDG&E assert that this "boom/bust" cycle is unlikely to occur in California, because RPS flexible compliance rules eliminate the prospect of a single fixed compliance deadline for all RPS-obligated LSEs. Calpine claims that, although banking of RECs and flexible compliance can help, a highly constrained supply of TRECs will have the same effect on prices as an inflexible deadline: prices will rise sharply.

All parties agree that, at least in the next two or three years, the demand for TRECs for California RPS compliance is likely to exceed the limited foreseeable supply. Many parties—whether in favor of TRECs or skeptical about them—also share the belief that, at least in the near term, the TREC market will be largely a market for short-term RECs from existing facilities.[86]

TURN asserts that a price cap is necessary in order to keep TREC prices in line with the price of bundled RPS contracts. Ratepayers, TURN argues, should not have to pay more for the combination of a TREC and conventional energy than they would have paid for a long-term bundled contract for RPS-eligible energy. From this point of view, a TREC price cap should be set below the current $50/MWh penalty price because the penalty price plus conventional

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[85] Information on recent TREC prices in markets in other states, provided by Aglet in its supplemental comments, shows that prices vary from a low range (less than $5/REC) through a few in the range of $25/REC, to, in one instance, a high of $48/REC.

[86] Aglet, Calpine, DRA, IEP, PG&E, TURN, and UCS all make this point.

energy price may be higher than the long-term bundled RPS contract price. TURN therefore supports the $35/REC price cap proposal.[87]

Several parties urge that any price cap, if one is adopted at all, be set at the amount of the penalty for noncompliance with RPS procurement obligations.[88] This is currently $50.00/MWh. (See D.03-06-071.) If the price of a TREC bought by an IOU were allowed to exceed the penalty cost, this argument suggests, a utility would have an incentive to pay almost any price for a TREC (even above the penalty amount) in order to transfer the costs of noncompliance from the shareholders (via a penalty payment) to the ratepayers (via an inflated price for TRECs that would be reflected in rates).

Many parties oppose any cost cap, arguing that price limits almost by definition put artificial restraints on markets.[89] With a new market such as the California TREC market, the argument continues, such early restraints could delay the development of a robust TREC market and stifle the price signals needed to encourage new renewable development.

CEERT urges that, instead of a price cap, the Commission should adopt a price benchmark for TRECs. CEERT argues that a price cap will constrain the TREC market instead of letting market supply and demand determine prices. A

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[87] BVES and Central California Power also support it. Aglet suggests a more complex calculation that would impose a significantly lower cap, but only on IOU cost recovery for TRECs purchased from unregulated LSEs. Aglet's suggestion is not consistent with an integrated, liquid TREC market, and does not account for the participation of other, non-LSE entities in the TREC market.

[88] GPI and UCS take this position. UCS also expresses a concern that the $35 price cap in the Straw Proposal might be too low in current market conditions to provide incentives for new renewable construction, though the basis for that concern is not clear.

[89] Calpine, CEERT, Horizon, IEP, PG&E, and Solar Alliance take this position.

reasonableness benchmark, however, would protect ratepayers from unreasonable TREC prices without depressing TREC prices. CEERT suggests that the price benchmark should be set at the penalty amount, rather than at a lower figure, such as the Straw Proposal's $35/REC. CEERT asserts that this would avoid creating a situation in which an IOU could not buy TRECs to fulfill its RPS obligations if they were above the price cap, but below the penalty amount, yet would be subject to the penalty for a procurement shortfall. CEERT does not, however, suggest a methodology for implementing a benchmark to evaluate prices.

A price benchmark for evaluating TREC purchases may be a reasonable proposal for the medium and longer term. In the immediate future (i.e., the next two or three years), however, it could be difficult to develop a reliable benchmark. TREC prices could not reliably be approximated by, for example, estimating the cost of RPS-eligible energy and subtracting the cost of conventional power, which parties sometimes call the "green premium." Such an RPS energy cost would be extremely difficult to estimate in itself, since RPS power purchase agreements present a wide range of technologies and prices. More importantly, however, TREC prices will largely be the result of forces in the TREC market, not the energy market. Pressure to comply with the 20% goal combined with a limited supply of TRECs would dominate TREC market pricing, making it difficult to develop and implement a benchmark using sources other than the TREC market prices.

SDG&E, supported by PG&E, proposes neither a cap nor a benchmark, but a price reasonableness review similar to what is done for all-source procurement. The review would be based on broker quotes, results of solicitations, or a price valuation model. This proposal, however, assumes that there is a fully

developed market in which there is a wide range of information. Since, in its early years, the TREC market is unlikely to conform to this model, SDG&E's suggestion, like CEERT's benchmarking suggestion, is premature.

Paradoxically, a published, firm price cap could operate as a relatively reliable price signal for investors in new RPS-eligible generation. At the workshop and in post-workshop comments, staff and parties discussed methods to ensure some measure of price transparency in the early stages of the TREC market. No party proposed any method that would produce public TREC prices. Suggestions were made that some kind of anonymous average of transaction prices could be compiled from data in WREGIS, though it was not clear whether WREGIS' current functionalities could support such an averaging of prices.

A price cap, by contrast, does not implicate the confidential data of any participant. Market participants may make deals at prices lower than the price cap, and RPS-obligated ESPs and CCAs, as well as POUs, could make deals at higher prices. But the price cap itself could give a reasonable indication of the value of TRECs to ratepayers. As compared to no public indication of price, this would provide important information that could ground new investment in RPS-eligible generation, not simply TREC trades.

Price volatility and high prices are not a necessary outcome of the predicted situation of short TREC supply, but they are a significant risk. We conclude that this is a risk that ratepayers should not be required to bear in the short term. We believe that it is possible to create temporary protections for ratepayers through imposition of a price cap without damaging the basic structure of the TREC market or undermining the financial incentives for new renewable construction that are among the longer-term benefits of a TREC market. We therefore adopt a temporary TREC price cap.

The Straw Proposal's suggestion of price cap of $35/REC, while potentially reasonable, would not be effective at this time. First, as CEERT notes, a utility could have to leave a TREC priced at $36 on the table, while paying $50 in penalties for having failed to procure it. Second, as SCE points out, a price cap lower than the penalty amount creates an uneven playing field between utilities and other LSEs. LSEs not subject to the price cap could pay the highest price for a REC they thought they could afford, up to the penalty amount, thus potentially driving up the price out of reach of utilities.

On the other hand, a price cap of $50/REC is connected to the noncompliance penalty amount. It is the highest economically rational price for a TREC that would not shift the costs of noncompliance from utility shareholders to ratepayers. The penalty structure is, however, intended to put the burden of IOUs' noncompliance with RPS requirements on shareholders, not ratepayers. It would be undermined by allowing utilities to pay more than the penalty amount for TRECs.

Therefore, we adopt a temporary price cap of $50/REC (the penalty amount translated from MWh to RECs). This means that an IOU may not use for RPS compliance a TREC acquired through a REC-only contract for which it paid more than $50.00, on a levelized basis.[90]

The temporary price cap, like other aspects of RPS procurement, works somewhat differently for MJUs. The price cap, like the TREC usage limit, applies only to those TRECs procured by MJUs exclusively for use in complying with

[90] This does not mean that purchasing TRECs for the amount of the price cap is per se reasonable. We will evaluate the reasonableness of TREC purchases by utilities in the contract approval process. IOUs must provide sufficient information to the Commission to demonstrate that a TREC contract price is reasonable.

their California RPS procurement obligations. It does not extend to system-wide purchases of TRECs that are proportionally allocated to California compliance, in accordance with § 399.17.

Both in order to use a REC-only transaction for RPS compliance and in order to obtain cost recovery for it, an IOU must demonstrate that the RECs are priced at or below $50.00.[91] In a REC-only contract in which an IOU buys only RECs, the price of the REC and its relation to the price cap will generally be clear.

An IOU may also enter into a transaction for both RECs and energy in which the generation facility is not directly interconnected to the California grid or the energy is not dynamically transferred to a California balancing authority. If the prices for the RECs and energy are separately identified in the contract for such a transaction, the REC price will also generally be clear. If the RECs and the energy are not separately priced, the price for the RECs must be inferred in some manner in order for Energy Division to determine whether the contract complies with the price cap. In this situation, the IOU will have to provide an estimate of the REC price, by separately indentifying the energy price. The most transparent and consistent source of such an estimate is likely to be an estimate of the market value of the energy through the life of the contract. The net REC price could then be determined by subtraction.

If an IOU signs a REC-only contract, as defined in this decision, in which the REC price must be inferred but forward price curves are inappropriate or unavailable, the IOU would need to provide sufficient information for Energy Division to make a determination of whether the inferred REC price is at or

[91] In prior comments, Evolution Markets suggested that more detail on the price calculation would be valuable.

below the REC cap. The Director of Energy Division is authorized to develop a methodology, in consultation with the parties, for making this determination and to make any changes to the processing of advice letters that are necessary in order to implement the price cap on TRECs.

This limit on payments for RECs procured through REC-only contracts, as defined in this decision, applies to all REC-only contracts approved on or after the effective date of this decision. It does not apply to any contracts approved by the Commission prior to the effective date of this decision.

Like the limit on TRECs usage, this cap on the prices of TRECs used for RPS compliance should be a temporary one. This price cap will terminate December 31, 2011, unless the Commission acts to review, extend, or modify it, or to terminate the price cap prior to its expiration. If there is a new legally binding RPS goal, the price cap may be reviewed in light of the new goal.

4.7.4. Cost Limitation Provisions

Section 399.15(d) provides for a limitation on the total above-market costs expended for RPS procurement by IOUs and makes available a limited amount of money to cover above-market costs. It states that "[n]o purchases of renewable energy credits may be eligible for consideration as an above-market cost." (§ 399.15(d)(2)(D).) Thus, TREC purchases are not eligible for any above-market funds set aside pursuant to § 399.15(d)(1). No IOU is required to purchase TRECs to meet RPS obligations if it has otherwise exceeded its cost limitation for bundled contracts (§ 399.16(a)(8)).[92] However, IOUs should also have the ability

[92] This is analogous to the provision, with respect to bundled contracts, that no IOU is required to purchase bundled electricity at a price above the market price referent if its cost limitation has been exceeded. (§ 399.15(d)(3).)

to enter into voluntary TREC transactions even if the cost limitation has been reached, as they do with bundled contracts. (See § 399.15(d)(4).)

4.7.5. TREC Revenues for the Benefit of Ratepayers

Section 399.16(a)(4) provides that "[a]ll revenues received by an electrical corporation for the sale of a renewable energy credit shall be credited to the benefit of ratepayers." The respondent utilities should promptly take steps to include all TREC transactions in their energy resource recovery accounts (ERRA) or energy cost adjustment accounts (ECAC), or equivalents, such as power purchase adjustment accounts, as appropriate. Those utilities that believe they do not currently have an appropriate accounting vehicle for TREC transactions should submit advice letters within 90 days of the date of this decision, proposing their accounting treatment of TREC transactions.

4.8. Transactions Subject to §§ 399.16(a)(5) and (6)

The RPS statute provides that "no renewable energy credits shall be created" associated with electricity from two types of transactions.[93] The first is a

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[93] The relevant parts of § 399.16 are:

> (5) No renewable energy credits shall be created for electricity generated pursuant to any electricity purchase contract with a retail seller or a local publicly owned electric utility executed before January 1, 2005, unless the contract contains explicit terms and conditions specifying the ownership or disposition of those credits. Deliveries under those contracts shall be tracked through the accounting system described in subdivision (b) of Section 399.13 and included in the baseline quantity of eligible renewable energy resources of the purchasing retail seller pursuant to Section 399.15.
>
> (6) No renewable energy credits shall be created for electricity generated under any electricity purchase contract executed after January 1, 2005, pursuant to the federal Public Utility Regulatory Policies Act of 1978 (16 U.S.C. Sec. 2601 et seq.). Deliveries under the electricity purchase contracts shall be

Footnote continued on next page

contract executed with a California RPS-obligated LSE or POU prior to 2005 that does not specify the ownership or disposition of the RECs. The second is a contract pursuant to PURPA executed after January 1, 2005 with a QF.

The first of these restrictions is clear and specific. Comments on the RPD request clarification on the application of the second of these restrictions to RECs associated with generation from a QF not located in California under a contract with a utility that is not located in California.[94] This restriction was enacted by the Legislature in response to the decision of the Federal Energy Regulatory Commission (FERC) in *Covanta Energy Group, Montenay Power Corporation, and Whellabrator Technologies, Inc.*. 105 F.E.R.C. 61004 (2003). In that case, FERC determined that states have the power to create RECs, to determine who owns the REC in the initial instance, and to decide how RECs may be sold or traded. (105 FERC at 61007.)

In § 399.16(a)(6), the Legislature used its authority over the creation of RECs to put certain limits on their creation in California. It prevented the creation of RECs from PURPA contracts delivering to California utilities executed after January 1, 2005. California's law regarding creation of RECs from California PURPA contracts does not, however, alter the laws of other states regarding the creation and designation of ownership of RECs associated with energy from PURPA contracts with utilities in those states. Thus, RECs associated with energy from a PURPA contract between a QF and a utility, both located in a state

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tracked through the accounting system described in subdivision (b) of Section 399.12 and count toward the renewables portfolio standard obligations of the purchasing retail seller.

[94] Evolution Markets, PacifiCorp, and SCE address this issue.

in the WECC other than California, could be sold to a California RPS-obligated LSE for RPS compliance if all of the following conditions were met:

- The state with jurisdiction over the PURPA contract allows the creation of RECs that can be sold separately from the associated energy; and
- The RECs have not been used as the basis of any green energy claims or for compliance with another state's RPS; and
- The generation associated with the RECs is RPS-eligible; and
- The CEC's rules for delivery of the energy associated with the RECs are met; and
- The energy associated with the RECs was generated on or after January 1, 2008; and
- The RECs are properly recorded in WREGIS.

The restrictions set out in §§ 399.16(a)(5) and (6) must be applied through the use of WREGIS. Because WREGIS tracks renewable generation by issuing RECs (in the form of WREGIS Certificates), it is not possible literally to prevent the creation of RECs from these transactions. It is possible, however, to implement the Legislature's intent by ensuring that the bundled renewable energy from such transactions is tracked through WREGIS and counted toward the RPS obligations of only the purchasing retail seller. LSEs that purchase renewable energy from such transactions can prevent the WREGIS Certificates from being transferred out of their WREGIS accounts (and thus being available for transfer or trading) by setting up appropriate mechanisms within WREGIS to make direct or automatic transfers of the relevant WREGIS Certificates into their WREGIS accounts and retire them for RPS compliance at the earliest feasible time

after the WREGIS Certificates are generated.[95] Currently, only the three large utilities have such contracts.[96] They should take the steps necessary to ensure that the WREGIS Certificates generated by such transactions are moved as promptly as possible, as determined by the CEC, into the IOUs' retirement accounts in WREGIS for purposes of RPS compliance.

Energy Division staff should review with CEC staff and the affected utilities whether any changes to the RPS compliance spreadsheet, or other RPS reporting tools, are needed to ensure compliance with §§ 399.16(a)(5) and (6).

4.9. Compliance and Reporting

As a general principle, the use of TRECs will be consistent with the existing RPS flexible compliance rules.[97] There are a few situations, however, requiring more detailed examination and, in some cases, initial adjustments. As we develop experience with the use of TRECs for RPS compliance, we may review the impact of TRECs on the existing flexible compliance regime. The rules set out in this decision provide for the integration of TRECs into the existing RPS program; if experience reveals the need for improvements, we will consider them.

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[95] The rules for transfers between accounts in WREGIS are set out in section 15 of the WREGIS Operating Rules.

[96] PacifiCorp points out in its comments on the RPD that MJUs may use generation under PURPA contracts with QFs in other states to meet their California RPS obligations. Any MJU claiming such generation for RPS compliance purposes should consult with CEC staff to ensure that the generation is properly accounted for and the RECs associated with it are treated as required by this decision.

[97] See, e.g., D.06-05-037, D.06-10-050, D.07-02-011, and D.08-02-008.

4.9.1. Commitment of RECs for RPS Compliance

In the context of bundled energy contracts, RPS-eligible deliveries may be carried forward for an indefinite period for RPS compliance, as allowed by § 399.14(a)(2)(C)(i).[98] That is, an LSE with deliveries in excess of its APT in one year may use the surplus in any later compliance year. This process is referred to as "banking" the surplus deliveries for RPS flexible compliance purposes.[99] To maintain consistency between the use of TRECs and the use of bundled energy contracts, the banking rules for flexible compliance should apply to all RECs, whether they are acquired through bundled contracts or REC-only contracts.

Before a REC can be applied to RPS compliance, however, it must be tracked in an active sub-account in WREGIS. RECs in an active sub-account can be held there or disposed of by the account holder. Under the WREGIS Operating Rules, RECs may be maintained indefinitely in a WREGIS participant's active sub-account.[100] When RECs are committed to California RPS compliance (or any other compliance purpose), they are transferred to the participant's WREGIS retirement sub-account. The RECs in the retirement sub-account may not be traded or used for any purpose other than the compliance reason for which they have been retired.

Maintaining RECs within a WREGIS active sub-account keeps the RECs available for any purpose. The Straw Proposal would limit the amount of time a

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[98] Section 399.14(a)(2)(C)(i) provides in relevant part that

> The commission shall adopt. . . [f]lexible rules for compliance, including rules permitting retail sellers to apply excess procurement in one year to subsequent years or inadequate procurement in one year to no more than the following three years.

[99] See D.06-10-050 at 24.

[100] WREGIS Certificates do not have an expiration date. (Operating Rules at 34.)

REC may be maintained in an active sub-account prior to being retired for RPS compliance. Under the Straw Proposal, a REC could be maintained in an active WREGIS sub-account for up to three compliance years (inclusive of the year of generation) from the year the electricity associated with the REC is generated before being retired for RPS compliance.[101] That is, an RPS-obligated LSE that wanted to use, for example, a REC associated with electricity generated in June 2008 for RPS compliance would need to commit the REC to RPS compliance by transferring it to the LSE's WREGIS retirement sub-account for no later than the 2010 compliance year (the end of the third compliance year since the generation). This is in the mid-range of the practices of other states, which typically allow RECs to be held between 18 months and five years before they need to be retired for compliance.[102]

TURN argues that this is too long a period to allow RECs to be maintained in an active WREGIS sub-account without commitment to RPS compliance. TURN urges that 18 months is a more appropriate time limit. UCS supports some limits on the time RECs can be maintained in active WREGIS sub-accounts, in order to ensure that LSEs continue to procure RPS-eligible energy, rather than relying on generation from several years in the past. GPI and Pilot Power Group (PPG) argue that the time for maintaining RECs in active sub-accounts should be

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[101] Under WREGIS rules, a REC can be maintained in an active sub-account indefinitely, though a REC can only be used for RPS compliance if it is transferred to a retirement sub-account for that purpose. However, a REC maintained in an active sub-account beyond the time period set forth in this decision could not be used for RPS compliance, though it would be available for other purposes.

[102] The staff presentation on "Compliance Rules: Consensus and Unresolved Issues" provided this information at the TREC workshop.

unlimited, essentially because the RPS compliance banking process for bundled energy is unlimited.

The argument advanced by GPI and PPG conflates the two processes. It is possible to allow indefinite banking of RECs (whether from bundled or REC-only transactions) for RPS compliance once they have been committed to that purpose, without allowing indefinite maintenance of RECs in active WREGIS sub-accounts. TURN argues that allowing RECs to be maintained in active WREGIS sub-accounts for an indefinite period of time without being committed to any compliance purpose could encourage hoarding of TRECs. Gaming of the TREC market is also a concern of TURN, which argues that market participants could buy TRECs at any time and hold them until a major compliance deadline (such as attainment of the 20% target) looms, then sell them at inflated prices.

In evaluating these comments, it is important to remember that the primary purpose of authorizing the use of TRECs is to improve the RPS program. Allowing market participants to hold RECs indefinitely without committing them to RPS compliance would undermine both liquidity in the market and compliance planning by RPS-obligated LSEs. On the other hand, in order to have a liquid TREC market, it is necessary to keep RECs available in active WREGIS sub-accounts for a long enough period of time that trading within the market will be efficient, without providing incentives to keep TRECs out of the market.

The Straw Proposal strikes an appropriate balance between maintaining market liquidity and discouraging hoarding of TRECs. We therefore adopt the Straw Proposal on commitment of RECs to RPS compliance and clarify that it is applicable to all RECs, including those procured bundled with energy, tracked in WREGIS. A REC must be retired for RPS compliance for a compliance year not more than three compliance years subsequent to and inclusive of the year of

generation of the electricity associated with the REC.[103] This will allow an LSE holding TRECs to make a good estimate of its future compliance needs, and either commit or sell its TRECs. Other TREC market participants will be able to assess their market situations over a reasonable period of time, but without incentives to hold TRECs for extremely long periods of time and potentially distort the TREC market.[104]

Once RECs are retired for RPS compliance within WREGIS, they will be accounted for in the RPS compliance and reporting system, and be subject to the RPS flexible compliance rules, regardless of whether they were acquired through bundled or REC-only transactions.

4.9.2. Unbundling of RECs from Future Years of Bundled Contracts

Once a system of tradable RECs is established, any RECs recorded in WREGIS are subject to being traded, with the important exception (discussed in § 4.8 above) of RECs associated with the types of contracts described in §§ 399.16(a)(5) and (6). This raises the question of the appropriate treatment of RECs that are associated with the energy conveyed in bundled RPS contracts.

An LSE with a contract for bundled energy should be able to "unbundle" and sell RECs from that contract on both a spot and forward basis. In the case of a contract that is delivering energy, RECs from past deliveries would be tracked

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[103] As explained in § 4.8, a special process for retiring RECs in WREGIS applies to those transactions that are subject to the restrictions in §§ 399.16(a)(5) and (6).

[104] This timing rule applies to the REC, not to the LSE or other market participant. A TREC may be traded several times within the three-year period; it may count for RPS compliance as long as it is retired in WREGIS within the period. The LSE retiring the REC for RPS compliance may have retained that REC in its active WREGIS sub-account for months, or acquired it only the day before it is retired.

in WREGIS and could be sold if they were not yet retired for RPS compliance. RECs from later deliveries could be sold on a forward basis. In the case of a contract with a facility that is not yet online, RECs could be sold on a forward basis for some or all of the entire term of the contract (with the partial exception that RECs could not be unbundled from the first three years of bundled contracts that have been earmarked).[105] Once the RECs are transferred, however, the LSE with the original bundled contract may not use *either* the REC *or* the underlying energy for RPS compliance; the RPS compliance value has been transferred to the purchaser along with the REC.[106]

The potential unbundling and sale of RECs from bundled contracts that have been earmarked to make up shortfalls from prior years presents a special case.[107] The Straw Proposal suggests that RPS-obligated LSEs should not be allowed to unbundle the RECs from the first year of such contracts, since that year's deliveries have already been committed to make up a prior year's shortfall under the flexible compliance rules. This raises the risk of double-counting the unbundled RECs, as earmarked by one LSE and retired for RPS compliance by another. On the other hand, if an earmarked contract turns out not to be needed

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[105] Energy Division staff should review the RPS compliance spreadsheet and reporting rules to determine whether additional reporting requirements should be imposed to track these transactions.

[106] In principle, the original LSE could buy some or all of the RECs back at a later point. As the owner of the RECs, it could then retire them for RPS compliance.

[107] "Earmarking" is a flexible compliance mechanism by which deliveries from a future RPS procurement contract may be designated to make up, within three years, shortfalls in RPS procurement in the same year in which the earmarked contract was signed. As part of the earmarking process, Energy Division staff reviews the contract proposed for earmarking to ascertain whether the contract is likely to deliver as proposed, since it is covering an already-incurred shortfall.

to make up the shortfall for which it has been earmarked, the RECs should be able to be unbundled. We adopt an approach that would encourage liquidity in the TREC market without undermining the flexible compliance rules. An LSE may unbundle and trade RECs from the later years of a bundled contract that has been earmarked, but should be prohibited from unbundling any RECs generated in the first three years of deliveries under an earmarked contract.

4.9.3. Earmarking of TREC Contracts

In the Straw Proposal, staff suggests that earmarking of TREC contracts not be allowed because the viability of forward TREC contracts would be significantly more difficult to assess than the viability of bundled contracts. CEERT, GPI, IEP, PG&E, and UCS agree with this position. AReM, Pilot Power, SCE, and SDG&E argue against it. The opponents assert that all RPS contracts should be treated equally. They assert that administrative difficulty in making a viability determination should not prevent earmarking of TREC contracts. SCE asserts that purchases of TRECs from new or planned facilities would be discouraged if earmarking of TRECs were not allowed.

Although in almost all respects TRECs can and should fit into the general flexible compliance rules, it is appropriate to limit the circumstances in which earmarking of REC-only contracts is allowed. TREC deals present earmarking challenges different from bundled energy contracts. For TREC purchases that are associated with energy from multiple generators, possibly located in several different jurisdictions, staff would have difficulty undertaking an adequate review of potential future performance under the contracts. Confidential information about the viability of a number of different generation projects may be difficult and very time-consuming to track down. This could at the least significantly delay approval of TREC deals proposed for earmarking, and might

increase the risk that the shortfall for which the TRECs are earmarked would not in fact be made up within the required three-year period.

On the other hand, as PG&E pointed out in its earlier comments, TREC contracts between an LSE and one RPS-eligible generator providing the RECs share most of the characteristics of bundled transactions. It should not be significantly more difficult for staff to evaluate the likelihood of future performance of such contracts than it is to evaluate the future performance of bundled contracts that are eligible for earmarking.

We therefore allow earmarking of TREC contracts between an RPS-obligated LSE and one RPS-eligible generator that is providing all the RECs, subject to review by staff in accordance with RPS flexible compliance procedures. A REC-only contract that is earmarked should count in the overall TREC usage cap for the year in which the TRECs are used for RPS compliance. Such earmarking is also subject to the restriction that no RECs in the first three years of deliveries from an earmarked TREC contract may be sold or traded. This is analogous to the restriction for RECs from bundled contracts set out in § 4.9.2, above.

4.9.4. Use of TRECs to Make Up Prior Shortfalls

The flexible compliance rules allow an LSE to carry forward a deficit in RPS procurement under certain circumstances. In brief, a deficit of up to .25% of the prior year's retail sales may be carried for up to three years without need for Commission approval.[108] A larger deficit may be carried forward if the LSE demonstrates one of the allowable excuses for failure to meet annual

[108] D.03-06-071; D.08-02-002.

procurement obligations.[109] A deficit of up to .25% of prior year's sales may be satisfied by applying procurement in any of the following three years that is in excess of APT for that year.[110]

Because REC-only procurement and bundled procurement should be as similar as possible for RPS compliance purposes, REC-only transactions may be used to make up shortfalls to the same extent as bundled transactions, so long as the contribution of REC-only transactions does not exceed any limitation on the use of TRECs for that compliance year.

4.9.5. Reporting

4.9.5.1. Compliance

The RPS reporting structure has been set forth in D.06-10-050.[111] Energy Division staff has developed a collaborative process with parties in which any changes needed in the reporting formats are developed and reviewed.[112] Staff should use this process to make revisions to current reporting formats that may be needed to accommodate the use of TRECs. The assigned Commissioner or assigned ALJ in R.08-08-009 or its successor may issue any rulings necessary to provide staff and the parties with the opportunity to develop revisions to the reporting formats.

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[109] See D.03-06-071; D.03-12-065.

[110] D.05-07-039.

[111] A standardized RPS reporting format and a process for considering changes to the reporting format were adopted in R.06-05-027 by an ALJ's Ruling Adopting Standardized Reporting Format, Setting Schedule For Filing Updated Reports, and Addressing Subsequent Process (ALJ's Reporting Ruling) (March 12, 2007).

[112] Reporting formats include the semiannual compliance spreadsheets and any other documentation needed to report on RPS compliance.

4.9.5.2. Monitoring

Following a suggestion made by CEERT, all RPS-obligated LSEs should be required to file with Energy Division reports on TREC purchases, sales, and prices, with appropriate confidentiality protections. Those utilities that utilize a procurement review group (PRG) should also provide this information to the PRG. This is not for the purposes of contract approval, but for TREC market monitoring. Not less often than annually all RPS-obligated LSEs should provide to Energy Division at least the following information:

- All TREC purchases, both for that compliance year and cumulatively;
- Expected dates of delivery for all TREC purchases;
- For each REC-only contract, whether the RPS-eligible energy associated with the RECs was generated by a facility that entered commercial operation before January 1, 2005; or entered commercial operation on or after January 1, 2005; or is a facility that was not yet in commercial operation at the time the contract was signed;
- A comparison of the prices of REC-only contracts from facilities of the three vintages set out above;
- Sales of TRECs undertaken by the LSE;
- Prices of all TRECs sold;
- A breakdown of TRECs sold to other RPS-obligated LSEs and to other entities (e.g., brokers); and
- For the three large IOUs only, an analysis of the projected contribution of their REC-only contracts to the development of new RPS-eligible generation in California and throughout the WECC.

Energy Division has discretion to develop, in consultation with the parties, the format and timing of such reports; they may be included as part of the RPS compliance spreadsheet.

Additionally, in their advice letters seeking approval of REC-only contracting, the utilities shall include the following information:

- the vintage of the underlying facility or facilities that are producing the RECs that are the subject of the advice letter;
- the sum of all delivered and expected TRECs purchased through contracts executed by the utility to date and how this compares to any applicable usage cap;
- the sum of all delivered and expected TRECs purchased by that IOU through contracts with facilities that are already online as of the execution dates of their associated contracts, and how this compares to the applicable usage cap;
- the sum of all delivered and expected TRECs purchased by that IOU through contracts with facilities that are not yet online as of the execution dates of their associated contracts, and how this compares to the applicable usage cap;
- a comparison of the price of the RECs in the contract that is the subject of the advice letter and the price of RECs from all REC-only contracts with facilities that were online as of the execution date of their associated contracts; and
- a comparison of the price of the contract that is the subject of the advice letter and the price of RECs from all REC-only contracts with facilities that were not yet online as of the execution date of their associated contracts.

Energy Division should use this information, in conjunction with information obtained from the RPS compliance reports and from other reports by LSEs to develop a report to the Commission on the initial functioning of the TREC market and place of TRECs in RPS compliance. The report should consider:

- TREC prices;
- TREC trading patterns, including the proportion of TRECs associated with generation from facilities that entered commercial

operation before 2005; those that entered commercial operation after January 1, 2005; and those that were not yet in commercial operation at the time the REC-only contracts was signed;

- how TRECs are being used for RPS compliance (for example, whether TREC contracts are being earmarked);
- the progress of LSEs toward the 20% RPS target; and
- any other information the Director of Energy Division determines would be useful to the Commission.

On the basis of this information, Energy Division shall make a recommendation to the Commission regarding whether or not the applicable usage limit and price cap should be retained or allowed to sunset.

In compiling the report, Energy Division may use both publicly available information and confidential information (if appropriate aggregation can be done to protect the confidential information of individual LSEs), but the entire report should be publicly available. The report should be made available not more than 16 months from the effective date of this decision, in order to aid the Commission in deciding whether to review the TREC usage limit and price cap set out in this decision and to provide information for such a review.

4.10. Standard Terms and Conditions

Parties commenting on this issue favor minimal new STCs for TREC contracts, and little or no change to the STCs for bundled RPS contracts.[113] Parties unanimously believe that an STC defining RECs is the core, and perhaps only, new STC needed. SDG&E adds that the STCs must provide that the RECs are tracked in WREGIS; PG&E and AReM include a "CPUC approval" term.

[113] AReM, CEERT, PG&E, SCE, SDG&E, and UCS made suggestions for STCs.

We agree with the parties that few changes to existing STCs are required. It is clear that all TREC contracts will need an STC that ensures that the RECs being transferred conform to the definition and attributes of RECs set forth in D.08-08-028, or any later modifications made by decision of this Commission or new legislation. Because RECs cannot be recognized for RPS compliance unless they are tracked in WREGIS, REC-only contracts must contain assurances that the seller has taken all steps necessary to ensure that the generation is properly registered and the RECs will be tracked in WREGIS.[114]

In addition, as PG&E points out, REC-only contracts of both large and small IOUs must include the same requirement as bundled contracts that the contract takes effect upon approval by this Commission.[115] In order to ensure consistency between REC-only and bundled contracts, the current non-modifiable STC specifying governing law must also be included in all REC-only contracts.[116]

Bundled contracts transfer RECs as well as energy. In order for bundled contracts to be consistent with REC-only contracts and to allow the unbundling and trading of RECs from bundled contracts as authorized by this decision, the "RECs definition" and "WREGIS tracking" STCs should be included in the non-modifiable STCs for bundled contracts.

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[114] PG&E suggests in its comments on the RPD that the assurance of registration with WREGIS should apply at the time deliveries commence under the contract, not at the time the contract is signed. This suggestion is unopposed and simplifies contracting; we adopt it in this decision.

[115] This Commission does not approve RPS contracts of multi-jurisdictional utilities. See § 4.7.1, above.

[116] See D.08-04-009, Appendix A at 7 (STC 17: Applicable Law).

In sum, four non-modifiable STCs will be required for REC-only contracts approved on or after the date of this decision: REC definition; WREGIS tracking; statement of governing law as that of California; and Commission approval for utility contracts (other than multi-jurisdictional utilities).[117] In bundled contracts approved on or after the effective date of this decision, the "RECs definition" and "WREGIS tracking" STCs must be included.[118]

The STCs for REC-only contracts will also be required for REC-only contracts that result from the unbundling of RECs from future deliveries from existing contracts, as authorized in § 4.9.2., above. None of the new STCs apply to contracts conveying only energy, since such contracts by definition do not transfer RECs, and thus may not be used for RPS compliance.

The new STCs are set out in Appendix C.

4.11. Timing Issues

Beginning on the effective date of this decision, TRECs tracked in WREGIS for which the RPS-eligible electricity associated with the TREC was generated on or after January 1, 2008 may be procured, traded, and used for RPS compliance.[119] Any RECs tracked in WREGIS for which the RPS eligible electricity associated with the REC was generated on or after January 1, 2008 may be used for RPS compliance in accordance with RPS flexible compliance rules and may, beginning

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[117] If and when the Commission changes or augments the RPS procurement approval process, appropriate changes can be made in the STCs.

[118] Contracts that have not yet been approved should be amended to include the STCs adopted in this decision. Pending advice letters should be amended to show that the contracts contain the required STCs. (See D.07-11-025.)

on the effective date of this decision, be unbundled and sold in accordance with the rules set forth in this decision, subject to the restrictions in §§ 399.16(a)(5) and (6).

IOUs required to submit their RPS procurement contracts for Commission approval may submit contracts conveying only RECs and not energy for approval not earlier than April 1, 2010.

4.12. Comparison to March 2009 PD

There are three significant differences between the RPD and the March PD it revises, as well as a number of minor changes. Editorial changes for clarity and consistency have also been made. The major differences are:

1. In the March PD, the definition of a transaction as REC-only or bundled was based on analyzing the details of individual contractual arrangements. In the RPD, the definition of a REC-only transaction has been clarified and based on physical facts of interconnection between RPS-eligible generators and the WECC transmission system. In the RPD, this definition has been moved closer to the beginning of the discussion, to aid understanding of the following sections that set out various rules and requirements. In response to comments on the RPD, the RPD was modified to expand the classification of bundled contracts to include dynamic transfer arrangements, and to identify further work on including transactions with firm transmission as bundled.
2. In the March PD, the temporary limit on the use of TRECs for RPS compliance by the three large IOUs was set at 5% of APT; TRECs in excess of that amount could not be banked for RPS compliance in future years. In the RPD, a limit of 40% of APT is imposed, again only on the three large IOUs. TRECs in excess of the limit may be

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[119] This date is used because 2008 is the first year that WREGIS issued certificates; it is also the first year data from WREGIS is reported to the CEC to verify RPS procurement. (*RPS Eligibility Guidebook* at 46.)

banked for use in future years, though the 40% limit continues to apply in each year. In view of the change to the criteria for the classification of REC-only contracts, the annual TREC usage limit has been changed to 25% of APT.

3. In the March PD, the process for reviewing the temporary limit on use of TRECs for RPS compliance and the temporary limit on the price an IOU may pay for a TREC was complex and uncertain. The RPD sets a time when the limits will expire, unless the Commission acts to review, extend, or modify these limits.

4.13. Next Steps

The Director of Energy Division should promptly undertake the development of methods to evaluate RPS contracts using dynamic scheduling or pseudo ties, in consultation with the parties, CAISO, and any other relevant entities or organizations, including POU balancing authorities. The Director of Energy Division should also commence work on evaluating the use of firm transmission arrangements in RPS contracts, in accordance with the guidance set out in this decision.

Follow-up tasks to integrate TREC procurement into RPS procurement processes are most appropriately undertaken in R.08-08-009, where all aspects of the RPS procurement process are addressed. The Assigned Commissioner's Ruling Transferring Consideration of Certain Issues from Rulemaking 06-02-012 to Rulemaking 08-08-009 (April 3, 2009) identified several issues that were better handled in R.08-08-009 than this proceeding. These include:

- the revision of utilities' least-cost best-fit methodologies to include evaluation of contracts for TRECs, and
- a process for approving utilities' short-term REC-only contracts.

These tasks have not been scheduled in that proceeding, pending the issuance of our decision authorizing the use of TRECs for RPS compliance. Now that we

have issued this decision, the assigned Commissioner should revise the scoping memo for R.08-08-009 to include these tasks.

Recently enacted § 365.1(c)(1) mandates that RPS requirements for ESPs and the three large utilities be equalized.[120] To implement this provision, the Commission will undertake a comprehensive review and revision of all RPS requirements soon after it completes the authorization of additional direct access transactions currently under consideration in R.07-05-025. This review fits most easily within the ambit of R.08-08-009. The assigned Commissioner or assigned administrative law judge should initiate this review as soon as practicable.

Several parties commented on PG&E's application for approval of REC-only contracts filed in October 2009 (Application (A.) 09-10-035).[121] This decision, which announces general rules for the use of TRECs and the TREC market, does not address that individual application. Any concerns about the relationship of this decision to A.09-10-035 will be addressed in that docket.

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[120] Section 365.1 was added by SB 695 (Kehoe), Stats. 2009, ch. 337. Section 365.1(c)(1) provides that:

> Once the commission has authorized additional direct transactions pursuant to subdivision (b), it shall do … the following:
>
> (1) Ensure that other providers are subject to the same requirements that are applicable to the state's three largest electrical corporations under any programs or rules adopted by the commission to implement the resource adequacy provisions of Section 380, the renewables portfolio standard provisions of Article 16 (commencing with Section 399.11), and the requirements for the electricity sector adopted by the State Air Resources Board pursuant to the California Global Warming Solutions Act of 2006 (Division 25.5 (commencing with Section 38500) of the Health and Safety Code). This requirement applies notwithstanding any prior decision of the commission to the contrary. . . .

[121] These commenters include PG&E, TransAlta, AReM and Aglet.

We intend to work with the CEC as it reviews a variety of RPS requirements in developing revisions to the *RPS Eligibility Guidebook*.

We encourage the Director of Energy Division to consider suggestions made by several parties to convene a workshop on integrating TRECs into the RPS reporting and verification processes of this Commission and the CEC.

The Commission may decide to review the temporary TREC usage limit and cap on payments for TRECs before they expire. In doing so, the Commission will make use of the report to be provided by Energy Division staff. The Commission could consider, among other things:

- The quantity of procurement of TRECs by utilities and other LSEs;
- The prices for TRECs paid by utilities and other LSEs;
- The age of the generation facilities from which TRECs are procured, e.g., facilities built before 2005, facilities built after 2005, facilities that are planned or under construction;
- How close individual LSEs, as well as classes of LSEs, are to meeting the 20% RPS goal; and
- How the TRECs market is working, with respect to availability of TRECs in the market and the transparency and efficiency of the market's functioning.

The landscape within which our RPS program functions is always changing, so we must consider the possibility that we might need to revisit additional aspects of this decision in the future. Executive Order S-21-09 (September 15, 2009) directed the Air Resources Board to implement a renewable energy standard under AB 32 to lead to use of renewable energy for 33% of retail sales in California by 2020. The full implementation of AB 32 may lead to additional changes. Legislative changes to the RPS program may also occur. Review of how the TREC market is functioning may reveal unexpected challenges or opportunities not fully encompassed in this decision.

Because this decision resolves all remaining issues in this proceeding identified in the Second Amended Scoping Memo and Ruling of Assigned Commissioner (February 25, 2008), [122] R.06-02-012 is resolved for the purpose of compliance with § 1701.5. However, the proceeding remains open to address the Petition for Modification of Decision 06-10-019 filed by SDG&E on October 29, 2009.

The rules and procedures for procuring and trading TRECs and using them for RPS compliance that are set forth in this decision are summarized for informational purposes only in Appendix D.

5. Comments on Proposed Decision

The revised proposed decision of ALJ Simon in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on January 19, 2009 by AReM and WPTF (jointly; collectively, AReM); BVES; Bonneville Power Administration (BPA); California Wastewater Climate Change Group; CalWEA; CEERT; DRA; Evolution Markets; GPI; Iberdrola; IEP; Lakeview Light & Power, LL&P Wind Energy, Inc., and Lakeview Green Energy, Inc. (jointly; collectively, Lakeview); LSA; LS Power Associates (LS Power); NaturEner USA; PacifiCorp; PG&E; SCE; SDG&E; Sempra Generation; Shell Energy North America; SMUD; Solar Alliance; TransAlta Corporation; TURN; and UCS. With the permission of the ALJ, Bloom Energy filed its comments on January 20, 2009.[123]

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[122] Three issues were transferred to R.08-08-009 in April 2009.

[123] Motions for party status were filed on January 15, 2010 by LS Power Associates, L.P. and by Sempra Generation. Motions were filed on January 19, 2010 by TransAlta

Footnote continued on next page

Reply comments were filed on January 25, 2010 by Aglet, AReM, CEERT, DRA, Evolution Markets, Iberdrola, IEP, CAISO, LS Power, Mountain Utilities, PG&E, Pilot Power, SMUD, SCE, Solar Alliance, TURN, and UCS.

The majority of the comments focused on the classification of transactions as REC-only or bundled, and the limit on the proportion of APT that can be met with REC-only transactions. DRA, GPI, PacifiCorp, Solar Alliance, and TURN support the criteria for classification of REC-only contracts in the RPD. CEERT, Evolution Markets, PG&E, Pilot Power, SCE, and SMUD oppose them. The helpful comments of BPA and CAISO do not take a position.

Most parties support the use of some criteria for differentiating bundled from REC-only contracts, but propose modifications to the RPD.[124] We adopt the suggestion that transactions that are "electrically equivalent" to the direct interconnection criterion in the RPD should also be included in the "bundled transaction" classification.[125] Staff will further investigate the use of firm transmission, which was advanced by several parties as an indication of a bundled transaction.

The temporary limit on the use of TRECs for RPS compliance is supported by GPI and Solar Alliance, and opposed by AReM, Lakeview, NaturEner, PG&E,

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Corporation; Lakeview; and California Wastewater Climate Change Group. Bloom Energy Corporation filed its motion on January 20, 2010 and BPA filed its motion on January 21, 2010. BPA's motion was granted by the ALJ's Ruling Granting Motion for Party Status (January 27, 2010); the other motions were granted by the ALJ's Ruling Granting Motions for Party Status (January 22, 2010).

[124] AReM, CalWEA, CEERT, Iberdrola, IEP, LSA, Lakeview, LS Power, NaturEner, Sempra, SDG&E, and UCS are in this group.

[125] CalWEA, Iberdrola, and IEP advance this view. LSA and UCS support it. Sempra Generation provides useful information to support this clarification.

Pilot Power, SCE, and Shell. Aglet, CEERT, LSA, Sempra, TURN, and UCS propose modified limits. We agree with LSA that, since we now include a greater range of transactions in the bundled transaction category, the TREC usage limit should be reduced. Most parties[126] proposing a specific amount for a lower limit identify 25% of APT as the appropriate limit; we agree.

We are also persuaded by SDG&E and TURN that the temporary limit on the use of TRECs for RPS compliance should not be applied to TRECs from contracts previously approved by the Commission if applying the limit to those deliveries would cause the LSE to exceed the TREC usage limit.

Several commenters[127] on the RPD argue that the classification of REC-only contracts, the usage limit, or the combination of the two creates an impact on interstate commerce that runs afoul of the commerce clause of the United States Constitution (Art. I, sec. 8, cl. 3).[128] These parties assert that the RPD impermissibly favors RPS-eligible generators located in California over generators that are not located in California and are not interconnected to a California balancing authority area.

These arguments against the TRECs regime in the RPD are not persuasive. As an initial matter, the RPD makes no distinctions among RPS procurement contracts that expressly convey only RECs and not energy. Any generator within

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[126] Aglet, TURN, and UCS.

[127] Iberdrola, Lakeview, NaturEner, Pilot Power, SCE, and SDG&E raise this issue. DRA argues that the RPD is not in conflict with the Commerce Clause.

[128] This clause provides that:

> The Congress shall have power. . . to regulate commerce with foreign nations, and among the several states, and with the Indian Tribes. . .

the WECC can enter into a REC-only contract with a California RPS-obligated LSE, so long as the CEC's criteria for eligibility and delivery are met.

The parties' arguments focus on the classification of REC-only and bundled contracts where both RECs and energy are initially conveyed to the buyer. The classification announced in the RPD is not based on political boundaries, and it does not equate to a state-based classification in practice. The electrical boundaries of California balancing authority areas extend outside the state, and indeed outside the country, into Mexico. As TURN notes in its reply comments on the RPD, about 23% of the pending requests by renewable generators for interconnection to the CAISO are made by generators located outside the state border of California.

The changes made to the RPD in response to comments about the "bright-line" test in the RPD further erode the claim that the treatment of REC-only contracts discriminates against RPS-eligible generators located outside California.[129] This decision now includes as bundled RPS contracts (i.e., contracts with energy that can directly serve California load) those contracts using dynamic transfers from RPS-eligible generators located outside California to California balancing authorities. This improvement to the technical accuracy of the classification made in the RPD also has the effect of clarifying that generators throughout the WECC may enter into RPS bundled contracts, since dynamic transfer arrangements are not limited to balancing authority areas that are immediately adjacent to one another.[130]

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[129] See § 4.5, above, for a detailed discussion of these adjustments.

[130] CAISO Dynamic Transfer Issue Paper at 16.

Parties' concerns about the effect of the temporary TREC usage limit on interstate commerce are misplaced. The usage limit applies to all REC-only contracts, whether the generator is located within California or outside its borders. Depending on its RPS procurement decisions, an LSE could fill its entire annual usage limit with REC-only transactions with generators located outside California, or entirely with REC-only transactions with generators located in California, or with some combination of generation resources. The usage limit itself does not create any RPS procurement requirements, nor does it require any particular pattern of RPS procurement.

In response to a number of suggestions, we provide a fixed date for the expiration of the temporary TREC usage limit and price cap on REC-only purchases, as well as topics the Commission should consider if it decides to review the usage limit and price cap prior to their expiration.

Parties' comments on the temporary cap on utility payments for TRECs do not present new policy arguments; the RPD remains substantially unchanged on this point. Several suggestions for clarifications to this section are adopted.

All comments and reply comments have been carefully considered; only those areas with the most interest from commenters are discussed in this section. The RPD has been thoroughly revised in response to the full range of comments, as well as to improve clarity and consistency, and to correct minor errors.

6. Assignment of Proceeding

Michael R. Peevey is the assigned Commissioner and Anne E. Simon and Burton W. Mattson are the assigned ALJs for this proceeding.

Findings of Fact

1. Allowing the use of TRECs for RPS compliance will give RPS-obligated LSEs increased options for RPS compliance, and may reduce complexity and costs of RPS procurement contracting.

2. The use of TRECs for RPS compliance will be substantially compatible with existing RPS flexible compliance rules.

3. As the California TREC market develops, it is likely to provide support for the development of new RPS-eligible generation.

4. In view of the benefits of the use of TRECs for RPS compliance and the development of a viable TREC market, it is reasonable to allow the use of TRECs for RPS compliance, subject to reasonable conditions.

5. This Commission adopted the report on the tracking system required by § 399.16(a)(1) by Res. E-4178 (November 21, 2008).

6. The CEC adopted the report on the tracking system required by § 399.16(a)(1) at its business meeting on December 3, 2008.

7. In order to maximize benefits to ratepayers, it is reasonable to classify RPS procurement transactions that convey energy and RECs as bundled transactions when these transactions serve California customer load without the substitution of energy from firming and/or shaping arrangements prior to the energy being scheduled in a California balancing authority.

8. Because the RPS-eligible energy is delivered directly to California's system, California customers receive the maximum benefit of RPS procurement transactions when the generator of the energy associated with a REC has its first point of interconnection with the WECC transmission system with a California balancing authority area, or when the energy procured is dynamically transferred to a California balancing authority.

9. In the early years of a California TREC market, prior to LSEs' attaining the goal of 20% of retail sales from RPS-eligible generation resources, demand for TRECs is likely to exceed supply.

10. REC-only contracts are likely to provide fewer potential benefits to ratepayers than contracts for RPS procurement that include both RECs and RPS-eligible energy. In light of this differential in potential benefits, it is reasonable to impose on the three large IOUs a temporary limit of 25% of APT annually on their use of TRECs for RPS compliance.

11. In order to provide protections for ratepayers from the potential for volatility and spikes in TREC prices without damaging the basic structure of the TREC market or undermining the financial incentives for new renewable construction that are among the longer-term benefits of a TREC market, it is reasonable to impose a temporary price cap of $50/REC for TREC purchases by IOUs.

12. Solely for purposes of determining whether the contract price is reasonable and the price of TRECs is at or below the reviewable price cap, it is reasonable to develop a method to infer the price for a TREC based on a forecast of the market price for the associated energy if the contract does not specifically identify the REC price.

13. In order to promote liquidity in the TREC market, it is reasonable to impose a limit on the period of time that TRECs and RECs associated with energy in bundled contracts may be held in an active WREGIS sub-account before being retired for RPS compliance.

14. Allowing LSEs to unbundle and sell RECs from bundled contracts for RPS-eligible energy, on both a spot and forward basis, will promote liquidity in the TREC market and provide RPS compliance flexibility.

15. Because it is not always possible for the viability of REC-only contracts to be assessed in the same way as bundled contracts, it is reasonable to limit the earmarking of REC-only contracts to those contracts between an RPS-obligated LSE and one RPS-eligible generator providing the TRECs.

16. It is reasonable to allow REC-only transactions as well as bundled transactions to be used to make up shortfalls in RPS procurement in prior years in accordance with the flexible compliance rules and the limits on TREC usage set forth in this decision.

17. In order to preserve the Commission's ability to determine compliance with RPS obligations and to eliminate the potential for double-counting of some RECs, it is reasonable to prohibit the unbundling and trading of RECs from the first three years of deliveries of any RPS procurement contract, whether bundled or REC-only, that has been earmarked.

18. In view of the uncertainties involved in the early years of a new TREC market, it is reasonable to provide for regular reports by RPS-obligated LSEs of their purchases and sales of TRECs including prices of the transactions. This information may be used in assessments of market performance by Energy Division staff and, as needed, review by the Commission of the market rules set forth in this order.

Conclusions of Law

1. The use of TRECs for RPS compliance should be authorized.
2. All statutory preconditions to this authorization have been met.
3. Procurement and trading of RECs that meet the requirements of D.08-08-028 and any subsequent Commission decision or any applicable legislation characterizing RECs should begin not earlier than the effective date of this decision.

4. Only RECs tracked in WREGIS should be allowed to be used for RPS compliance.

5. LSEs should be allowed to unbundle and sell RECs from bundled contracts for RPS-eligible energy, on both a spot and forward basis, subject to conditions that promote RPS compliance and prevent double-counting.

6. Existing RPS flexible compliance rules should be applied to the use of TRECs for RPS compliance, with the following adjustments:

   a. REC-only contracts between an LSE and one RPS-eligible generator supplying the TRECs may be earmarked.

   b. RECs may not be unbundled or traded in the first three years of contracts (whether bundled or REC-only) that have been earmarked.

   c. REC-only contracts that are used for earmarking will count against any TREC usage limitation in the year the TRECs are used for RPS compliance.

7. RECs associated with RPS-eligible generation under contracts with California RPS-obligated LSEs or POUs signed prior to 2005 that do not allocate ownership or disposition of RECs as well as RECs associated with RPS-eligible generation under contracts pursuant to PURPA between QFs and California LSEs or POUs signed after January 1, 2005 may not be unbundled or used for RPS compliance separate from the associated energy.

8. A reasonable limit on the period of time that TRECs and RECs associated with energy delivered in bundled contracts used for RPS compliance may be held in an active WREGIS sub-account before being retired for RPS compliance should be imposed.

9. In order to allow flexibility in RPS procurement and compliance, IOUs should be able to enter into voluntary TREC transactions even if their cost

limitation, as set out in § 399.15(d), has been reached, so long as the usage limit, price cap, and other requirements in this decision are met.

10. In order to maximize the benefit California consumers receive from the procurement of RPS-eligible energy and of TRECs, all procurement that does not meet the Commission's criteria for classification as bundled RPS transactions should be classified as REC-only transactions. Transactions in which RECs and energy are procured from RPS-eligible generators for which the first point of interconnection with the WECC interconnected transmission system is in a California balancing authority area, or transactions using dynamic transfer arrangements with a California balancing authority, should be considered bundled procurement for RPS compliance purposes. All other RPS procurement transactions should be considered REC-only at this time.

11. Transactions in which RECs and RPS-eligible energy are procured from a generator whose first point of interconnection with the WECC interconnected transmission system is not a California balancing authority, and the transaction does not make use of dynamic transfer arrangements with a California balancing authority, that were approved by the Commission prior to the effective date of this decision should be counted as REC-only transactions as of the effective date of this decision. All deliveries from such transactions that occurred prior to the effective date of this decision should count as bundled transactions.

12. A temporary limit on the proportion of annual RPS procurement obligations that can be met by using TRECs should be imposed on the three large IOUs.

13. In order to recognize the legitimate expectations of the parties to RPS contracts now classified as REC-only that were approved by the Commission prior to the effective date of this decision, the temporary limit on the use of

TRECs for RPS compliance provided in this decision should not be applied to deliveries to an LSE from contracts classified as REC-only by this decision, but which were previously approved by the Commission, if the deliveries would cause the LSE to exceed the TREC usage limit. In this circumstance, the LSE should not be allowed use any TRECs associated with contracts that were not approved by the Commission prior to the effective date of this decision for compliance in that year that would exceed the 25% annual limit.

14. A temporary cap on the price a utility may pay for a TREC should be imposed.

15. The temporary price cap for IOU purchases of TRECs should not be treated as a per se reasonable price for a TREC.

16. IOUs should include proceeds of the sale of TRECs in their ERRA or ECAC accounts, or equivalents (such as power purchase accounts) for the benefit of ratepayers. Any IOU not currently having an appropriate accounting method should file an advice letter within 90 days of the date of this decision proposing an accounting method.

17. In order to allow multi-jurisdictional utilities to recover the reasonable costs of REC-only contracts procured solely for California RPS compliance, such contracts should be submitted for Commission approval via advice letter.

18. In order to carry out the determinations in this decision, the Director of Energy Division should be authorized to develop methods, in consultation with the parties and CAISO and other California balancing authorities, if relevant, of reviewing and evaluating RPS procurement contracts in which a dynamic transfer is an element of the contract.

19. In order to provide the Commission with information to evaluate the role of firm transmission in RPS procurement, the Director of Energy Division should

be authorized to investigate the use of firm transmission in accordance with the guidance provided in this decision.

20. In order to facilitate the integration of TRECs into RPS procurement planning and practices, the assigned Commissioner in R.08-08-009 or its successor should be authorized to include in that proceeding consideration of changes to RPS annual procurement plans, LCBF evaluation methodology, and RPS contract approval processes to include procurement of TRECs.

21. In order to facilitate the integration of REC-only transactions into the RPS flexible compliance rules, the Director of Energy Division should be authorized, consistent with the ALJ's Reporting Ruling, to make revisions to the RPS compliance spreadsheet and other RPS reporting formats to implement the requirements and conditions set forth in this order.

22. In order to facilitate the integration of REC-only transactions into the RPS procurement process, the Director of Energy Division should be authorized to apply current procedures and methods of review of bundled contracts to REC-only contracts, with the exception that the fast-track procedure authorized by D.09-06-050 should not now be applied to REC-only contracts.

23. In order to facilitate the integration of REC-only transactions into the RPS procurement process, utilities that have submitted RPS procurement contracts for Commission approval should, if necessary, amend all pending contracts to include the STCs related to RECs, and should amend their pending advice letters or applications to demonstrate that the contracts conform to the requirements for STCs related to RECs.

24. Utilities that are required to submit their RPS procurement contracts for Commission approval should submit contracts conveying only RECs and not energy for approval not earlier than April 1, 2010.

25. In order to facilitate the integration of REC-only transactions into the RPS procurement process, the Director of Energy Division should be authorized to determine the price of the TRECs in transactions for both RECs and energy in which no separate price for RECs is indicated and where the RECs are associated with energy from generators of RPS-eligible energy for which the generator's first point of interconnection with the WECC interconnected transmission system is not with a California balancing authority, and the transaction does not make use of dynamic transfer arrangements in a California balancing authority.

26. In order to provide the Commission with information about the initial period of the TREC market and the use of TRECs for RPS compliance, the Director of Energy Division should prepare a report for the Commission within 16 months of the effective date of this order, using information provided by all RPS-obligated LSEs. This report should include a recommendation to the Commission regarding whether or not the applicable TREC usage limit and price cap should be retained or allowed to sunset.

27. In order to allow the use of TRECs for RPS compliance as soon as practicable, this order should be effective immediately.

O R D E R

IT IS ORDERED that:

1. Renewable energy credits that are procured and traded separately from the associated energy generated by a facility that is eligible for the California renewables portfolio standard may be used for compliance with the California renewables portfolio standard in accordance with the rules set forth in this decision.

2. Procurement and trading of renewable energy credits for compliance with the California renewables portfolio standard in accordance with the rules set forth in this decision may commence on the effective date of this decision.

3. Only renewable energy credits tracked and retired in the Western Renewable Energy Generation Information System shall be used for compliance with the California renewables portfolio standard.

4. Any renewable energy credits tracked in the Western Renewable Energy Generation Information System that conform to the requirements of Decision 08-08-028 and any subsequent Commission decision or any applicable California legislation characterizing renewable energy credits may be used for compliance with the California renewables portfolio standard, subject to the restrictions in Ordering Paragraphs 8 and 9, below.

5. Any renewable energy credits tracked in the Western Renewable Energy Generation Information System associated with electricity that is eligible for the California renewables portfolio standard that was generated on or after January 1, 2008 may be procured and traded separately from the associated energy, subject to the restrictions set forth in Ordering Paragraphs 8, 9, and 14 below.

6. As of the effective date of this decision, a transaction for purposes of compliance with the California renewables portfolio standard shall be considered a transaction that procures only renewable energy credits if that transaction either:

a. Expressly transfers only renewable energy credits and not energy from the seller to the buyer; or

b. Transfers both renewable energy credits and energy from the seller to the buyer but does not meet the Commission's criteria for considering a procurement transaction a bundled transaction for purposes of compliance with the California renewables portfolio standard.

All deliveries from transactions described in subsection b, above, made prior to the effective date of this decision will be counted as bundled deliveries of both renewable energy credits and energy for purposes of compliance with the California renewables portfolio standard.

7. The following types of transactions shall be treated as bundled transactions for purposes of compliance with the California renewables portfolio standard:

   a. Transactions in which energy is acquired from a generator certified as eligible for the California renewables portfolio standard and the generator has its first point of interconnection with the Western Electricity Coordinating Council interconnected transmission system with a California balancing authority; and

   b. Transactions in which energy is acquired from a generator certified as eligible for the California renewables portfolio standard and the energy from the transaction is dynamically transferred to a California balancing authority area.

8. Renewable energy credits associated with electricity generation that is eligible for the California renewables portfolio standard delivered under procurement contracts signed prior to 2005 with load-serving entities obligated under the California renewables portfolio standard or with California publicly owned utilities that do not allocate ownership or disposition of the renewable energy credits shall be used for compliance with the California renewables portfolio standard only if they are not transferred to an entity other than the original buyer in the Western Renewable Energy Generation Information System prior to being retired for compliance with the California renewables portfolio standard.

9. Renewable energy credits associated with electricity generation that is eligible for the California renewables portfolio standard delivered under procurement contracts of California utilities for both energy and renewable

energy credits pursuant to the federal Public Utility Regulatory Policies Act of 1978 that were signed after January 1, 2005 with qualifying facilities located in California shall be used for compliance with the California renewables portfolio standard only if they are not transferred to an entity other the original buyer in the Western Renewable Energy Generation Information System prior to being retired for compliance with the California renewables portfolio standard.

10. In order to be used for compliance with the California renewables portfolio standard, renewable energy credits may be retained in active sub-accounts in the Western Renewable Energy Generation Information System for no more than three compliance years (inclusive of the year in which the electricity associated with the renewable energy credits was generated) after the electricity associated with the renewable energy credits was generated before being transferred to the Western Renewable Energy Generation Information System retirement sub-account of a load-serving entity obligated under the California renewables portfolio standard.

11. Once renewable energy credits are retired in the Western Renewable Energy Generation Information System for use for compliance with the California renewables portfolio standard, they may be banked for compliance with the California renewables portfolio standard in future years in accordance with the flexible compliance rules for the California renewables portfolio standard.

12. Subject to the restrictions in Ordering Paragraphs 8, 9, and 14, the renewable energy credits from bundled contracts currently delivering energy eligible under the California renewables portfolio standard may be unbundled and traded separately from the associated energy in accordance with the rules set forth in this decision, so long as, once the renewable energy credits have been

sold, the associated energy is not used for compliance with the California renewables portfolio standard.

13. Subject to the restrictions in Ordering Paragraphs 8, 9, and 14, the renewable energy credits from bundled contracts scheduled to deliver energy eligible for the California renewables portfolio standard in the future may be unbundled and traded on a forward basis separately from the associated energy, so long as, once the renewable energy credits are generated, they are tracked in the Western Renewable Energy Generation Information System and, once the renewable energy credits have been sold, the associated energy is not used for compliance with the California renewables portfolio standard.

14. Renewable energy credits may not be unbundled and traded from the first three years of deliveries under any bundled procurement contract for compliance with the California renewables portfolio standard that has been earmarked to apply to a shortfall in meeting the annual procurement target of a load-serving entity obligated under the California renewables portfolio standard in the year the bundled contract was signed, subject to the restrictions in Ordering Paragraphs 8 and 9.

15. Contracts for delivery of renewable energy credits only between a load-serving entity and one generator of energy eligible under the California renewables portfolio standard that supplies all the renewable energy credits in the contract may be earmarked for purposes of compliance with the California renewables portfolio standard, but no other types of contracts for delivery of renewable energy credits only may be earmarked. The tradable renewable energy credits from such contracts shall count against any annual limit on the use of tradable renewable energy credits in the year that the tradable renewable

energy credits are used for compliance with the California renewables portfolio standard.

16. Renewable energy credits may not be sold or traded from the first three years of deliveries from a procurement contract for renewable energy credits only that has been earmarked to apply to a shortfall in meeting the annual procurement target of a load-serving entity obligated under the California renewables portfolio standard in the year the contract for the delivery of renewable energy credits was signed.

17. Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company may each use renewable energy credits procured from contracts for renewable energy credits only to meet no more than 25 percent of their annual procurement targets for the California renewables portfolio standard, beginning with the 2010 compliance year.

18. The temporary limit on the use of tradable renewable energy credits for compliance with the California renewables portfolio standard shall not be applied to deliveries to a load-serving entity obligated under the California renewables portfolio standard from contracts that are classified by this decision as contracts for renewable energy credits only, but were approved by the Commission prior to the effective date of this decision, if such deliveries would cause that load-serving entity to exceed the annual limit on the use of tradable energy credits for compliance with the California renewables portfolio standard. In this circumstance, the LSE may not use any tradable renewable energy credits associated with contracts that were not approved by the Commission prior to the effective date of this decision for compliance in that year that would exceed the 25% annual limit.

19. The temporary limit on the use of tradable renewable energy credits for compliance with the California renewables portfolio standard shall terminate December 31, 2011, unless the Commission acts to review, extend, or modify it, or to terminate the limit prior to its expiration.

20. No renewable energy credits procured through contracts for renewable energy credits only for which the levelized amount paid is greater than $50.00 per renewable energy credit may be used by any investor-owned utility for compliance with the California renewables portfolio standard. This limit applies only to those renewable energy credits procured by multi-jurisdictional utilities exclusively for use in complying with their California renewables portfolio standard procurement obligations.

21. The temporary limit on the price paid by an investor-owned utility for tradable renewable energy credits procured through contracts for tradable renewable energy credits only for compliance with the California renewables portfolio standard shall terminate December 31, 2011, unless the Commission acts to review, extend, or modify it, or to terminate the limit prior to its expiration.

22. Investor-owned utilities that have reached the procurement cost limitation for compliance with the California renewables portfolio standard set forth in Public Utilities Code Section 399.15(d) may enter into voluntary transactions for renewable energy credits in accordance with the rules set forth in this decision.

23. Investor-owned utilities shall promptly set up an appropriate accounting method to apply proceeds of the sale of renewable energy credits for the benefit of ratepayers. Any investor-owned utility not currently having an appropriate accounting method shall file an advice letter within 90 days of the effective date of this decision proposing an accounting method.

24. Any contracts for renewable energy credits only that are procured solely for compliance with the California renewables portfolio standard for which a multi-jurisdictional utility seeks recovery of costs must be submitted for Commission approval by means of an advice letter.

25. The Director of Energy Division is authorized to develop methods, in consultation with the parties and California Independent System Operator, and other California balancing authorities, if relevant, of reviewing and evaluating procurement contracts for compliance with the California renewables portfolio standard in which a dynamic transfer is an element of the contract.

26. The Director of Energy Division shall take appropriate steps to obtain information that will enable a definitive determination of how to classify transactions for RPS procurement that include firm transmission arrangements but not dynamic transfers to a California balancing authority and will allow the development of criteria for reviewing and evaluating such contracts that are presented for Commission approval. The Director of Energy Division may also, in the Director's discretion, provide recommendations to the Commission about the classification and evaluation of such transactions. Such recommendations may be in the form of a report, or in the form of a resolution prepared for the Commission's consideration.

27. The Director of Energy Division is authorized to review existing reporting formats and tools for the California renewables portfolio standard and undertake appropriate revisions to allow complete reporting and monitoring of the provisions in this order.

28. The Director of Energy Division is authorized to apply current procedures and methods of review of bundled contracts for procurement under the California renewables portfolio standard by investor-owned utilities to contracts

for renewable energy credits only, with the exception that the fast-track procedure authorized by Decision 09-06-050 may not now be applied to procurement of renewable energy credits only.

29. The Director of Energy Division is authorized to develop and apply a method for inferring the price of renewable energy credits in transactions for both renewable energy credits and energy in which no separate price for the renewable energy credits is indicated and where the renewable energy credits are associated with energy from generators of energy eligible under the California renewables portfolio standard for which the first point of interconnection with the Western Electricity Coordinating Council interconnected transmission system is not a California balancing authority and a dynamic transfer with a California balancing authority is not an element of transaction.

30. The Director of Energy Division may require the submission of appropriate documentation to verify compliance with any of the requirements set forth in this Order, including but not limited to purchases, sales, and prices of renewable energy credits.

31. The Director of Energy Division shall review and compile information about the market for tradable renewable energy credits and the use of tradable renewable energy credits for compliance with the California renewables portfolio standard provided by load-serving entities obligated under the California renewables portfolio standard in their advice letters or applications seeking approval of contracts for procurement of renewable energy credits only, in their semiannual compliance reports, and in response to other request for information made by Energy Division staff. The Director of Energy Division shall include analysis of this information in a report to be provided to the Commission not more than 16 months from the effective date of this decision. The report shall

also include recommendations about whether the Commission should review, modify, or extend the annual limit on the use of tradable renewable energy credits for compliance with the California renewables portfolio standard program, or whether the Commission should let the limit expire. The report shall also include recommendations about whether the Commission should review, modify, or extend the limit on the price an investor-owned utility may pay for tradable renewable energy credits for compliance with the California renewables portfolio standard program, or whether the Commission should let the limit expire.

32. The Director of Energy Division shall include in the format for advice letters seeking Commission approval of contracts for procurement of tradable renewable energy credits for compliance with the California renewables portfolio standard the following information from the utility submitting the advice letter:

- Whether the generation facility or facilities producing the energy eligible for the California renewables portfolio standard that is associated with the renewable energy credits to be procured entered commercial operation prior to January 1, 2005, or after January 1, 2005, or was not in commercial operation at the time the contract was signed;
- the sum of all delivered and expected tradable renewable energy credits purchased through contracts executed by the utility to date and how this compares to any applicable annual limit on the use of tradable renewable energy credits for compliance with the California renewables portfolio standard;
- the sum of all delivered and expected tradable renewable energy credits purchased by that utility through contracts for the procurement of renewable energy credits only with facilities that are or were already online as of the execution date of their associated contract for procurement of tradable renewable energy credits , and how this compares to the applicable annual limit on

the use of tradable renewable energy credits for compliance with the California renewables portfolio standard;

- the sum of all delivered and expected tradable renewable energy credits purchased by that utility through contracts for the procurement of renewable energy credits only with facilities that are not or were not online as of the execution dates of their associated contracts, and how this compares to the applicable annual limit on the use of tradable renewable energy credits for compliance with the California renewables portfolio standard;
- a comparison of the price of the renewable energy credits in the contract that is the subject of the advice letter and the price of renewable energy credits from all contracts for the procurement of renewable energy credits only with facilities that were online as of the execution date of their associated contracts; and
- a comparison of the price of the renewable energy credits in the contract that is the subject of the advice letter and the price of renewable energy credits from all contracts for the procurement of renewable energy credits only with facilities that were not yet online as of the execution date of their associated contracts.

33. Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company shall each file and serve amendments to their 2010 annual procurement plans for compliance with the California renewables portfolio standard that have been submitted in Rulemaking 08-08-009, on a schedule to be set by the assigned administrative law judge. The amendments shall address each utility's anticipated plans for the use of tradable renewable energy credits to meet their procurement obligations under the California renewables portfolio standard. The amendments shall include as much detail as currently possible on whether the utility intends to use long-term or short-term contracts, and whether the utility expects to contract with newly constructed generation, or acquire tradable renewable energy credits from

facilities that are currently on line. The amendments shall also explain how these transactions will promote the development of new renewable facilities in California and the area served by the Western Electricity Coordinating Council.

34. The assigned Commissioner in Rulemaking 08-08-009 is authorized to initiate review and revision of the methodology for identifying least cost and best-fit resources for procurement for compliance with the California renewables portfolio standard. The review shall include, among other issues, consideration of revisions to the least cost and best-fit methodology that will encourage greater reliance on procurement transactions that lead to the construction of additional capacity for generation that is eligible for procurement for compliance with the California renewables portfolio standard.

35. The following non-modifiable standard terms and conditions shall be included in all contracts for procurement for compliance with the California renewables portfolio standard, whether bundled contracts or purchases of renewable energy credits only:

a. STC REC-1. Transfer of renewable energy credits

Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the renewable energy credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

b. STC REC-2. Tracking of RECs in WREGIS

Seller warrants that all necessary steps to allow the renewable energy credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

36. The following non-modifiable standard terms and conditions shall be included in all contracts for purchase of renewable energy credits only of regulated utilities other than multi-jurisdictional utilities:

STC REC-3. CPUC Approval

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

(a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and

(b) finds that any procurement pursuant to this Agreement is procurement of renewable energy credits that conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public

> Utilities Commission or by subsequent legislation, for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable law.
>
> CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.
>
> STC 17. Applicable Law
>
> Governing Law. This agreement and the rights and duties of the parties hereunder shall be governed by and construed, enforced and performed in accordance with the laws of the state of California, without regard to principles of conflicts of law. To the extent enforceable at such time, each party waives its respective right to any jury trial with respect to any litigation arising under or in connection with this agreement.

37. Utilities that have submitted for Commission approval contracts for procurement for compliance with the California renewables portfolio standard shall, if necessary, amend all pending contracts to include the standard terms and conditions related to renewable energy credits set forth in Ordering Paragraphs 35 and 36 above, and shall amend their pending advice letters or applications to demonstrate that the contracts conform to the requirements for standard terms and conditions related to renewable energy credits.

38. Not earlier than April 1, 2010, utilities may submit for Commission approval contracts conveying only renewable energy credits and not energy that conform to the requirements of this order.

39. The issues in the Second Amended Scoping Memo and Ruling of Assigned Commissioner (February 25, 2008) have either been transferred to Rulemaking (R.) 08-08-009 by the Assigned Commissioner's Ruling Transferring

Consideration of Certain Issues from R.06-02-012 to R.08-08-009 (April 3, 2009) or resolved in this proceeding. This proceeding is therefore resolved for the purpose of compliance with Public Utilities Code Section 1701.5. However, the proceeding remains open to address the Petition for Modification of Decision 06-10-019, filed October 29, 2009.

This order is effective today.

Dated _____, at San Francisco, California.

APPENDIX A

Public Utilities Code Section 399.16

§ 399.16. Use of renewable energy credits to satisfy the requirements of the renewables portfolio standard

(a) The commission, by rule, may authorize the use of renewable energy credits to satisfy the requirements of the renewables portfolio standard established pursuant to this article, subject to the following conditions:

(1) Prior to authorizing any renewable energy credit to be used toward satisfying annual procurement targets, the commission and the Energy Commission shall conclude that the tracking system established pursuant to subdivision (c) of Section 399.13, is operational, is capable of independently verifying the electricity generated by an eligible renewable energy resource and delivered to the retail seller, and can ensure that renewable energy credits shall not be double counted by any seller of electricity within the service territory of the Western Electricity Coordinating Council (WECC).

(2) A renewable energy credit shall be counted only once for compliance with the renewables portfolio standard of this state or any other state, or for verifying retail product claims in this state or any other state.

(3) The electricity is delivered to a retail seller, the Independent System Operator, or a local publicly owned electric utility.

(4) All revenues received by an electrical corporation for the sale of a renewable energy credit shall be credited to the benefit of ratepayers.

(5) No renewable energy credits shall be created for electricity generated pursuant to any electricity purchase contract with a retail seller or a local publicly owned electric utility executed before January 1, 2005, unless the contract contains explicit terms and conditions specifying the ownership or disposition of those credits. Deliveries under those contracts shall be tracked through the accounting system described in subdivision (b) of Section 399.13 and included in the baseline quantity of eligible renewable energy resources of the purchasing retail seller pursuant to Section 399.15.

(6) No renewable energy credits shall be created for electricity generated under

any electricity purchase contract executed after January 1, 2005, pursuant to the federal Public Utility Regulatory Policies Act of 1978 (16 U.S.C. Sec. 2601 et seq.). Deliveries under the electricity purchase contracts shall be tracked through the accounting system described in subdivision (b) of Section 399.12 and count toward the renewables portfolio standard obligations of the purchasing retail seller.

(7) The commission may limit the quantity of renewable energy credits that may be procured unbundled from electricity generation by any retail seller, to meet the requirements of this article.

(8) No electrical corporation shall be obligated to procure renewable energy credits to satisfy the requirements of this article in the event that the total costs expended above the applicable market prices for the procurement of eligible renewable energy resources exceeds the cost limitation established pursuant to subdivision (d) of Section 399.15.

(9) Any additional condition that the commission determines is reasonable.

(b) The commission shall allow an electrical corporation to recover the reasonable costs of purchasing renewable energy credits in rates.

(END OF APPENDIX A)

APPENDIX B

STAFF STRAW PROPOSAL

COMPLIANCE QUESTIONS	STRAW PROPOSAL
Market Participants	
• Who can participate in the California compliance REC market?	There are no limits on market participation.
• Should the REC trading rules differ for third parties (any non RPS-obligated entity)?	To the greatest extent possible, rules should be consistent for all participants.
TREC Usage Limits	
• Pursuant to Pub. Util. Code § 399.16(a)(7), the Commission may limit the quantity of tradable RECs (TRECs) procured for RPS compliance.	To address usage limits, a minimum quota mechanism, similar to the one set forth in D.07-05-028 for short term contracts, will be applied to TRECs.
• Should there be a limit on the quantity of tradable RECs that can be used by LSEs for RPS compliance? Should the limit be different for different classes of LSEs?	The minimum quota will allow, in any calendar year, LSEs to count short-term REC contracts for RPS compliance only if, in the same calendar year, the LSE signs long-term bundled contracts or bundled contracts with new facilities whose aggregated annual expected deliveries[131] total at least 0.25% of its prior year's retail sales.

[131] This is different from the minimum quota framework set forth in D.07-05-028, which requires that the *total* deliveries expected from the long-term contracts and contracts with new facilities are greater than 0.25% of prior year's retail sales before short-term contracts can be signed.

Flexible Compliance: Banking

• Should tradable RECs have an "expiration date"?

• Should RPS-obligated LSEs be able to "bank" tradable RECs without limitation as to quantity?

• Should RPS-obligated LSEs be able to "bank" tradable RECs without temporal limitations?

Note: Currently, there are no temporal or quantity restrictions for banking bundled RPS contracts. Flexible compliance is tracked for each LSE in its Reporting and Compliance Spreadsheet submitted in biannual performance reports required by D.06-10-050.

Banking within WREGIS

In order for tradable RECs to be used for RPS compliance, they must be retired[132] in WREGIS within three compliance years (including compliance year in which it was generated).[133]

Banking after WREGIS

After RECs are retired in WREGIS, they can be banked indefinitely for RPS compliance purposes.

The flexible compliance for RECs and RPS bundled procurement will be tracked by the Compliance Spreadsheets submitted as part of the biannual Compliance Reports (D.06-10-050).

[132] "A Retirement Subaccount is used as a repository for WREGIS Certificates that the Account Holder wants to designate as Retired and remove from circulation (e.g., to demonstrate compliance with a state's RPS). Once a Certificate has been transferred into a WREGIS Retirement Subaccount, it cannot be transferred again to any other Account." (WREGIS Operating Rules, p. 6.)

[133] The LSEs should create a banking Active sub-account within WREGIS to 'hold' RECs until they are retired for compliance purposes.

Flexible Compliance: Earmarking	
• Should earmarking[134] be allowed for TRECs?	No tradable RECs can be used for earmarking. No forward REC contracts can be used for earmarking.
Treatment of Bundled[135] Contracts	
• What types of existing and future bundled RPS contracts can be unbundled for REC trading (excluding contracts pursuant to Pub. Util. Code § 399.16(a) for which no RECs will be created)?	Beginning on January 1, 2009, LSEs can unbundle and sell the RECs (that are tracked in WREGIS) from currently operational RPS projects. (Once the RECs are sold, they cannot be used for RPS compliance by the selling LSE. The null power also cannot be used for RPS compliance by any LSE.) Beginning on January 1, 2009, LSEs can unbundle and sell RECs (that are tracked in WREGIS), on a forward basis, from Commission-approved RPS projects that are not yet online. (Once the RECs are sold, they cannot be used for RPS compliance by the selling LSE. The null power also cannot be used for RPS compliance.)

[134] Earmarking is a flexible compliance tool that LSEs can conditionally use to defer deficits. See D.06-10-050, Attachment A, pages 9-10.

[135] A bundled RPS contract is a power purchase agreement that conveys all energy, capacity and environmental attributes to a load-serving entity.

	However, LSEs cannot unbundle the first year of a bundled contract if it has been set aside for RPS earmarking. - LSEs can unbundle subsequent years of an earmarked bundled contract
Cost Recovery	
• What is the review and approval process for IOU REC contracts? *(Currently, all IOU bundled RPS contracts must be filed by advice letter. The contract review process for short-term bundled contracts is being separately developed in R.06-02-012.)* • What price evaluation mechanism should the Commission use to evaluate whether a REC contract price is reasonable? • Should the Commission establish standard terms and conditions (modifiable and/or non-modifiable) to be contained in REC contracts?	<u>Review process:</u> Long-term REC contracts (either from a solicitation or bilateral) must be filed with the Commission by advice letter. All short-term REC contracts should follow the same approval process that is established in R.06-02-012 for short-term bundled contracts. <u>Price evaluation criteria:</u> IOUs should solicit REC contracts in their annual renewable RFOs. As part of this process, the IOUs must modify their least cost, best fit (LCBF) evaluation methodologies to shortlist the most competitive REC contracts. The LCBF methodology should compare the benefits and costs of bundled contracts with REC transactions and evaluate them relative to the LSE's entire RPS portfolio. A price cap will also be used to protect ratepayers from unreasonable costs. The price cap for any REC contract (short term, long term, bid into a solicitation,

bilateral) is $35/REC levelized using the IOU's approved discount rate.

Bilateral REC contracts are allowed also and are subject to the $35/REC levelized price cap.

Standard terms and conditions:

Each REC contract must contain a Commission-approved term identifying the RECs and their attributes transferred to the buyer. This term is not modifiable.

(END OF APPENDIX B)

APPENDIX C

NEW AND REVISED STANDARD TERMS AND CONDITIONS

STC REC-1 Transfer of renewable energy credits (Applies to all REC-only and bundled contracts)

Non-modifiable

Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the renewable energy credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

STC REC-2 Tracking of RECs in WREGIS (Applies to all REC-only and bundled contracts) Non-modifiable

Seller warrants that all necessary steps to allow the renewable energy credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

STC REC-3 CPUC Approval (Applies to REC-only contracts of regulated utilities other than multi-jurisdictional utilities)

Non-Modifiable

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

(a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and

(b) finds that any procurement pursuant to this Agreement is procurement of renewable energy credits that conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation, for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

(END OF APPENDIX C)

APPENDIX D

Summary of TREC Rules Announced in This Decision

This decision sets rules for the use of TRECs for RPS compliance and for the TREC market. The orders and guidance (while not limited by this summary) are summarized below. Other sources relevant to TRECs include D.08-08-028, the CEC's *RPS Eligibility Guidebook*, and the WREGIS Operating Rules.

What is a tradable renewable energy credit (TREC) transaction?

1) A transaction in which an entity procures only a REC (and not the underlying energy) from another entity, or
2) A transaction conveying both RECs and energy that does not meet the Commission's criteria for bundled RPS procurement transactions. These REC-only transactions currently include all procurement from generators of RPS-eligible energy for which the first point of interconnection with the WECC interconnected transmission system is not a California balancing authority, and the transaction does not make use of dynamic transfer arrangements in a California balancing authority area.

Effective date of REC trading

- RPS-obligated load-serving entities[136] may begin procuring and trading RECs on the effective date of this decision.

Eligibility of TRECs

- All TRECs must be associated with RPS-eligible energy generated on or after January 1, 2008.
- All TRECs must be tracked in WREGIS to be used for RPS compliance.
    - The RECs from bundled contracts currently delivering RPS-eligible energy may be unbundled and traded separately from the associated energy, subject to the exceptions below.

[136] Load-serving entities (LSEs) include: investor-owned utilities (IOUs), energy service providers (ESPs), and community choice aggregators (CCAs).

- The RECs from bundled contracts scheduled to deliver RPS-eligible energy in the future may be unbundled and traded on a forward basis separately from the associated energy, subject to the exceptions below.

- Exceptions:

1. RECs associated with RPS-eligible energy delivered under procurement contracts signed prior to 2005 with California RPS-obligated LSEs or publicly owned utilities cannot be traded unless the contract explicitly assigns ownership or disposition of the RECs.

2. RECs associated with RPS-eligible energy delivered to California utilities under procurement contracts pursuant to the Federal Public Utility Regulatory Policies Act of 1978 with qualifying facilities signed after January 1, 2005 cannot be traded.

Flexible compliance rules for TRECs

Commitment and Banking

- In order to be used for RPS compliance, TRECs may be retained in active sub-accounts in WREGIS for no more than three calendar years (inclusive of the year in which the electricity associated with the RECs was generated) after the electricity associated with the RECs was generated.

- Once RECs are retired in WREGIS for RPS compliance, they may be banked for RPS compliance in future years in accordance with the RPS flexible compliance rules.

Earmarking

- TREC contracts between an LSE and one RPS-eligible generator may be earmarked for RPS compliance purposes, but no other types of TREC contracts may be earmarked.

- An LSE may not unbundle and trade RECs associated with energy generated in the first three years of an RPS contract (whether bundled or REC-only) that is being used for earmarking.

Filling compliance shortfalls

REC-only contracts may be used to make up shortfalls in APT, so long as the total use of TRECs for the year of the shortfall does not exceed the applicable limit on TRECs usage.

Temporary limit on use of TRECs for RPS compliance

- PG&E, SCE, and SDG&E may meet no more than 25% of their APT with TRECs. This limitation will sunset December 31, 2011 unless the Commission acts to extend it.

Contract review and approval of TREC transactions

- IOUs may submit TREC contracts for CPUC review and approval by advice letter starting April 1, 2010.
- Energy Division staff may use present methods of analyzing advice letters for bundled contracts, and make any adaptations necessary, for reviewing REC-only contracts, except that the fast-track process set out in D.09-06-050 does not apply to TRECs. These methods may be reviewed in R.08-08-009.
- TRECs for which an IOU pays more than $50/TREC may not be used for RPS compliance. This price cap will sunset December 31, 2011, unless the Commission acts to extend it.
- The temporary $50/TREC price cap does not make a TREC priced at or below $50 reasonable. A utility will still have to provide sufficient information in its advice letter filing to demonstrate that the TREC contract is reasonable.
- All REC-only contracts must contain the following three non-modifiable standard terms and conditions: (1) Transfer of renewable energy credits; (2) Tracking of RECs in WREGIS; (3) Applicable Law.
- REC-only contracts of California IOUs other than MJUs must contain a fourth STC: Commission Approval.
- IOUs may enter into voluntary TREC transactions even if their cost limitation pursuant to § 399.15(d) has been reached, so long as they comply with the requirements of this decision.

Delivery rules for TREC transactions

- The CEC decides whether a TREC contract satisfies RPS delivery rules. For bundled contracts, the Energy Division may request written confirmation from the CEC about whether the contract complies with RPS delivery rules.

(END OF APPENDIX D)

APPENDIX E

SERVICE LIST IN R.06-02-012

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