DRAFT

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

ENERGY DIVISION

I.D. #7949
RESOLUTION E-4178
November 6, 2008

R E S O L U T I O N

Resolution E-4178. This Resolution adopts a report written collaboratively between the California Public Utilities Commission (CPUC) and the California Energy Commission (Energy Commission). The *Joint Commission Staff Report* evaluates whether the renewable energy generation tracking system established under Public Utilities Code Section 399.13 (c) satisfies the requirements in Public Utilities Code Section 399.16 (a) (1). This determination has to be made before the CPUC can authorize renewable energy credits for compliance with the Renewables Portfolio Standard program.

This Resolution is made on the Commission's own motion.

SUMMARY

This Resolution adopts a *Draft Joint Commission Staff Report* and *Appendices* that determine that the tracking system developed to track electricity generated by an eligible renewable energy resources is operational. This determination is required before the CPUC is authorized to allow the use of renewable energy credits to satisfy the requirements of the Renewables Portfolio Standard (RPS).

The Report responds to a legislative directive that requires the CPUC and Energy Commission to conclude that the renewable energy generation tracking system established under Public Utilities Code Section 399.13 subdivision (c) 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). This report includes the criteria, methodology, evaluation and conclusions for whether the tracking system is operational.

BACKGROUND

The RPS program requires each California retail seller to increase the amount of renewable energy in its portfolio

The California Renewables Portfolio Standard (RPS) Program was established by Senate Bill 1078[1] as codified in California Public Utilities Code Section 399.11, et seq. The statute required that each retail seller of electricity increase its total procurement of eligible renewable energy resources by at least 1 percent of annual retail sales per year so that 20 percent of its retail sales are supplied by eligible renewable energy resources by 2017. In 2006, Senate Bill 107[2] accelerated the renewable procurement target to reach 20 percent renewable procurement by 2010.

RPS statute requires the Energy Commission to implement a tracking system to verify compliance with the RPS

To verify compliance with the RPS, SB 1078 charged the California Energy Commission (Energy Commission) with designing and implementing an accounting system "to verify compliance with the renewable portfolio standard by retail sellers, to ensure that electricity generated by an eligible renewable energy resource is counted only once for the purpose of meeting the renewables portfolio standard of this state or any other state, and to verify retail product claims in this state or any other state."[3]

The Western Renewable Energy Generation Information System (WREGIS), designed to fulfill the Energy Commission's obligation to track and verify renewable energy generation, was launched in June 2007. Consistent with the Energy Commission's RPS Eligibility Guidebook,[4] 2008 is the first calendar year

[1] SB 1078 (Sher, Chapter 516, Statutes of 2002)

[2] SB 107 (Simitian, Chapter 464, Statutes of 2006)

[3] Public Utilities Code Section 399.13 (b), as enacted by SB 1078

[4] *Renewables Portfolio Standard (RPS) Eligibility Guidebook* (http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF) (THIRD Edition), publication # CEC-300-2007-006-ED3-CMF, January 2008.

Footnote continued on next page

that WREGIS data will be reported to the Energy Commission to verify RPS procurement. All generating facilities, retail sellers, procurement entities, and third parties participating in California's RPS were required to register with WREGIS by January 1, 2008, with the exception of California's three large investor-owned utilities (IOUs),[5] which must have registered with and begun to use WREGIS to verify RPS compliance by May 1, 2008.

SB 107 authorizes the CPUC to allow tradable RECs for RPS compliance under a few conditions

SB 107 granted the California Public Utilities Commission (CPUC) the ability to authorize the use of renewable energy credits (RECs) toward RPS obligations.[6] However, before the CPUC can authorize RECs, the CPUC and the Energy Commission must jointly conclude that the tracking system is operational, capable of independently verifying that all renewable energy used for RPS compliance is generated by an eligible facility 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).

To develop a record on whether the CPUC should authorize the use of tradable RECs, the assigned administrative law judge issued a ruling in July 2007 asking for comments on tradable RECs as a compliance tool for the RPS program. Subsequently, in September 2007, the CPUC Energy Division held a workshop on REC trading and developed a Straw Proposal for tradable REC compliance rules (Straw Proposal). The administrative law judge issued a post-workshop ruling on October 16, 2007, asking for further comments on tradable RECs and the Straw Proposal by November 13, 2007, with reply comments due December 5, 2007. On August 21, 2008, the CPUC adopted a definition of a REC for compliance with the RPS program in D.08-08-028.[7]

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[5] California's three largest investor-owned utilities are: Pacific Gas and Electric, San Diego Gas & Electric, and Southern California Edison.

[6] Public Utilities Code Section 399.16

[7] http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/86954.pdf

Neither the *Joint Commission Staff Report* nor this resolution is intended to serve as the authorization of the use of tradable RECs for RPS compliance. The Commission will address that subject in a separate decision.

The Commissions drafted the *Joint Commission Staff Report* to determine whether the renewable energy tracking system is operational

To determine whether the tracking system meets the statutory requirements, the CPUC and Energy Commission used their adopted collaborative process procedures.[8] In early 2008, collaborative Commission staff developed a list of criteria to evaluate the statutory requirements and then suggested methods for researching, testing and evaluating the status of the tracking system functionality for each criterion. The Commissions' staffs jointly wrote a D*raft Report* outlining the proposed criteria and method that would be used to determine whether the tracking system is operational as required by SB 107 and applied them to make an interim evaluation. On March 17, 2008, the Energy Commission held a workshop on *Draft Report* and invited stakeholders and decision-makers from both agencies. Members of the public (from Pacific Gas & Electric, Green Power Institute and the California Independent System Operator) submitted oral comments at the workshop and written comments (from Pacific Gas & Electric, Southern California Edison, PacifiCorp and The Utility Reform Network) were received on March 19, 2008.

After the Commissions decided how to address party comments, staff finalized the conclusions contained in the *Draft Report*. The revised *Report* is being released in a draft Resolution by the CPUC. After public comments are received on the revised *Report*, the Commissions will finalize the document and both will adopt an identical *Final Report* at an Energy Commission business meeting and CPUC commission meeting.

[8] See CPUC February 3, 2003, Administrative Law Judge Ruling Issuing Workplan and Collaboration Guidelines as well as the March 13, 2003, Energy Commission "Committee Order on RPS Proceeding and CPUC Collaborative Guidelines," Order No. 03-0305-04.

DISCUSSION

See Attachment A, the *Joint Commission Staff Report*

COMMENTS

"Public Utilities Code section 311(g)(1) provides that this resolution must be served on all parties and subject to at least 30 days public review and comment prior to a vote of the Commission. Section 311(g)(2) provides that this 30-day period may be reduced or waived upon the stipulation of all parties in the proceeding.

"The 30-day comment period for the draft of this resolution was neither waived or reduced. Accordingly, this draft resolution was mailed to parties for comments, and will be placed on the Commission's agenda no earlier than 30 days from today."

FINDINGS

1. The *Joint Commission Staff Report* concludes that the renewable energy generation tracking system established under Public Utilities Code Section 399.13 (c) satisfies the requirements in Public Utilities Code Section 399.16 (a) (1).

THEREFORE IT IS ORDERED THAT:

1. The *Joint Commission Staff Report* is adopted to satisfy the requirements in Public Utilities Code Section 399.16 (a) (1).

This Resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed and adopted at a conference of the Public Utilities Commission of the State of California held on November 6, 2008; the following Commissioners voting favorably thereon:

_____

Paul Clanon
Executive Director

Attachment A

Joint Commission Staff Report

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ABSTRACT

The *Draft Joint Commission Staff Report* and *Appendices* respond to a legislative directive that requires the California Public Utilities Commission and the California Energy Commission to conclude that the renewable energy generation tracking system established under Public Utilities Code Section 399.13 subdivision (c) 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) prior to the California Public Utilities Commission authorizing the use of renewable energy credits. This report proposes the criteria, methodology, evaluation and conclusions for whether the tracking system is operational.

Keywords: Tracking system, WREGIS, tradable RECs, renewable energy credits

CHAPTER 1: Introduction

The California Renewables Portfolio Standard (RPS) Program was established by Senate Bill 1078[9] as codified in California Public Utilities Code Section 399.11, et seq. The statute required that each retail seller of electricity increase its total procurement of eligible renewable energy resources by at least 1 percent of annual retail sales per year so that 20 percent of its retail sales are supplied by eligible renewable energy resources by 2017. In 2006, Senate Bill 107[10] accelerated the renewable procurement target to reach 20 percent renewable procurement by 2010.

To verify compliance with the RPS, SB 1078 charged the California Energy Commission (Energy Commission) with designing and implementing an accounting system "to verify compliance with the renewable portfolio standard by retail sellers, to ensure that electricity generated by an eligible renewable energy resource is counted only once for the purpose of meeting the renewables portfolio standard of this state or any other state, and to verify retail product claims in this state or any other state."[11]

SB 107 granted the California Public Utilities Commission (CPUC) the ability to authorize the use of renewable energy credits (RECs) toward RPS obligations.[12] It is the industry standard that one REC represents 1 megawatt-hour (MWh) of electricity generation from renewable sources. However, before the CPUC can authorize tradable RECs, the CPUC and the Energy Commission must jointly conclude that the tracking system is operational, capable of independently verifying that all renewable energy used for RPS compliance is generated by an eligible facility 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). This *Joint Commission Staff Report* (*Report*) proposes the criteria and the evaluation methods to be used to make a determination of whether the tracking system meets these requirements.

The Western Renewable Energy Generation Information System (WREGIS), designed to fulfill the Energy Commission's obligation to track and verify renewable energy generation, was

[9] SB 1078 (Sher, Chapter 516, Statutes of 2002)

[10] SB 107 (Simitian, Chapter 464, Statutes of 2006)

[11] Public Utilities Code Section 399.13 (b), as enacted by SB 1078

[12] Public Utilities Code Section 399.16

launched in June 2007. Consistent with the Energy Commission's RPS Eligibility Guidebook,[13] 2008 is the first calendar year that WREGIS data will be reported to the Energy Commission to verify RPS procurement. All generating facilities, retail sellers, procurement entities, and third parties participating in California's RPS were required to register with WREGIS by January 1, 2008, with the exception of California's three large investor-owned utilities (IOUs),[14] which must have registered with and begun to use WREGIS to verify RPS compliance by May 1, 2008.

To develop a record on whether the CPUC should authorize the use of tradable RECs, the assigned administrative law judge issued a ruling in July 2007 asking for comments on tradable RECs as a compliance tool for the RPS program. Subsequently, in September 2007, the CPUC Energy Division held a workshop on REC trading and developed a *Straw Proposal for tradable REC compliance rules* (*Straw Proposal*). The administrative law judge issued a post-workshop ruling on October 16, 2007, asking for further comments on tradable RECs and the *Straw Proposal* by November 13, 2007, with reply comments due December 5, 2007.

To determine whether the tracking system meets the statutory requirements, the CPUC and Energy Commission ("Commissions") are using their adopted collaborative process procedures.[15] This report evaluates whether the tracking system satisfies the legislative mandates and that the system be deemed operational by both the Energy Commission and CPUC before tradable RECs can be authorized to satisfy any of the requirements of the RPS program.

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[13] *Renewables Portfolio Standard (RPS) Eligibility Guidebook* (http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF) (THIRD Edition), publication # CEC-300-2007-006-ED3-CMF, January 2008.

[14] California's three largest investor-owned utilities are: Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDGE), and Southern California Edison Company (SCE).

[15] See CPUC February 3, 2003, Administrative Law Judge Ruling Issuing Workplan and Collaboration Guidelines as well as the March 13, 2003, Energy Commission "Committee Order on RPS Proceeding and CPUC Collaborative Guidelines," Order No. 03-0305-04.

CHAPTER 2: WREGIS History

SB 1078 charged the Energy Commission with developing a tracking system for implementing California's RPS and ensuring that renewable energy output is counted only once for RPS purposes in California or any other state. In August 2003, the Energy Commission and the Western Governors' Association surveyed regulators, electric utilities, market participants, tribes, developers, and other stakeholders to solicit input on the requirements of a renewable energy tracking system. These early stakeholder sessions led the Western Governors' Association and the Energy Commission to identify specific goals and general characteristics of the system that has come to be identified as WREGIS.

In January 2004, the development process for WREGIS began by forming working committees composed of interested stakeholders. The Operational Rules Committee was responsible for developing the functional requirements and business rules for WREGIS, resulting in the Interim Operating Rules issued in June 2004. The Institutional Committee was responsible for recommending the institutional home for WREGIS and establishing its governance structure. In June 2004, the Institutional Committee recommended that the WECC be the institutional home of WREGIS.

In July 2004, the WECC agreed to serve as the institutional home of WREGIS with the understanding that the Energy Commission would be the "financial backstop" for the program, ensuring that the WECC would incur no costs for housing WREGIS. WREGIS would be funded by user fees, and in the event of a shortfall, the Energy Commission would reimburse the WECC. The WECC Board of Directors adopted a resolution to provide the administrative services for WREGIS for a three-year trial period that would begin once WREGIS was online. The WECC's commitment was formalized in a contract approved by the WECC Board of Directors in July 2006 and by the Energy Commission in August 2006.

In September 2004, the Institutional Committee issued a report that included recommendations for the governance and fee structures for WREGIS. It was decided that WREGIS would be governed by the WREGIS Committee, which would function as a WECC Board Committee. The structure and protocols of the WREGIS Committee were formalized in the WREGIS Charter, which was approved by the WECC Board of Directors in December 2004. An Interim WREGIS Committee was established to develop the protocols and processes for convening a Stakeholder Advisory Committee and conducting the election of WREGIS Committee members. The Stakeholder Advisory Committee also brings issues regarding WREGIS to the attention of the WREGIS Committee. The permanent WREGIS Committee convened in January 2006. Three members of this committee are appointed and represent the Western Governors' Association, the WECC, and Energy Commission. The remaining four positions are elected by the Stakeholder Advisory Committee.

In September 2005, the California Department of General Services released a request for proposals for the System Development and Technical Operations Contractor. The request for proposals specified that an existing renewable energy registry and tracking system should be modified to meet the functional requirements of WREGIS. Final proposals for the System Development and Technical Operations Contractor were received in June 2006, and the contract was awarded to APX, Inc., (APX) in September 2006.

The WREGIS administrative staff members were hired as WECC employees in November and December of 2006 and began to administer the WREGIS program from the WECC headquarters in Salt Lake City, Utah.

The Energy Commission worked with APX to further define the functional requirements of WREGIS, and APX subsequently modified the base system to meet these specifications. After months of system design, modification and testing, WREGIS launched on June 25, 2007.

CHAPTER 3: Joint Commission Process

The Commissions are using their adopted collaborative process procedures to determine whether the tracking system is operational consistent with the requirements of SB 107.[16] The Commissions' priorities for this task are to develop robust evaluation criteria and to vet the criteria through a public workshop.

In early 2008, collaborative Commission staff developed a list of criteria to evaluate the statutory requirements and then suggested methods for researching, testing and evaluating the status of the tracking system functionality for each criterion. The Commissions' staffs jointly wrote a draft Report outlining the proposed criteria and method that would be used to determine whether the tracking system is operational as required by SB 107 and applied them to make an interim evaluation. On March 17, 2008, the Energy Commission held a workshop on the *Draft Report* and invited stakeholders and decision-makers from both agencies. Members of the public (from PG&E, Green Power Institute and the California Independent System Operator (California ISO)) submitted oral comments at the workshop and written comments (from PG&E, SCE, PacifiCorp and The Utility Reform Network (TURN)) were received on March 19, 2008.

PG&E and SCE suggested that the Commissions remove the criterion that generating facilities, retail sellers, procurement entities and third parties participating in California's RPS are registered with WREGIS and suggested that the Energy Commission consider using the interim tracking system in parallel with WREGIS until December 31, 2008. The Energy Commission concurs with the first suggestion, but feels that the second is unnecessary, as WREGIS is capable of tracking all RPS-eligible generation in California for generating facilities that are registered in WREGIS. PacifiCorp stated that WREGIS should permit the disaggregation of RECs to allow users to separate the greenhouse gas attributes from the rest of the REC. The Energy Commission disagreed, as it is WREGIS policy, informed by multiple stakeholder surveys, to track only whole RECs. The Energy Commission did, however, remind PacifiCorp that this issue could be brought to the WREGIS Committee and vetted through the WREGIS change control process. PacifiCorp also stated that WREGIS should allow RECs reserved for disaggregation to be retired for the California RPS or other compliance program. The Energy Commission disagrees, as this runs counter to the RPS requirements that the entire REC be retired for RPS compliance, and also counter to WREGIS policy and system functionality. TURN

[16] See CPUC February 3, 2003, Administrative Law Judge Ruling Issuing Workplan and Collaboration Guidelines as well as the March 13, 2003, Energy Commission "Committee Order on RPS Proceeding and CPUC Collaborative Guidelines," Order No. 03-0305-04.

expressed concern regarding the independent verification of generation using the interim tracking system, as it was not as rigorous as it must be to guard against double counting. The Energy Commission agrees on this point, but notes that WREGIS, a more robust tracking system than the interim tracking system, is expected to be used to verify generation after May 1, 2008. TURN also suggested that the interim tracking system continue to be used both because certain parties were unprepared to sign the current Terms of Use agreement and because the CPUC's REC definition did not match the definition of a WREGIS Certificate in the WREGIS Operating Rules, enabling possible REC disaggregation. The Energy Commission assured TURN that all parties must sign the Terms of Use agreement and register with WREGIS by May 1, 2008, as part of compliance with the California RPS. The Energy Commission also reminded TURN that the definition of a WREGIS Certificate in the WREGIS Operating Rules can be modified through the change control process, and that disaggregation of RECs in WREGIS is against California RPS and WREGIS policies.

After the Commissions decided how to address party comments, staff finalized the conclusions contained in the Draft Report. The Energy Commission staff primarily evaluated the criteria that require technical understanding of WREGIS software. The CPUC staff evaluated the tracking system for compatibility with REC trading rules and provided an independent perspective on the tracking system and on Energy Commission processes for using that system for RPS compliance.

The revised Draft Report is being released in a draft Resolution by the CPUC. After public comments are received on the revised Draft Report, the Commissions will finalize the document and both will adopt an identical Report at an Energy Commission business meeting and CPUC commission meeting.

CHAPTER 4: Criteria for Evaluation

SB 107 sets three conditions the Commissions must evaluate before determining whether the tracking system established under Public Utilities Code Section 399.13 (c) is sufficient to allow RECs for RPS compliance. This chapter of the Report identifies the criteria and methods for evaluation, and Chapter 5 describes the Commissions' assessment of whether the conditions have been met using evaluations based on the proposed methods. The three conditions set forth in statute are whether the tracking system is:

1. Operational.

2. Capable of independently verifying the electricity generated by an eligible renewable energy resource and delivered to the retail seller.

3. Able to ensure that renewable energy credits shall not be double counted by any seller of electricity within the service territory of the WECC.[17]

While the second and third conditions are more specific and straightforward, the first condition requires some interpretation, and collaborative staff chose to develop criteria to evaluate what it means to be "operational." The following lists the five criteria, which are described in more detail in Chapter 5, that collaborative staff propose using to determine whether the tracking system is "operational":

a. WREGIS has been launched, and software meets specifications of the contract.

b. Generating facilities, retail sellers, procurement entities and third parties participating in California's RPS are registered with WREGIS.

c. The Energy Commission has established processes to verify the RPS-eligibility of generating units.

d. Certificates have been created.

e. The WREGIS Final Operating Rules would not preclude any reasonably foreseeable CPUC REC trading rules.

[17] Public Utilities Code Section 399.16(a)(1)

CHAPTER 5: Rationale, Methods, Evaluation and Conclusions

Collaborative staff propose using a variety of methods to evaluate the three conditions that SB 107 set forth to determine whether the tracking system is operational. This section provides an evaluation analysis of the conditions described in Chapter 4 and reaches conclusions about whether the criteria have been satisfied and/or additional steps may be required.

Condition 1: Tracking System is "operational."

The five criteria proposed to determine what it means to be "operational" and the interim evaluation and preliminary conclusions regarding each criterion are described in detail below.

Criterion 1: WREGIS has been launched, and software meets specifications of the contract.

Rationale

For the tracking system to be considered operational, the Commissions need assurance that WREGIS is up and running and capable of meeting all of the functional requirements established by the Energy Commission to meet its legislative mandate to "develop and implement an accounting system."

History

The Energy Commission's contract with APX set forth user acceptance testing protocols to ensure that the WREGIS software operates as specified in the contract. To launch WREGIS, user acceptance testing had to be completed and all known defects fixed. The contract with APX specified that the system would need to be up and running for a trial period of 90 days before "final acceptance" of the system. "Final acceptance" of the system would signify the end of the implementation phase and the start of the operations phase.

User acceptance testing took place in June 2007 and was conducted by the WREGIS Project Team and a small group of stakeholders. WREGIS functional requirements were tested during user acceptance testing. These functional requirements were defined in more than 400 pages in the contract. The functional requirements were divided into the following seven sections: Account Holder Registration and Updates, Generating Unit Registration and Updates, Establish and Maintain Subaccounts, Create and Deposit WREGIS Certificates, Manage WREGIS Certificates, Access Assignments and Updates, and Report on WREGIS Data and Related Features.

The user acceptance testing process was completed on June 21, 2007. On June 25, 2007, WREGIS was officially launched. At that time account holders could begin to register and sign up their generating units.

During the 90-day trial period, and before the WREGIS final acceptance, seven types of tests were conducted by APX and Energy Commission staff. The most thorough level of testing occurred at the coding level. Developers tested their program modifications as defined in the design documents to ensure that all codes were written properly. The second test type, the unit test, ensured the functionality of the system as it spanned multiple components and focused on processes that began in one module or component and completed in another. The integration test verified that interfaces defined in the interface control documents with external data providers worked properly. The interface control documents describe the structure and substance of data entered into the system by qualified reporting entities and program administrators. At a slightly higher level of complexity was the system test, conducted by the testing team to test whole system functionality. This level of testing was performed when all system modifications were complete for a particular build phase. After these tests were satisfactorily completed, staff from PG&E, SCE, SDGE, the WECC, and the Energy Commission conducted user acceptance testing to ensure to Energy Commission staff's satisfaction that the system would perform as required. Concurrently, performance testing demonstrated the processing and response times of critical functions and transactions under various operational conditions (for example, scenario scripts and system load and stress). Finally, a disaster recovery test was performed to assure that proper procedures would be followed in the event of a catastrophic occurrence.

All code, unit, integration, and system tests passed without defects before user acceptance testing began in June 2007. Any defects that were discovered during user acceptance testing were reported to APX, who fixed most defects within a few days, and all defects were fixed prior to launch. The test cases that had been reported as containing defects were then retested and found to be free of defects. All required functionalities were part of the system and working correctly at the time of the WREGIS launch.

Current Status

The 90-day trial period ended on September 23, 2007. On October 5, 2007, the Energy Commission notified APX staff that the deliverables required for the completion of the implementation phase had been accepted. This constituted "final acceptance" of the WREGIS software and moved the project into the operational phase.

Conclusion

The notification to APX staff and subsequent payment by the Energy Commission for the completion of the implementation phase confirm that the WREGIS software functions as specified in the contract. This criterion has been satisfied.

Criterion 2: Entities participating in California's RPS are registered with WREGIS

Rationale

To have a comprehensive tracking system that can be used to verify all RPS-related activity, the Energy Commission requires in its *RPS Eligibility Guidebook* that generating facilities, retail sellers, procurement entities, and third parties participating in California's RPS be registered with and use WREGIS by May 1, 2008. Also, generating units wishing to participate in WREGIS must have their generation data submitted by a Qualified Reporting Entity (QRE). The registration of all above-mentioned entities becomes especially important when the Energy Commission's interim tracking system is no longer being used to track and verify RPS generation.

History

According to the Energy Commission's *RPS Eligibility Guidebook*, as of May 1, 2008, WREGIS data will replace the interim tracking system for procurement of RPS-eligible energy generated on or after May 1, 2008. To enable the use of WREGIS, generating facilities, retail sellers, procurement entities, and third parties participating in California's RPS were required to register as account holders with WREGIS by January 1, 2008, with the exception of the three IOUs (PG&E, SDGE, and SCE), which had until May 1, 2008, to sign up and begin to use WREGIS.[18]

While there is no such requirement for balancing authorities, which are expected to function as QREs and be the main source of generation data in WREGIS, the verification of many RPS transactions may be contingent on the participation of the California ISO. Further, the verification of certain out-of-state RPS transactions would require the participation of the balancing authority overseeing the control area into which the energy was delivered. In a large percentage of these cases, this balancing authority would be the California ISO.[19] If the

[18] CEC RPS Eligibility Guidebook, Third Edition; page 46

[19]Ibid page 24, footnote 22

appropriate balancing authorities do not register, the generating units depending on them will have to find other qualified entities to register as QREs for their generation data to be tracked in WREGIS. The QRE Interface Control Document in the WREGIS Operating Rules contains guidelines that must be met by any WREGIS QRE and could potentially be met by load-serving entities and other non-balancing authority account holders.

To be approved as a WREGIS account holder, the account holder must have submitted a signed Terms of Use Agreement. The Terms of Use (TOU) is the agreement between an account holder and WREGIS. Some potential account holders had concerns regarding the TOU published on June 22, 2007. In particular, the California ISO, which was expected to report much of the generation data in California, had outstanding issues regarding the TOU. However, legal counsel from the California ISO worked with WREGIS staff to resolve these issues, and a revised Terms of Use Agreement was published on August 6, 2008.

Current Status

As of September 11, 2008, there are 155 approved account holders with WREGIS. Currently, there are a number of retail sellers and generators that are participating in the RPS but are not registered with WREGIS. On August 28, 2008, the California ISO did sign the revised TOU and then registered with WREGIS on September 3, 2008. The California ISO can now report generation for those generators that are registered with WREGIS, including prior generation from months extending back to the reporting period that was open at the time of the generators' initial registration.

A list of all account holders currently registered in WREGIS is provided in Appendix A.

Conclusion

This criteria is satisfied in the cases where the retail seller, generating unit and QRE are registered and using WREGIS. Because the California ISO has completed registration as a WREGIS account holder and most of the key entities are registered with WREGIS, the Commissions will consider this criterion satisfied for the purpose of finding the tracking system operational, as the level of participation in WREGIS is sufficiently robust.

Criterion 3: The Energy Commission has established processes to verify the RPS-eligibility of generating units.

Rationale

For the Commissions to be able to meet their respective legislative mandates regarding the RPS, WREGIS certificates will need to indicate whether they are eligible for the California RPS. While

all the information needed to determine eligibility is included within the WREGIS certificate, staff from both Commissions feels that the administrative burden would be significantly less if the WREGIS certificates included the California RPS-eligibility designation. To achieve this goal, the Energy Commission staff and WREGIS administrator need to implement an efficient and timely process to verify California RPS eligibility for all California RPS-eligible generating units.

History

A generating unit must be certified by the Energy Commission as California RPS-eligible for its renewable energy to count toward California's RPS compliance.[20] When generating units register with WREGIS, they provide WREGIS with their California RPS identification numbers (if they have a California RPS identification number). If the generating unit has not yet received a California RPS identification number, the Energy Commission program administrator will provide the RPS identification number to the WREGIS administrator once RPS certification has been obtained. If the generating unit wishes its WREGIS certificates to indicate that its generation is California RPS-eligible, the generating unit will indicate during registration or any time thereafter that the facility is eligible for the California RPS. The eligibility for a particular program (such as California RPS) will not be shown on the WREGIS certificate until the information is verified by the appropriate program administrator (in this case, Energy Commission RPS staff), and confirmed by the WREGIS administrator.

Energy Commission RPS staff (program administrator) will upload RPS eligibility information into WREGIS monthly using a secure login and password. The program administrator will provide a list of all generating units that have been approved as eligible for the California RPS via an electronic file following the standardized format specified in the *Interface Control Document for Program Administrators*. The uploaded data automatically updates program-specific information to verify each generating unit's eligibility for the California RPS.

Current Status

In California, the following California RPS eligibility information must be included in the file to be uploaded to WREGIS by the Energy Commission:

Program (CA)

[20] *Renewables Portfolio Standard (RPS) Eligibility Guidebook*, pgs. 1, 28 (http://www.energy.ca.gov/2007publications/CEC-300-2007-006/CEC-300-2007-006-ED3-CMF.PDF) (THIRD Edition), publication # CEC-300-2007-006-ED3-CMF, January 2008.

UNITID (WREGIS Unit ID)

Fuel Type

Attribute1 (Y/N regarding eligibility status for the CA RPS Program)

Attribute2 (Alphanumeric CA RPS Identification Number)

Attribute3 (MM/YYYY – Good Through Date – identifying when the generating unit is no longer eligible in the California RPS program)[21]

Attribute4 (Y/N indicating whether the California supplemental energy payment was received)[22]

Attribute5 (Y/N indicating whether the generating unit is eligible for supplemental energy payments)[23]

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[21] A response in the good-through date field is required by WREGIS. The California RPS recently removed its good-through date requirement; once certified by Energy Commission staff as California RPS-eligible, generating units are considered to be California RPS-eligible for the lifetime of the facility or until such a time when the generating unit is considered to be ineligible for the California RPS. Generating units are no longer required to recertify every two years, as was previously the case under the *Renewables Portfolio Standard Eligibility Guidebook*. Energy Commission staff will enter a date five years from the current year as a proxy date when uploading eligibility data to WREGIS.

[22] The supplemental energy payment field is a holdover from when the Energy Commission awarded supplemental energy payments to cover the above-market cost of eligible renewable energy. The Energy Commission is no longer charged with awarding supplemental energy payments. Effective January 1, 2008, the responsibility for approving above-market costs for eligible renewable energy now rests with the CPUC pursuant to Senate Bill 1036 (Perata, Chapter 685, Statutes of 2007). Since the Energy Commission is no longer awarding supplemental energy payments, an "N" will be entered in this field. This field will remain in the system until Energy Commission staff goes through the WREGIS change and issue management process to have the attribute removed from the file upload, if necessary.

[23] As with Attribute4, this is a holdover regarding supplemental energy payments. All generating units will automatically receive an "N" as no generating units are eligible for supplemental energy payments.

Once the file has been uploaded by the program administrator, the WREGIS administrator will verify any changes to generating units that are registered with WREGIS. If the uploaded file contains information about generating units that are not yet registered with WREGIS, WREGIS will not recognize and process those data.

Conclusion

Collaborative staff have reviewed this process and agree that it will result in a timely and accurate verification of RPS eligibility of generating units registered with WREGIS. This criterion has been satisfied.

Criterion 4: Certificates have been created.

Rationale

Without the creation of WREGIS certificates, ensuring that the tracking system is operational and able to meet the legislative mandates of SB 107 would not be possible. WREGIS certificates represent the renewable and environmental attributes needed for the LSEs to comply with the RPS.

History

WREGIS certificates are created once generation data has been uploaded into WREGIS by a qualified reporting entity. A generating unit owner must select a qualified reporting entity to report its generation data to WREGIS or, if eligible, may self-report generation data. The qualified reporting entity serves as an independent source of metered generation data that will result in the creation of WREGIS certificates. Reporting entities are WREGIS account holders and upload data files containing generation data for the generating units that have selected them during the registration process. WREGIS verifies the format of the file to ensure that the data format is correct; once the data format has been validated, the data are entered into WREGIS.

Once the generation file has been uploaded, generating unit owners who have registered as account holders within WREGIS are notified that generation data has been uploaded for their generating units and are ready to be reviewed. The account holder may accept or dispute the data. If the data are accepted, after 90 days[24] have passed from the end of the generation period, WREGIS certificates will be created.

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[24] The 90-day requirement coincides with the 90-day settlement period associated with the California Independent System Operator. All generation is subject to the same timeline so that no individual generating unit has an advantage over another; for example, if the qualified reporting entity selected by a generating unit had a shorter settlement period than the

Footnote continued on next page

Current Status

In January 2008, PacifiCorp became the first registered qualified reporting entity to upload generation data to WREGIS. The data reported were for the generation periods September 2007 through October 2007. Generation uploads were conducted by multiple qualified reporting entities in the subsequent months with no reported problems.

Conclusion

Certificates for PacifiCorp were successfully created in the January 2008 certificate cycle, which occurred on January 30, 2008. Energy Commission staff received confirmation from the WREGIS administrator on February 14, 2008, that the WREGIS certificates created for PacifiCorp accurately reflect the information of the respective generating units registered with WREGIS. Since the first Certificate creation cycle, all subsequent monthly creation cycles have also occurred successfully. This criterion has been satisfied.

Criterion 5: The WREGIS Final Operating Rules would not preclude any reasonably foreseeable CPUC REC trading rules.

Rationale

SB 107 requires that the Commissions deem the tracking system operational before allowing tradable RECs to be used for RPS compliance purposes. It is reasonable, therefore, for the Commissions to assess whether WREGIS is consistent with any reasonably foreseeable REC trading rules and the REC definition that was established by the CPUC. The Commissions recognize that WREGIS will be used to verify RPS generation for many states and that the system would not be tailored specifically to California's REC trading regime, if the CPUC were to authorize one for California RPS compliance. However, if WREGIS is unable to accommodate

California's proposed REC trading rules and REC definition, a determination will need to be made regarding whether WREGIS should be modified.

History

California Independent System Operator, this could lead some generating units to receive their WREGIS Certificates sooner, which could create unfair circumstances.

The Commissions used the CPUC's *Straw Proposal* on REC trading, appended to the October 2007 administrative law judge ruling seeking post-workshop comments on tradable RECs[25], to evaluate whether WREGIS functionalities would prevent or limit the implementation of REC trading for RPS compliance.[26] This *Straw Proposal* identifies a number of compliance rules that may govern a REC trading regime: a) market participants, b) tradable REC usage limits, c) flexible compliance: banking, d) flexible compliance: earmarking, e) treatment of bundled contracts and f) cost recovery. While the CPUC has received comments from parties in response to specific questions posed in the Ruling and on the *Straw Proposal*, the CPUC has not taken any further action on the *Straw Proposal*. It could adopt, reject, or modify the *Straw Proposal*.

The Commissions also evaluated whether the definition of a WREGIS Certificate is consistent with the definition of "renewable energy credit" in Public Utilities Code Section 399.12 (h) and as defined by the CPUC. The primary issue under review is the treatment of renewable and environmental attributes, specifically those attributes "associated with the production of electricity from the eligible renewable energy resource."[27] The question is whether those attributes, which are included in SB 107, include the benefits resulting from the reduction or elimination of fossil-fueled generation elsewhere in the electric power system. These benefits are usually referred to as the "avoided greenhouse gas (GHG) emissions" and are understood to be the benefits associated with the "displacement of conventional energy generation." It is unknown whether these attributes may be used for compliance with GHG cap and trade policies around the world, or as offsets for such policies, or for voluntary GHG emission reduction programs. Clearly, the value of a REC is affected by its defined attributes. The WREGIS Certificate definition includes this attribute, as it defines renewable and environmental attributes to be, "Any and all credits, benefits, emissions reductions, offsets and allowances, howsoever entitled, attributable to the generation from the Generating Unit, and its *displacement of conventional Energy generation*" [emphasis added].

On August 21, 2008, the CPUC adopted D.08-08-027 defining and specifying the attributes of a REC for compliance with the RPS program. [28] The CPUC proposed that the avoided greenhouse

gas emissions should be considered an attribute of a REC, but including this benefit in the REC should not result in the creation of any emissions offsets connected with the REC if the REC is retired for RPS compliance purposes.[29] The CPUC further explains that "the avoided emissions

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[25] http://docs.cpuc.ca.gov/EFILE/RULINGS/73922.htm

[26] http://162.15.7.24/EFILE/RULINGS/73928.htm

[27] Public Utilities Code Section §399.12(h)

[28] http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/86954.pdf

[29] The relationship between the "avoided emissions" attribute and the REC's use as an offset is explained in D.08-08-028.

included in a REC may or may not have any actual separate value, whether regulatory or monetary."[30]

Current Status

REC trading rules

Below, the Commissions analyze the interactions between the proposed CPUC compliance rules in the *Straw Proposal* and WREGIS functionalities.

Market Participants

The *Straw Proposal* sets no limits on participation. WREGIS similarly allows trading between any entities registered with WREGIS.

Tradable REC Usage Limits

The *Straw Proposal* requires LSEs to enter into a certain quantity of long-term bundled contracts and/or bundled contracts with new facilities before buying any short-term REC contracts.[31] The CPUC will be able to monitor compliance with this contracting quota using the CPUC Compliance Spreadsheets. WREGIS functionality will not affect compliance with this rule because it verifies renewable energy generation, not contracting obligations.

Flexible Compliance: Banking

In the *Straw Proposal*, the CPUC staff proposes to allow RECs for RPS compliance only if they are retired in WREGIS within three compliance years from which they were generated. While WREGIS Certificates do not have expiration dates and WREGIS does not have the functionality to restrict the retirement of RECs for RPS compliance with different vintage dates, WREGIS will not prevent the implementation of this proposed rule. In fact, WREGIS Certificates will identify the generation month for each WREGIS Certificate, providing data to the CPUC that may help determine compliance with this proposed banking rule.

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[30] The California Air Resources Board (ARB) is responsible for developing the compliance rules for the state's greenhouse gas emissions reduction policy, Assembly Bill 32. (AB 32, Núñez/Pavley, Chapter 488, Statutes of 2006).

[31] Long-term contracts have term lengths of 10 years or longer. Bundled contracts are power purchase agreements for both energy and green attributes.

Flexible Compliance: Earmarking[32]

Earmarking is a rule that will be tracked within the CPUC compliance spreadsheets, so WREGIS functionality would not affect this proposed compliance rule.

Treatment of Bundled Contracts

The *Straw Proposal* distinguishes between RECs that may be unbundled and traded from currently bundled RPS contracts and RECs that may be procured unbundled. The *Straw Proposal* allows LSEs to unbundle RECs from currently bundled RPS contracts starting in 2009 and to unbundle and sell RECs on a forward basis from CPUC-approved RPS projects that are not yet online. The *Straw Proposal* does not, however, allow the unbundling of MWhs that are earmarked. WREGIS will not either facilitate or prevent any of these proposed rules, since it does not distinguish RECs procured through unbundled contracts from those procured through bundled contracts. Instead, compliance spreadsheets filed with the CPUC will monitor compliance with these rules.

Definition of a Renewable Energy Credit

The CPUC recognizes in D.08-08-028 that the structure of WREGIS supports the proposed approach for defining a REC. While the California definition of a REC is more expansive than the WREGIS definition because of California-specific rules, the definitions are relatively consistent, if not identical, in most regards. However, the CPUC recommends that greater precision of their formulation should be adopted for WREGIS. First, the CPUC asserts that use of the phrase "displacement of conventional energy generation" in the WREGIS definition should be modified to "avoided emissions of pollutants". Second, the footnote appended to the "avoided emissions" attribute should clarify that such an attribute may or may not have any value for GHG compliance. This footnote clarifies that jurisdictions implementing GHG policies have the ability to develop their own compliance rules, including deciding whether to allow RECs to be used as offsets. D.08-08-028 states, "These clarifications should apply generally to all jurisdictions using WREGIS, and will aid in preventing confusion among WREGIS users about the value (both regulatory and monetary) of a REC."[33]

The CPUC and Energy Commission developed a proposal to modify the WREGIS Certificate definition pursuant to the CPUC's suggestions. The CPUC proposed the definition to the WREGIS Committee on August 29, 2008 and to the WREGIS Stakeholder Advisory Committee on September 10, 2008. See Appendix B.

[32] Earmarking is one of the RPS flexible compliance mechanisms. See D.06-10-050.

[33] Pg 38

Conclusion

After analyzing each aspect of the *Straw Proposal*, collaborative staff has determined that WREGIS will not prevent the implementation of any of the six categories of proposed compliance rules in the *Straw Proposal* as noted above. While WREGIS does not necessarily conform to a few of the proposed rules (for example, WREGIS Certificates do not have expiration dates), the software does not limit the CPUC's ability to implement any of the rules. CPUC staff does not find it to be a problem that WREGIS will not track LSEs' use of flexible compliance rules since the CPUC already requires that each LSE file a compliance spreadsheet, and the compliance spreadsheet will continue to track LSEs' compliance with such rules.[34] The CPUC compliance spreadsheet must be updated to verify REC trading rules if REC trading for RPS compliance is approved.

With regard to the definition of a WREGIS Certificate, the Commissions are comfortable that the appropriate processes are in place to modify the WREGIS Certificate definition to reflect the regulatory concerns identified in the CPUC's proposed decision on the definition of a REC.

This criterion has been satisfied.

[34] See Administrative Law Judge's Ruling Adopting Standardized Reporting Format, Setting Schedule for Filing Updated Reports and Addressing Subsequent Process. http://docs.cpuc.ca.gov/efile/RULINGS/65470.pdf

Condition 2: Capable of independently verifying the electricity generated by an eligible renewable energy resource and delivered to the retail seller

History

RPS delivery rules for RPS-eligible energy require that electricity be either generated in state or scheduled for consumption by California end-use retail customers.[35] The statute requires that energy associated with RECs be "delivered to a [California] retail seller, the [California] Independent System Operator, or a local publicly-owned electric utility."[36] Generating units that are located within the state or that have their first point of interconnection to the transmission network within the state satisfy the statutory delivery requirements and do not require further verification of delivery[37]. However, energy deliveries from all generating units located out-of-state that qualify for the RPS must be verified to assure that they meet the RPS delivery requirements. WREGIS software is not currently configured to verify that power from out-of-state generating units has been delivered into California. The Energy Commission has been verifying out-of-state deliveries into California using an interim process since 2004. The process is underway to integrate out-of-state delivery verification into WREGIS software, but until that time, Energy Commission staff will continue to use the interim process.

Current Status

Energy Commission's Interim Tracking System

Since 2004, the Energy Commission has tracked and verified the large IOUs' RPS procurement. This system is being extended to cover all RPS-obligated LSEs, including electric service providers, community choice aggregators, small utilities, and multi-jurisdictional utilities. Currently, the interim system is used as a tool in verifying compliance with the California RPS. For 2008 generation, the interim system will be used to verify procurement for PG&E, SDGE, and SCE Company from January through April, and WREGIS data will be used for the remainder of the year. The robustness of the interim system is limited by the availability and quality of generation data against which procurement data is compared. For all other RPS-

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[35] Public Resources Code Section 25741 (a) and Public Utilities Code Section 399.12 (b). Energy Commission-300-2007-006-ED3-CMF, California Energy Commission, January 2008, Section D: Delivery Requirements, pg. 23

[36] Public Utilities Code Section 399.16(a)(3)

[37] Public Resources Code Section 25741(b)(2)

obligated entities, WREGIS will be used as a tool to verify compliance beginning in January 2008.

The interim tracking process is intended to verify:

- The California RPS eligibility of the renewable energy facilities from which each LSE procured energy.

- The amount of energy procured by each LSE from each California RPS-eligible facility, to the extent possible.

- That California RPS procurement exclusively serves California's RPS and does not support another renewable energy market claim, to the extent possible.

- That the California RPS energy delivery requirements are satisfied by out-of-state facilities.

The first step in the interim tracking system is to confirm, using the Energy Commission's RPS eligibility database, that the energy procured was generated by an RPS-certified facility. Next, information gathered from LSEs, generation facilities, and other sources is used to compare the LSEs' RPS procurement data with generation data.

In most cases, facility data are compiled from more than one source. Self-reported generation data are collected from the U.S. Energy Information Administration's website, which provides monthly generation from facilities with a capacity greater than 1 megawatt. The Energy Commission also uses self-reported data submitted from owners of electric power plants larger than 1 megawatt located in California. The data collected include the nameplate capacity, fuel type, generation, and fuel usage. The staff also reviews data collected from other programs within the Energy Commission.[38]

Additional generation data come from the RPS certified generating facilities. On an annual basis, a facility that is certified as RPS-eligible with the Energy Commission must submit data on its monthly generation, including any generation sold to an entity that does not qualify as a retail seller for purposes of the California RPS under Public Utilities Code Section 399.12, Subdivision (c). The generating facilities annually report their generation data to the Energy Commission for the previous year using the Energy Commission-RPS-GEN form and must

[38] Examples of programs within the Energy Commission that supply generation data include: Existing and New Renewable Facilities Programs, Public Interest Energy Research Program, and the Power Source Disclosure Program.

report by May 1 (or the next business day) of each year. For cases in which the retail seller certifies a facility on the facility's behalf, the retail seller is responsible for reporting that facility's generation data.

Energy Commission staff compares the amount of RPS-eligible energy procured by the IOUs and the total amount of energy generated as reported by the facilities. If the various data sources show different generation amounts per facility, procurement is compared to the data source showing the most generation from that facility. If two or more LSEs procured energy from the same facility, the cumulative amount of energy procured from that facility is compared with the total amount of energy generated by that facility. If procurement exceeds generation, the Energy Commission will report the discrepancies. If staff finds a discrepancy in which procurement exceeds generation by more than 5 percent,[39] staff does not include the excess procurement as RPS-eligible.

Staff then determines, to the extent possible, that RPS-eligible energy procured by the IOUs was counted only once in California or any other state. The primary data source is an annual report to the Energy Commission submitted by retail sellers as part of the Power Source Disclosure Program that lists the generating facilities from which the retail sellers procured electric generation for the previous year. Using these data, LSE procurement data are cross-referenced with retail sales made by other LSEs in California, including publicly owned electric utilities. Additionally, the Energy Commission verifies, to the extent possible, that the generation from renewable facilities claimed by the California IOUs for RPS compliance was not claimed by retail providers in other states by collaborating with state agencies in Oregon and Washington.

Finally, for out-of-state facilities, staff annually verifies that procurement satisfies RPS delivery requirements.[40] In accordance with the policies of the North American Electricity Reliability Council (NERC), electricity delivered across control areas[41] must be tagged with what is commonly referred to as a NERC "E-tag." The Energy Commission requires retail sellers to submit summary reports of NERC E-tag transactions to document delivery of RPS electricity from out-of-state facilities. Generation of RPS certified facilities under power purchase agreements with a retail seller and NERC E-Tag documentation of delivery must be reported

[39] Discrepancies of less than 5 percent are allowed to account for possible rounding errors when comparing data sources that use differing energy units (for example, gigawatt-hour or megawatt-hour versus kilowatt-hour).

[40] These delivery requirements do not apply to facilities located outside California whose first point of interconnection to the WECC transmission system is located in California consistent with the requirements of Public Resources Code Section 25741 (b)(2).

[41] The WECC now refers to control areas as balancing authorities.

annually to show generation and delivery per month for the previous calendar year. The NERC E-Tag must reference the RPS certification number of the facility for which deliveries are being matched with generation. The Energy Commission staff then compares the total amount generated in the previous calendar year with the total amount delivered in the previous calendar year, and the lesser of the two amounts may be accounted for as RPS-eligible.

Also, in addition to the Energy Commission's interim delivery verification process, the Energy Commission and CPUC have developed a method for pre-verifying delivery from out-of-state generating units in contracts that IOUs have submitted to the CPUC for approval. This is important because it will enable both Commissions to review out-of-state delivery mechanisms before the projects are approved, providing the generator, the IOU, and the Commissions more confidence that all WREGIS certificates that indicate they are California RPS-eligible will also satisfy the California RPS delivery requirements.

In the interim tracking system, most generation data are self-reported by the generating units. WREGIS requires that a registered qualified reporting entity upload generation data that is based on meter-read data, with the exception of small-scale generating units that are allowed to self-report. While some LSEs will be allowed to act as qualified reporting entities and submit meter data to WREGIS for the creation of certificates, these LSEs must follow the *Interface Control Document* guidelines for a qualified reporting entity, which requires independent verification and validation of the generation data.

Delivery verification functionality to be added to WREGIS

To add the delivery functionality to WREGIS, WREGIS staff conducted a stakeholder process to define the functional requirements related to the verification of delivery. Many states and provinces require that the energy be delivered into the state or province to qualify for their particular renewable energy program, including California. To ensure that WREGIS satisfies the requirements of the broader stakeholder group, it is important to ensure that the needs of all affected states and provinces are being met. The process for adding to WREGIS the ability to track out-of-state delivery follows:

1. Energy Commission staff prepares an issue brief on the proposed change to track out-of-state delivery.

2. WREGIS administrative staff enters the issue brief into the WREGIS change control system required for review of changes.

3. The WREGIS Committee is given the issue brief at its next meeting and may either vote to approve or reject, or ask for more information.

4. If approved by the WREGIS Committee, the Change Control Subcommittee[42] reviews the change.

5. The Change Control Subcommittee submits the change request to APX to develop a solution, including an estimate of cost and schedule.

6. APX develops a method to add the functionality to WREGIS.

7. The WREGIS Committee reviews APX's estimates; if the WREGIS Committee approves the cost and schedule estimates, then the Energy Commission contract manager approves the work authorization to allow APX to begin work.

All steps of the above process have been completed. The WREGIS Committee approved the final proposal, including the estimated cost and schedule, and APX began development in July 2008. The verification of delivery functionality is estimated to be available to users in November 2008, at which time historical delivery data (for example, from January 2008 forward) can be imported into the system. Funding for the addition of this functionality will be provided by the Energy Commission as part of the funds budgeted for system modifications and upgrades under its contract with APX.

Conclusion

The Energy Commission already verifies deliverability for out-of-state facilities using the Interim Tracking System. Once this functionality has been completed and incorporated in WREGIS, which is expected to occur in November 2008, WREGIS will be used to verify deliveries into California from out-of-state RPS-eligible facilities. This criterion has been satisfied.

[42] The Change Control Subcommittee is one of three working subcommittees within WREGIS. The Change Control Subcommittee reviews and evaluates all program change requests and program issues to provide recommendations to the WREGIS Committee.

Condition 3: Protecting against double counting

History

WREGIS issues a unique serial number for each WREGIS certificate that has been created. The use of unique serial numbers prevents different account holders from claiming the same WREGIS certificate for compliance or voluntary programs. Additionally, the functionality for retiring and reserving WREGIS certificates only allows the WREGIS certificate to be applied to a single renewable energy program.[43]

Generation data claimed by LSEs to satisfy the RPS must be tracked in WREGIS and represented by WREGIS certificates (1 WREGIS certificate = 1 MWh) of renewable energy generation). All registered WREGIS account holders must attest that they are not reporting generation data for generation that has been reported to another tracking system and that they are not selling RECs representing the same generation data outside WREGIS, and that this information is accurate, complete and true. In addition, under the Terms of Use, the WECC reserves the right to audit Account Holder's relevant records to verify any information submitted by Account Holder to the WECC.

Current Status

During user acceptance testing, which was conducted before the launch of WREGIS, Energy Commission staff tested the functionality of WREGIS and determined that there were no instances in which more than one WREGIS certificate was created for a MWh of renewable energy generation. Additionally, when retiring or reserving the WREGIS certificates, only one renewable energy program could be selected. This testing confirms that WREGIS is able to protect against double-counting and can ensure no double-counting has occurred within the system.

[43] There are some exceptions. Some states, such as Arizona allow the "double-use" of renewable energy certificates. "Double-use" is the use of a single renewable energy certificate for two separate purposes. Only if a state/provincial or voluntary program specifies that "double-use" is allowed will WREGIS allow it within the functionality. Currently only solar thermal in Arizona may use a WREGIS Certificate for more than one purpose.

Conclusion

Energy Commission staff is confident that the experience in user acceptance testing with respect to the reserve functionality within WREGIS and WREGIS certificates enables WREGIS to ensure no double counting of WREGIS certificates. This conclusion is further supported by the WECC's right to audit an Account Holder's submitted information. This criterion has been satisfied.

Chapter 5: Conclusion

Draft Joint Commission Staff Report and *Appendices* respond to a legislative directive that requires the CPUC and the Energy Commission to conclude that the renewable energy generation tracking system established under Public Utilities Code Section 399.13 subdivision (c) 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 prior to the CPUC authorizing the use of renewable energy credits.

The Joint Commissions have developed the criteria and methodology for evaluating the three statutory conditions that WREGIS must satisfy to evaluate the tracking system. These criteria and methodologies were released as in the *Draft Report*, presented at a CEC Workshop and parties then submitted comments. The Commissions modified the *Report* appropriately, and then finalized conclusions based on the analysis of whether WREGIS has satisfied each condition.

The analysis and conclusions in this *Report* demonstrate that WREGIS has satisfied the three statutory requirements of Public Utilities Code Section 399.13 subdivision (c). The *Joint Commission Staff Report* is not intended to serve as the authorization of the use of tradable RECs for RPS compliance. The Commission will address that subject in a separate decision.

APPENDIX A: LIST OF WREGIS ACCOUNT HOLDERS:

3Phases Renewables
3Degrees Group, Inc.
Aire Systems
Amerex Energy
Arlington Wind Power Project, LLC
Avista Utilities
Bennett Creek Windfarm LLC
Benton PUD
Bicent Power, LLC
Bonneville Environmental Foundation
Bonneville Power Administration
Bottle Rock Power, LLC
Brookfield Energy Marketing, Inc.
Buena Vista Energy, LLC
California Energy Commission
California ISO
California Power Partners Inc
Cargill Environmental Finance
Cassia Gulch Wind Park LLC
Cassia Wind Farm LLC
CE2 Environmental Market LP
CE2 Environmental Opportunities I LP
City of Rancho Cucamonga
City of Riverside Public Utilities
City of San Diego - MWWD
Colorado Public Utilities Commission
Community Energy, Inc.
Constellation Energy Projects & Services Group
Constellation Energy Projects & Services Group, Inc.
Constellation NewEnergy
County of Solano
Covanta Delano, Inc.
DeLiddo & Associates, Inc. dba DEERS
Diablo Winds, LLC
e5 Clean Energy, Inc.
East Bay Municipal Utility District
El Paso Electric Company
Element Markets
Energy Northwest
Envirepel Energy
enXco, Inc.
Evergreen Biopower, LLC
Evolution Markets Inc.
Exergy Development Group
Falls Creek, H.P., L.P.
Fat Spaniel Technologies, Inc.
FPL Energy Green Power Wind, LLC
Gas Recovery Systems LLC
Geysers Power Company, LLC
Global Ampersand, LLC
Glu Networks, Inc.
Golden State Water Company dba Bear Valley Electric
Green Mountain Energy Company
Green-e Energy
GreenVolts, Inc.
Grey K Renewable Energy Limited
GT Environmental Finance LLC
Honeywell Global Finance, LLC
Hot Springs Windfarm LLC
Hybrid Energy Homes
Iberdrola Renewables, Inc
Idaho Power Company
Imperial Irrigation District
Imperial Valley Resource Recovery Co., LLC
Integrys Energy Corp.
Jay James Castino, PE
Johnson Holding, Inc.
Klickitat County PUD
Kumeyaay Wind LLC
LL&P Wind Energy, INC.
M-S-R Public Power Agency
Madera Power, LLC

Metropolitan Water District of Southern California
Minnesota Methane LLC
MMA Renewable Ventures
Modesto Irrigation District
Mountain View Power Partners LLC
Murray City Power
New Mexico Public Regulation Commission
Northern Wasco County PUD
NorthWestern Energy
Oregon Department of Energy
ORMAT
Pacific Gas & Electric Company
PacifiCorp
Pilot Power Group, Inc.
PNGC Power
Portland General Electric Company
Powerex Corp.
PPL Energy Plus,LLC
Praxair Plainfield, Inc.
Public Service Company of Colorado
Public Service Company of New Mexico
Public Utility District #1 of Cowlitz County
Public Utility District No. 1 of Chelan County
Public Utility District No. 1 of Lewis County
PUD No 1 of Franklin County
Puget Sound Energy
Raser Technologies, Inc.
Redding Electric Utility
Renewable Choice Energy
Robertson Bryan
Roseburg Forest Products
Sacramento Municipal Utility District
San Diego Gas & Electric
San Diego Water Authority
Sanitation Districts of Los Angeles County
SDG&E
Sempra Energy Solutions LLC
Sempra Generation
Shell Energy North America
Shell WindEnergy Services, Inc.
Shoot4themoon Properties, Inc.
Sierra Pacific Industries
Sierra Pacific Power Company
Sierra Power Corporation
Snohomish Co. PUD #1
Solar Integrated Technologies
Solar Power Partners, Inc.
SolarWorx
SolFocus, Inc
Southern California Edison
Southwestern Public Service
Sterling Planet, Inc.
Strategic Energy, LLC
Sun Run Generation
SunEdison
Tanner Electric Cooperative
Telocaset Wind Power Partners, LLC
TFS Energy
Threemile Canyon Wind I, LLC
Tieton Hydropower, LLC
Tioga Energy
Tri-Dam Project
Tunnel Hill Hydro LLC
U.S. Geothermal, Inc.
Utica Power Authority
Viasyn, Inc.
Victorville Municipal Utilities Services
Village Green Energy, Inc.
Vista Solar
Wadham Energy Ltd Partners
Wheat Field Wind Power Project, LLC

APPENDIX B: THE CPUC AND ENERGY COMMISSION'S PROPOSED DEFINITION OF A WREGIS CERTIFICATE

Certificate: The term "Certificate," as used in this document, refers to a WREGIS Certificate. A WREGIS Certificate represents all Renewable and Environmental Attributes from one MWh of electricity generation from a renewable energy Generating Unit registered with WREGIS or a Certificate imported from a Compatible Registry and Tracking System and converted to a WREGIS Certificate.[44] The WREGIS system will create exactly one Certificate per MWh of generation that occurs from a registered Generating Unit or that is imported from a Compatible Registry and Tracking System. Disaggregation of certificates is not currently allowed within WREGIS.

Renewable: Defined as renewable by a state or province within the Western Interconnection.

Renewable and Environmental Attributes: Any and all credits, benefits, emissions reductions, offsets and allowances, howsoever entitled, attributable to the generation from the Generating Unit, and its avoided emission of pollutants.[45] Renewable and Environmental Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Generating Unit, (ii) production tax credits associated with the construction or operation of the Generating Unit and other financial incentives in the form of credits, reductions or allowances associated with the Generating Unit that are applicable to a state, provincial or federal income taxation obligation, (iii) fuel-related subsidies or "tipping fees" that may be paid to the seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Generating Unit for compliance with local, state, provincial or federal operating and/or air quality permits.

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[44] A renewable Generating Unit, for the purposes of WREGIS, includes any Generating Unit that is defined as renewable by any of the states or provinces in the WECC.

[45] Avoided emissions may or may not have any value for complying with any local, state, provincial or federal greenhouse gas (GHG) regulatory program. Although avoided emissions are included in the definition of a WREGIS Certificate, this definition does not create any right to use those avoided emissions to comply with any GHG regulatory program.

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505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298

September 23, 2008

I.D. #7949

Draft Resolution E-4178

November 6 Commission Meeting

TO: PARTIES TO DRAFT RESOLUTION E-4178

Enclosed is draft Resolution E-4178 of the Energy Division. The draft Resolution adopts the *Joint Commission Staff Report*, *a* report written collaboratively between the California Public Utilities Commission and the California Energy Commission. The *Joint Commission Staff Report* evaluates whether the renewable energy generation tracking system established under Public Utilities Code Section 399.13 (c) satisfies the requirements in Public Utilities Code Section 399.16 (a) (1). This determination has to be made before the CPUC can authorize renewable energy credits for compliance with the Renewables Portfolio Standard program.

When the Commission votes on a draft Resolution, it may adopt all or part of it as written, amend, modify or set it aside and prepare a different Resolution. Only when the Commission acts does the Resolution become binding on the parties.

Parties may submit comments on the draft Resolution no later than October 13, 2008.

An original and two copies of the comments, with a certificate of service, should be submitted to:

Honesto Gatchalian
Energy Division
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102
fax: 415-703-2200

email: jnj@cpuc.ca.gov

An electronic copy of the comments should be submitted to:

Sara Kamins
Energy Division
smk@cpuc.ca.gov

Those submitting comments and reply comments must serve a copy of their comments on 1) the entire service list attached to the draft Resolution, 2) all Commissioners, and 3) the Director of the Energy Division.

Comments may be submitted electronically.

Comments shall be limited to five pages in length plus a subject index listing the recommended changes to the draft Resolution, a table of authorities and an appendix setting forth the proposed findings and ordering paragraphs.

Comments shall focus on factual, legal or technical errors in the proposed draft Resolution. Comments that merely reargue positions taken in the advice letter or protests will be accorded no weight and are not to be submitted.

Reply comments shall be served on parties and Energy Division no later than October 20, 2008 and may also be submitted electronically.

Late submitted comments or reply comments will not be considered.

Paul Douglas
Project and Program Supervisor
Energy Division

Enclosures:
Certificate of Service
Service List: R.06-02-012

CERTIFICATE OF SERVICE

I certify that I have by mail this day served a true copy of Draft Resolution E-4178 on all parties in
these filings or their attorneys as shown on the attached list.

Dated September 23, 2008 at San Francisco, California.

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Maria Salinas

NOTICE

Parties should notify the Energy Division, Public Utilities Commission, 505 Van Ness Avenue, Room 4002 San Francisco, CA 94102, of any change of address to ensure that they continue to receive documents. You must indicate the Resolution number on the service list on which your name appears.