

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 10R-674E

IN THE MATTER OF PROPOSED AMENDMENTS TO THE RULES OF THE COLORADO PUBLIC UTILITIES COMMISSION PURSUANT TO (1) THE DEVELOPMENT OF SOLAR GARDENS AS REQUIRED BY HB10-1342, (2) COMMUNITY-BASED PROJECTS THAT QUALIFY FOR SPECIAL TREATMENT UNDER HB10-1418, AND (3) USE OF ELIGIBLE ENERGY RESOURCES TO OFFSET ELECTRICAL ENERGY CONSUMPTION OF THE DIVISION OF PARKS AND OUTDOOR RECREATION AS PER HB10-1349.

DECISION ON EXCEPTIONS

Mailed Date: September 14, 2011
Adopted Date: September 12, 2011

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I. BY THE COMMISSION

A. Statement

1. This matter comes before the Commission for consideration of exceptions to Recommended Decision No. R11-0784 (Recommended Decision) filed by Public Service Company of Colorado (Public Service), the Colorado Office of Consumer Counsel (OCC), and the Interstate Renewable Energy Council (IREC) on August 15, 2011. Public Service, IREC, and Crest Renewable Energy, LLC and R2E Partners, LLC (Crest and R2E) filed responses to the exceptions.

2. The Recommended Decision, issued by Administrative Law Judge (ALJ) G. Harris Adams on July 25, 2011, primarily modifies the Commission’s Renewable Energy Standard (RES) Rules, 4 *Code of Colorado Regulations* (CCR) 723-3-3650, *et seq.*, as required by House Bill (HB) 10-1342. That statute, codified at § 40-2-127, C.R.S., concerns the development and operation of Community Solar Gardens (CSGs).

3. The Recommended Decision further modifies the Commission’s RES Rules to implement HB 10-1349, concerning the “Re-Energize Colorado” program in the Division of Parks and Outdoor Recreation in the Department of Natural Resources, and HB 10-1418, concerning community-based projects that connect to transmission or distribution facilities owned by cooperative electric associations or municipal utilities.

4. On August 30, 2011, Public Service filed a Motion to Accept Late Filed Response to Exceptions as well as its Response to Exceptions. We grant Public Service's motion, as its responses to exceptions are properly targeted at the previously-filed exceptions and no interested person will be prejudiced by our consideration of these comments.

5. As described below, we find good cause to grant some of the exceptions to Decision No. R11-0784. In addition, we modify certain other provisions in the rules that were not addressed in the exceptions. These additional changes are also discussed below. All changes we adopt by this Order are reflected in the rules attached as Attachment A.

II. DISCUSSION

A. Meter Aggregation for Net Metering

6. By the Recommended Decision, the ALJ adopted new provisions in Rule 3664, Net Metering, that allow for customers taking net metering service to combine their electricity consumption as measured by multiple meters on their contiguous property. This provision applies only when the aggregated meters are on the same rate schedule.

7. Public Service points out, in its exceptions, that such provisions relate not to CSGs or CSG subscribers but instead relate to customers taking service on net metering rates due to their installations of on-site solar facilities. Public Service contends that there is no legislative support for meter aggregation for such net metering customers in § 40-2-127, C.R.S., and that the rules adopted by the ALJ violate the underlying regulatory philosophy expressed in that statute. Public Service requests the Commission delete this rule and any associated cross-references.

8. Public Service also alleges that the meter aggregation provisions adopted by the Recommended Decision aggravate the inherent rate subsidy that results when net metering customers take service on energy-only rates and "avoid paying for transmission and

distribution investment serving the customer's premises." According to Public Service, § 40-2-127, C.R.S., gives the utility an opportunity to eliminate such alleged subsidies in the case of CSG subscribers by virtue of the provision that allows utilities to recover the costs of delivering the energy produced by the CSG to the premises where the energy is consumed. Public Service further contends that, because the Commission has never investigated the extent of this "hidden subsidy," it should wait to determine whether meter aggregation for net metering customers is appropriate.

9. Unlike Public Service, IREC generally supports the meter aggregation rule adopted by the ALJ. However, IREC takes exception to the requirement that meter aggregation be limited to meters on the same rate schedule. IREC argues there is nothing in § 40-2-127, C.R.S., that limits this provision to locations (or meters) on the same rate schedule with respect to participation in CSGs. IREC similarly argues that, because all customers regardless of rate class are allowed to participate in net metering, there is no statutory support for limiting meter aggregation to meters on the same rate schedule as required by the Recommended Decision.

10. In addition, IREC contends that limiting meter aggregation to meters on the same rate schedule would unduly limit the expansion of participation in solar generation. IREC therefore recommends that the Commission revise paragraph 3664(i)(IV) to allow for meter aggregation regardless of rate schedule.

11. In its response to IREC's exceptions, Public Service explains that it agrees that, for the purpose of determining billing credits for CSG subscribers, premises associated with the CSG subscription do not need to be in the same rate schedule. However, for net metering, Public Service argues that it is essential that all aggregated meters be on the same rate schedule,

because the utility would have great difficulty in accounting for the usage on the meters where charges are based on different prices and rules. While Public Service prefers that paragraph 3664(i) adopted by the Recommended Decision be deleted in its entirety, it requests that the Commission deny IREC's suggestion regarding aggregated meters on different rate schedules if other aspects of the rule are upheld.

12. IREC argues that it is inappropriate for Public Service to raise in its exceptions the arguments surrounding alleged subsidies paid to net metering customers and the notion that meter aggregation will, according to Public Service, exacerbate them. IREC also disputes that there is no statutory support for meter aggregation for net metering customers in § 40-2-127, C.R.S., since one of its primary goals is "the expansion of participation in solar generation by all Coloradans."

13. For their part, Crest and R2E explain why meter aggregation is needed and appropriate for CSG subscribers. They refute Public Service's allegations regarding a subsidy paid to net metering customers.

14. With respect to Public Service's arguments regarding inherent subsidies paid to net metering customers, we agree that the issue has not yet been fully investigated. We will therefore not base our decision regarding this matter on allegations about potential subsidies that would be exacerbated by the Recommended Decision.

15. Instead, we find that the ALJ's addition to Rule 3664 properly extends to customers with on-site solar facilities the ability to aggregate multiple meter in a manner that mirrors the ability of CSG subscribers to attribute their subscriptions to multiple locations.

The comments filed in this proceeding indicate that such meter aggregation was discussed extensively by the interested person. We further note that such meter aggregation for net metering customers is more restrictive than the ability for multiple locations to be attributed to a single CSG subscription. Specifically, net metering customers can aggregate only the meters located on the contiguous property where the on-site solar facilities are located if such meters are on the same rate schedule. In light of these restrictions, we affirm the rule as adopted by the ALJ. Public Service's and IREC's exceptions are therefore denied.

16. The comments filed by Crest and R2E indicate that it would be useful for the new meter aggregation rule to specify the similarities and distinctions between meter aggregation for net metering and the designation of the rank order of multiple meters attributed to a CSG subscription for the purpose of applying bill credits. We agree with Crest and R2E and therefore modify the rule adopted by the Recommended Decision as set forth in Attachment A.

B. CSG Subscription Verification

17. Subparagraph 3665(a)(II)(E) in the rules adopted by the ALJ reads: "The CSG Subscriber Organization and the QRU shall jointly verify that each CSG Subscriber is eligible to be a subscriber in the CSG pursuant to rule 3665(a)(I). Changes in the subscriber rolls of the CSG, including the effective date of changes, shall be communicated by the CSG Subscriber Organization to the QRU, in written or electronic form, as soon as practicable but on no less than a monthly basis."

18. The OCC suggests in its exceptions that the utility should be responsible for enforcing compliance with the requirement that a CSG subscription supplies no more than one hundred twenty percent of a customer's average annual consumption of electricity.

The OCC argues that CSG subscriber organizations may lack the proper incentives to enforce this “120-percent” provision and that CSG owners may have an incentive to allow customers to over-subscribe in order to maximize profits. According to the OCC, a strict enforcement of the 120-percent limit “could likely result in more interested customers being able to own a share in a CSG.”

19. The OCC explains that a single verification normally done for customers installing on-site solar is appropriate. This is because it would be unpalatable for a utility to instruct a customer to remove due to lower levels of electricity consumption. In contrast, according to the OCC, periodic verifications of CSG subscriptions are necessary due to the transferability of CSG subscriptions. In addition, the OCC argues that a CSG subscriber could potentially hoard CSG subscriptions, thereby preventing other potential customer from participating. The OCC argues the utility is the most logical entity to perform the annual verification.

20. In response to the OCC, Public Service states that there could be thousands of CSG subscribers and that it would therefore take considerable administrative expense to perform an annual audit. Public Service also explains that, if a customer purposely oversubscribes, the customer’s utility bill would show negative bills from month to month, likely triggering a check by the utility into the CSG subscription size. Public Service states that it expects most customers to comply with “the 120-percent rule” and that an annual audit would entail unneeded expenditures.

21. We agree with Public Service that large negative bills and billing credits will alert the utilities to potential abuses of CSG subscriptions. We find that an approach involving

utility investigations of CSG subscriptions that appear to be oversized is superior in terms of cost and effort to a requirement that an annual verification be completed for each CSG subscription. We therefore deny the OCC's exceptions on this point.

22. We will, however, modify paragraph 3665(a)(II)(E) in certain respects. While we endorse the concept of a "subscriber roll" adopted by the ALJ, we find it beneficial to list some additional contents of these lists for the purpose of implementing the bill credits to CSG subscribers. Specifically, we agree with the ALJ that the subscriber roll will include the effective date of any changes in subscriptions. We find the subscriber roll should also include the ownership percentages associated with each CSG subscription, the CSG subscriber's designated meter at the premise to which the CSG subscription is attributed, and any additional meters to be aggregated with the designated meter, including the rank order of those meters. As required by the ALJ's rules, changes in the CSG subscriber roll will be communicated to the utilities on no less than a monthly basis.

C. Rates for CSG Billing Credits

23. Section 40-2-127(5)(b)(II), C.R.S., states: "The net metering credit shall be calculated by multiplying the subscriber's share of the electricity production from the community solar garden by the qualifying retail utility's total aggregate retail rate as charged to the subscriber."

24. To implement this statutory provision, the ALJ adopted provisions in subparagraph 3665(c)(I). With respect to non-residential customers taking service on demand rates, subparagraph 3665(c)(I)(B) states: "For the purpose of calculating the net metering credit for a commercial or industrial customer on a demand tariff, the total aggregate retail rate (including all billed components) shall be determined by dividing the total electric charges for

the most recent calendar year (including demand charges) by the total kWh provided for that year.” This rule provision therefore contemplates customer-specific “total aggregate retail rates” for such customers.

25. Public Service faults the ALJ’s interpretation of § 40-2-127(5)(b)(II), C.R.S., arguing that the statute instead contemplates uniform unit bill credits for all customers on a “per kWh per rate class” basis. Public Service argues that its interpretation is the only workable and administratively feasible interpretation of the statute, whereas the rule adopted by the ALJ is overly complex and very expensive to the benefit of few customers.

26. Public Service further contends that, had the General Assembly contemplated customer-specific bill credits, the statute would have referred to “total aggregated customer bills” instead of a “total aggregated retail rate.” Public Service further argues that the approach adopted by the ALJ would be unfair, because a customer with a low load factor would receive a larger bill credit than a high load factor customer on a per unit basis.

27. Public Service therefore proposes alternative language to paragraph 3665(c)(I)(B) and requests that the Commission clarify that bill credits for all customers shall be determined on a service class basis and will therefore not require be determined on an individual customer basis.

28. Crest and R2E argue that the ALJ’s approach is consistent with the statute and is no more complex than Public Service’s existing billings.

29. We agree with the ALJ’s interpretation this provision of HB 10-1342 and deny Public Service’s exceptions in this matter. Public Service does not appear to disagree with the notion that the bill credits extended to customers taking service on demand rates should take into account that a substantial percentage of their bills are related to demand charges.

However, Public Service's approach would assume that the rate class' average demand charges would appropriately compensate customers with CSG subscriptions regardless of their actual load patterns. There is no basis for us to agree with Public Service on this point. Instead, we find that the rule adopted by the ALJ regarding the calculation of unit bill credits for non-residential CSG subscribers on a customer-specific basis is a valid interpretation of § 40-2-127(5)(b)(II), C.R.S., and should be implemented.

D. Ownership of Renewable Energy Credits (RECs)

30. Subparagraph 3665(c)(IV) of the rules adopted by the ALJ reads: "Renewable Energy Credits (RECs) are part of the CSG Subscriber's subscription and CSG Subscribers shall have the option to waive compensation for and keep the RECs resulting from the beneficial use of electricity generated from the CSG so long as such RECs are not part of a Commission-approved QRU acquisition plan. For RECs purchased by the QRU, the QRU and the CSG owner shall agree on whether subscribers will be compensated by a credit on each subscriber's electricity bill or by a payment to the owner of the CSG. RECs purchased by the QRU belong to the QRU and may not be used by CSG Subscribers for marketing or other purposes."

31. At paragraph 173 of the Recommended Decision, the ALJ explains that this provision permits a CSG subscriber to retain the RECs associated with the CSG subscription. Similarly, at paragraph 188, he states that a REC generated by a CSG may "have life outside of a QRU acquisition plan" because a CSG subscriber is not obligated to sell the RECs associated with the CSG subscription "unless and until it is incorporated into an acquisition plan approved by the Commission and relied upon for compliance by the QRU."

32. In its exceptions, Public Service argues this rule, as adopted by the ALJ, fails to comply with § 40-2-127, C.R.S. It proposes alternative language stating that RECs from CSGs “shall be sold only to the QRU serving the geographic area where the CSG is located.” Under Public Service’s proposed rule, all CSG-produced RECs would be purchased by the utility, and the utility and the CSG subscriber organization would agree on whether the subscribers will be compensated for these RECs by a credit on each subscriber's bill or by a payment to the CSG owner. Additionally, RECs purchased by the utility would belong to the utility and would not be used by CSG subscribers “for marketing or other purposes.”

33. Public Service opines that the statute contemplates that the acquisition of resources from CSGs would be part of each utility’s compliance plans for meeting the RES. The statute further contemplates, according to Public Service, that all of the electricity and RECs generated by the CSGs that are part of those plans would be purchased by the utility. Public Service also points to other provisions in the statute, including the requirement that it extend a standard offer to purchase RECs from CSGs, that it claims restrict the sale of the RECs only to the utility.

34. Public Service suggests that, unlike a net metering customer, a utility has no obligation to provide billing credits to CSG subscribers who do not sell the RECs produced by the CSG. A utility is also not obligated to buy RECs of electric energy from CSGs that are not part of a Commission approved RES plan.

35. Public Service therefore requests that Commission alter the rules adopted by the ALJ such that all of the RECs associated with the electricity purchased from the CSG by the utility through billing credits are also sold to the utility.

36. Crest and R2E object to Public Service's approach and urge the Commission to deny Public Service's exceptions on this issue. They argue that, for net metering customers, it is the taking of a rebate from a utility for an on-site solar system that requires the customer to transfer the associated RECs to the utility. However, if the net metering customer accepts no rebate, the customer would still obtain the net metering credit against its electricity usage. Crest and R2E argue that CSG subscribers should be afforded comparable rights with respect to RECs.

37. We are persuaded by Public Service's interpretation of the statutory language and agree that the utility has no obligation to enter any contract with a CSG owner where the RECs generated by that CSG will not be sold the utility. We further find that a utility will enter into contracts with CSG owners in order to meet its compliance obligations under the RES and to satisfy the minimum requirements for CSG acquisitions established by the Commission in consideration of the utility's plan to acquire renewable resources. Our approval of such plans will also take into account the requirement that such contracts will provide compensation for the entire electricity production of the CSGs. We are thus convinced that all contracts with CSG owners will be signed pursuant to a Commission-approved plan. We will therefore grant Public Service's exceptions on this matter to the extent reflected in the rules set forth in Attachment A.

E. Utility Incentives

38. Section 40-2-127(5)(f), C.R.S., states: "Qualifying retail utilities shall be eligible for the incentives and subject to the ownership limitations set forth in section 40-2-124(1)(f) for utility investments in community solar gardens and may recover through rates a margin, in the amount determined by the commission, on all energy and renewable energy credits purchased from community solar gardens. Such incentive payments shall be excluded from the cost analysis required by section 40-2-124(1)(g)."

39. The ALJ adopted provisions associated with the utility incentives addressed in § 40-2-127(5)(f), C.R.S., in subparagraph 3665(d)(VI), which read as follows: “For investments in CSGs, the investor owned QRU shall be eligible for the incentives and be subject to the ownership limitations set forth in rule 3660. For a CSG owned by an investor owned QRU, the QRU may submit a request to the Commission, by application, to recover through rates a margin on energy and RECs purchased; however such incentive payments shall be excluded from the retail rate impact under rule 3661.”

40. Public Service argues that the ALJ improperly tied the earning of a margin on CSG-produced energy and RECs to utility ownership of the CSG. Public Service states that the utility only purchases energy and RECs from a CSG only if it does not own the CSG. Public Service therefore suggests that the Commission entirely revise paragraph 3665(d)(VI) and introduce a new provision as 3665(d)(VII) that allows the utility to submit a request to recover through rates a margin on energy and RECs purchased from CSGs.

41. We agree with Public Service that a utility only purchases resources from a CSG that is not owned by the utility. We also agree that the statute provides the utility an opportunity to seek approval of an incentive in the form of a margin on purchases from CSGs. We therefore grant Public Service’s exceptions on this matter to the extent reflected in the rules in Attachment A.

F. CSG Appeals to the Commission

42. The Recommended Decision adopts a provision in subparagraph 3665(d)(IV)(B) by which CSGs can “apply” to the Commission for relief in the event that the CSG disputes the utility’s minimum capital requirements. The preceding rule, subparagraph 3665(d)(IV)(A),

establishes a threshold by which the utility will be deemed to have conducted sufficient due diligence by requiring documentation from the CSG of escrowed fund to support commercial operations of not less than \$100 per kW of CSG capacity.

43. First, we clarify that the process by which a CSG owner or subscriber organization in a dispute with a utility will not take the form of an application filing under the Commission's Rules for Practice and Procedure, 4 CCR 723-1. Instead, the existing formal complaint process governed by those rules will be the appropriate means by which a CSG owner or subscriber organization should seek relief.

44. Second, we will modify the provisions subparagraph 3665(d)(IV)(B) to prohibit a utility from rejecting a contract with a CSG owner for failing to demonstrate sufficient resources to reasonable assure successful construction and commencement of CSG operations if the documentation required by subparagraph 3665(d)(IV)(A) is properly provided to the utility. This modification is intended to reduce potential disputes between the utilities and new CSGs with respect to pre-operational capitalization and financial viability.

45. Both of these changes to the Recommended Decision are reflected in the rules in Attachment A.

G. Compliance in 2011, 2012, and 2013

46. The ALJ adopted a new provision under Rule 3655 Renewable Distributed Generation stating: "RECs generated from CSGs shall not be used to achieve more than twenty percent of the retail distributed generation requirements for compliance years 2011, 2012, and 2013." Similarly, the ALJ adopted paragraph 3665(d)(I)(b) that states: "For compliance years 2011, 2012, and 2013, the RECs generated from CSGs shall not be used to meet more than twenty percent of the QRU's retail distributed generation requirement under its RES obligation."

47. Public Service takes exception to the annual compliance targets set forth in these provisions, arguing that the statutory language upon which the ALJ based these rules instead allow for the three years 2011 through 2013 to be considered “collectively” for purposes of applying the twenty percent limit.¹

48. Public Service states that since 2011 is half over and these rules are not yet final, a utility will likely acquire few if any RECs from CSGs this year. Public Service would instead prefer potentially to acquire more than 20 percent of its renewable retail distributed generation RECs in 2012 and 2013 to make up for the lack of CSG RECs in 2011.

49. We find that the ALJ correctly interprets the statute as establishing an annual maximum of twenty percent of the RECs used for compliance with the RES to come from CSGs. The demonstration of compliance with RES is achieved through the filing of annual reports that detail the utility’s activities to meet requirements for each compliance year. We are not convinced that interpreting the twenty-percent limit on a basis other than this annual approach is supported by the provisions in HB 10-1342. Therefore, we deny Public Service’s exceptions on this point.

H. CSG Billing Credit Deadlines

50. Paragraph 3665(c)(I)(D) in the rules adopted by the ALJ reads: “Net metering credits shall be reflected in QRU billing for the QRU retail customers for energy consumption no later than the 30th day after information is reported to the QRU by the CSG.”

¹ Section 40-2-127(5)(a)(II) states: "Notwithstanding any provision of subparagraph (II) to the contrary, renewable energy credits generated from solar gardens shall not be used to achieve more than twenty percent of the retail distributed generation standard in years 2011 through 2013."

51. Public Service argues in its exceptions that it will have great difficulty in meeting this requirement due to cycle billing, which will often require more than 30 days to credit customers in their next billing cycle. Public Service requests that the 30-day deadline be extended to a 60-day deadline.

52. Crest and R2E support the 30-day requirement in the ALJ's adopted rule and suggest that the utility rely on its access to real-time production data to meet this deadline.

53. We agree with Public Service that the 30-day deadline adopted by the ALJ will not support a utility's cycle billing program in conjunction with the exchange of subscriber rolls as discussed above. We therefore grant Public Service's exceptions on this matter.

I. Rollover Provisions

54. Subparagraph 3665(c)(III) in the rules adopted by the ALJ addresses the rollover of billing credits from month to month. The provision states: "A CSG Subscriber's net metering credit that exceeds the electric bill in any billing period shall be carried over and applied to future bills or other net metering credit selection per rule 3664(b)."

55. Public Service argues in its exceptions that the cross-reference to paragraph 3664(b) is inappropriate, because net metering credits are in terms of kWh whereas CSG billing credits are "already monetized" and expressed as dollars. Public Service therefore requests that the phrase "or other net metering credit selection per rule 3664(b)" be deleted.

56. We agree with Public Service that the cross reference to paragraph 3664(b) is misplaced. However, we support the ALJ's intention to establish rollover provisions for billing credits associated with CSG subscriptions akin to the rollover provisions for kWh credits for net metering customers. Therefore, we will adopt new rollover provisions for CSG subscriptions as

set forth in the rules in Attachment A. In addition, we find the term “rollover” to be an improvement to “carry forward” and will use that term in Rule 3664 Net Metering rules as well.

57. Separately, the OCC argues in its exceptions that the ALJ failed to provide for the accumulation of bill credits during the pendency of a subscriber moving to a new qualifying premise. As such, the OCC requests that the Commission modify Rule 3665 to include the requirement that the QRU continue to accumulate bill credits, for up to three months, for CSG customers transferring subscriptions to a new qualifying premises.

58. In response to the OCC’s suggestion, Public Service argues that the proposal is administratively unworkable. Public Service explains that all electricity and RECs generated by a CSG is accounted for each month either as subscribed or unsubscribed electricity and RECs. Public Service states that it would thus be difficult to hold on to bill credits for individual subscribers for three months, especially if there are thousands of CSG subscribers. Finally, according to Public Service, the OCC has not presented a compelling argument for its proposal.

59. We agree with Public Service’s response to the OCC’s suggestion and deny OCC’s exceptions on this point.

J. Acquisition Plan Filings

60. Subparagraph 3665(d)(II)(A) in the rules adopted by the ALJ states: “For compliance year 2011, the QRU may submit an application to obtain energy and RECs from CSGs.”

61. The OCC contends that this provision should be modified to remove the permissive nature of the application for the 2011 compliance year, since some sort of acquisition plan for 2011 is needed to include the standard offer contemplated by § 40-2-127(5)(a)(II), C.R.S.

62. We agree with OCC and grant its exceptions on this point as reflected in the rules set forth in Attachment A.

K. CSG Contracts in the Public Record

63. Paragraph 3665(e)(I) in the rules adopted by the ALJ states that: “Contracts signed by QRUs with CSG owners shall be a matter of public record and shall be filed with the Commission by the QRU.”

64. Public Service explains that it does not object to filing the contracts with the Commission. However, it requests that the phrase “shall be a matter of public record” be removed, since contracts resulting from competitive bidding will have bid information contained in them. Public Service explains that it would like the opportunity to seek confidential or highly confidential protection for these contracts, if the situation warrants.

65. In its response to Public Service’s exceptions, IREC states that does not foresee why it should be necessary for a utility to file such contracts with the Commission. IREC also points out that there is no commensurate requirement for net metering customers.

66. We disagree with Public Service and IREC and deny their exceptions on this point. The rule, as adopted by the ALJ, is consistent with our recent decisions regarding the public disclosure of bid information in resource planning proceedings. Moreover, we do not anticipate that these contracts will need to include confidential or highly confidential information.

L. Definitions of CSG and CSG Owner

67. Based on the information in the exceptions and responses and on the ALJ’s discussion in the Recommended Decision regarding the term “output” as used in several instances in § 40-2-127, C.R.S., we will modify the definition of community solar garden

in Rule 3652 Definitions. Specifically, we will replace “output from a CSG” in the definition adopted by the Recommended Decision with “renewable energy generated by a CSG.” We find this change will add clarity to the rule, consistent with our discussion above concerning the ownership of RECs.

68. We will likewise clarify the meaning of “output” in the definition of a CSG owner. In this instance we replace “output from a CSG” with “unsubscribed renewable energy and RECs generated by the CSG.”

69. Our adopted definitions of CSG and CSG owner are set forth in Attachment A.

M. Premises Changes for CSG Subscriptions

70. We note that subparagraph 3665(a)(II)(G) in the rules adopted by the Recommended Decision restates the same provision found in the last sentence of subparagraph 3665(a)(I)(C). We will correct this redundancy by striking the subparagraph 3665(a)(II)(G).

N. Production Metering and Real-Time Access to Meter Data

71. The rules adopted by the Recommended Decision do not include the provision in § 40-2-127(5)(b)(I), C.R.S., that the amount of renewable energy and RECs generated by each CSG shall be measured by a production meter installed by the utility or the CSG owner and paid for by the CSG owner. We therefore adopt a new provision in paragraph 3665(b) that reflects this requirement for production metering.

72. Subparagraph 3665(b)(II) in the rules adopted by the Recommended Decision states that CSGs are required to provide real time reporting of production as specified by the utility and that the utility may require different real time reporting based on system size. However, we note that paragraph 3656(l) in our RES Rules already requires renewable resource greater than 250 kW to provide real time electronic access to production data.

We will therefore introduce a cross-reference to that existing provision regarding real-time access to production data for CSGs greater than 250 kW.

O. Minimum and Maximum Purchases from CSGs

73. Given the discussion above regarding the utility's acquisition of renewable energy and RECs pursuant to a Commission-approved acquisition plan, we shall reorganize the provisions adopted by the ALJ under paragraph 3665(d) concerning utility acquisitions from CSGs. These changes are reflected in the rules in Attachment A.

74. Specifically, the reorganized rule will begin with the provisions in paragraph 3665(d)(I)(D) in the Recommended Decision by which the Commission establishes minimum and maximum purchases from new CSGs for each compliance year. The statutory limits on acquisitions set forth in paragraph 3665(d)(I)(B) and (C) of the Recommended Decision are also included in this new paragraph. The reorganized rule then requires that the minimum and maximum acquisition levels described above will be established in consideration of the acquisition plans filed by the utilities. These rule provisions will precede the new rules discussed above regarding the utility's acquisition of renewable energy and RECs pursuant to contracts between the utility and CSG owners. The combination of these rule changes will result in a closer grouping of the provisions adopted by the ALJ regarding the utility standard offers for RECs from CSGs.

P. Additional Changes

75. The rules in Attachment A correct several typographic and formatting errors identified in the exceptions or uncovered during the course of our review of the Recommended Decision. They also include some wording changes that apply the terms normally used in the existing provisions of our RES Rules.

76. All other requested changes set forth in exceptions are denied.

Q. Future Rulemaking

77. We agree with Public Service's comments that HB 10-1342 represents an experiment designed to allow for the development of various forms of solar gardens that may expand the availability of solar resources to utility customers. We may learn from this experiment and later determine that changes to the rules we adopt by this Order will be appropriate in the future.

78. We therefore expect to consider a review of these new rules after the marketplace has tested the CSG concept over a couple of years. Such a review may occur as early as 2014.

III. ORDER

A. The Commission Orders That:

1. The Exceptions to Decision No. R11-0784 filed by Public Service Company of Colorado (Public Service) on August 15, 2011 are granted, in part, and denied, in part, consistent with the discussion above.

2. The Exceptions to Decision No. R11-0784 filed by the Colorado Office of Consumer Counsel on August 15, 2011 are granted, in part, and denied, in part, consistent with the discussion above.

3. The Exceptions to Decision no R11-0784 filed by the Interstate Renewable Energy Council on August 15, 2011 are denied, consistent with the discussion above.

4. The Motion to Accept Late Filed Response to Exceptions filed by Public Service on August 30, 2011 is granted.

5. The Commission adopts the rules contained in Attachment A to this Decision thereby modifying 4 *Code of Colorado Regulations* 723-3, Rules Regulating Electric Utilities, consistent with the discussion above.

6. The 20-day period provided for in § 40-6-114, C.R.S., within which to file applications for rehearing, reargument, or reconsideration, begins on the first day following the effective date of this Order.

7. This Order is effective upon its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' DELIBERATIONS MEETING
September 12, 2011.**

(SEAL)



ATTEST: A TRUE COPY

Doug Dean,
Director

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Public Utilities Commission

4 CODE OF COLORADO REGULATIONS (CCR) 723-3

PART 3

RULES REGULATING ELECTRIC UTILITIES

BASIS, PURPOSE, AND STATUTORY AUTHORITY.

The basis and purpose of these rules is to describe the electric service to be provided by jurisdictional utilities and master meter operators to their customers; to designate the manner of regulation over such utilities and master meter operators; and to describe the services these utilities and master meter operators shall provide. In addition, these rules identify the specific provisions applicable to public utilities or other persons over which the Commission has limited jurisdiction. These rules address a wide variety of subject areas including, but not limited to, service interruption, meter testing and accuracy, safety, customer information, customer deposits, rate schedules and tariffs, discontinuance of service, master meter operations, flexible regulation, procedures for administering the Low-Income Energy Assistance Act, cost allocation between regulated and unregulated operations, recovery of costs, the acquisition of renewable energy, small power producers and cogeneration facilities, and appeals regarding local government land use decisions. The statutory authority for these rules can be found at §§ 29-20-108, 40-1-103.5, 40-2-108, 40-2-123, 40-2-124, 40-2-129, 40-3-102, 40-3-103, 40-3-104.3, 40-3-111, 40-3-114, 40-3.2-104, 40-4-101, 40-4-106, 40-4-108, 40-4-109, 40-5-103, 40-8.7-105(5), 40-9.5-107(5), and 40-9.5-118, C.R.S.

GENERAL PROVISIONS

3000. Scope and Applicability.

- (a) Absent a specific statute, rule, or Commission Order which provides otherwise, all rules in this Part 3 (the 3000 series) shall apply to all jurisdictional electric utilities and electric master meter operators and to Commission proceedings concerning electric utilities or electric master meter operators providing electric service.
- (b) The following rules in this Part 3 shall apply to cooperative electric associations which have elected to exempt themselves from the Public Utilities Law pursuant to § 40-9.5-103, C.R.S.:
 - (I) Rules 3002 (a)(I), (a)(II), (a)(IV), (a)(V), (a)(XVI), (b), and (c) concerning the filing of applications for certificate of public convenience and necessity for franchise or service territory, for certificate amendments, to merge or transfer, or for appeals of local land use decisions.
 - (II) Rules 3005 (a)(III) (IV), (d), (e), (g), and (h) concerning records under RUS accounting system and preservation of records.

- (III) Rule 3006 (a) (b) (c) (d) and (e) concerning the filing of annual reports, designation for service of process, and election of applicability of Title 40, Article 8.5.
 - (IV) Rules 3008 (b) and (d) concerning incorporation by reference.
 - (V) Rules 3100 and 3103 concerning application for and amendment of a certificate of public convenience and necessity relating to a franchise.
 - (VI) Rules 3101 and 3103 concerning application for and amendment of a certificate of public convenience and necessity relating to service territory.
 - (VII) Rule 3104 concerning application to transfer assets, to obtain a controlling interest, or to merge with another entity.
 - (VIII) Rule 3204 concerning incidents occurring in connection with the operation of facilities.
 - (IX) Rule 3207 (a) and (b), concerning construction and expansion of distribution facilities.
 - (X) Rules 3250 through 3253 concerning major event reporting.
 - (XI) Rule 3411 concerning the Low-Income Energy Assistance Act unless the cooperative electric association has exempted themselves pursuant to rule 3411(c).
 - (XII) Rules 3650(b), 3651, 3652, 3654(b), (d) through (i), and (l); 3659(a)(I) through (a)(V), (b) and (d) through (i), 3660(l), 3661(b), (c), (g), and (i), 3662(a)(I), (a)(II), (a)(IV) through (a)(X), (a)(XIII), (a)(XV), (b), (d) and (e), and 3667.
 - (XIII) Rules 3700 through 3707 concerning appeals of local governmental land use decisions actions.
- (c) The following rules in this Part 3 shall apply to **cooperative electric generation and transmission associations**:
- (I) Rules 3002 (a)(III), (a)(XVI), (b), and (c) concerning the filing of applications for certificates of public convenience and necessity for facilities or for appeals of local land use decisions.
 - (II) Rule 3006(j) concerning the filing of electric resource planning reports.
 - (III) Rule 3102 concerning applications for certificates of public convenience and necessity for facilities.
 - (IV) Rule 3103 concerning amendments to certificates of public convenience and necessity for facilities.
 - (V) Rule 3104 concerning application to transfer, to obtain a controlling interest, or to merger with another entity.
 - (VI) Rule 3200 concerning construction, installation, maintenance, and operation of facilities.

- (VII) Rule 3204 concerning incidents occurring in connection with the operation of facilities.
 - (VIII) Rule 3205 concerning construction or expansion of generating capacity.
 - (IX) Rule 3206 concerning construction or extension of transmission facilities.
 - (X) Rule 3253(a) concerning major event reporting.
 - (XI) Rules 3602, 3605, and 3617(a) concerning electric resource planning.
 - (XII) Rules 3700 through 3707 concerning appeals of local governmental land use decisions actions.
- (d) The following rules in this Part 3 shall apply to municipally owned utilities, which are qualifying retail utilities:
- (I) Rules 3650(c), 3651, 3652, 3653, 3654(b), (c), (d) through (i) and (l); 3659(a)(l) through (a)(v), (b), (d) through (i).
- (e) The following rules in this Part 3 shall apply to municipally owned utilities which are not qualifying retail utilities:
- (I) Rules 3650(d).

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[indicates omission of unaffected rules]

ELECTRIC RESOURCE PLANNING

3600. Applicability.

This rule shall apply to all jurisdictional electric utilities in the state of Colorado that are subject to the Commission's regulatory authority. Cooperative electric associations engaged in the distribution of electricity (i.e., rural electric associations) are exempt from these rules. Cooperative electric generation and transmission associations are subject only to reporting requirements as specified in rule 3605.

3601. Overview and Purpose.

The purpose of these rules is to establish a process to determine the need for additional electric resources by electric utilities subject to the Commission's jurisdiction and to develop cost-effective resource portfolios to meet such need reliably. It is the policy of the state of Colorado that a primary goal of electric utility resource planning is to minimize the net present value of revenue requirements. It is also the policy of the state of Colorado that the Commission gives the fullest possible consideration to the cost-effective implementation of new clean energy and energy-efficient technologies.

3602. Definitions.

The following definitions apply to rules 3600 through 3618. In the event of a conflict between these definitions and a statutory definition, the statutory definition shall apply.

- (a) "Availability factor" means the ratio of the time a generating facility is available to produce energy at its rated capacity, to the total amount of time in the period being measured.
- (b) "Annual capacity factor" means the ratio of the net energy produced by a generating facility in a year, to the amount of energy that could have been produced if the facility operated continuously at full capacity year round.
- (c) "Cost-effective resource plan" means a designated combination of new resources that the Commission determines can be acquired at a reasonable cost and rate impact.
- (d) "Demand-side resources" means energy efficiency, energy conservation, load management, and demand response or any combination of these measures.
- (e) "End-use" means the light, heat, cooling, refrigeration, motor drive, or other useful work produced by equipment that uses electricity or its substitutes.
- (f) "Energy conservation" means the decrease in electricity requirements of specific customers during any selected time period, resulting in a reduction in end-use services.
- (g) "Energy efficiency" means the decrease in electricity requirements of specific customers during any selected period with end-use services of such customers held constant.
- (h) "Heat Rate" means the ratio of energy inputs used by a generating facility expressed in BTUs (British Thermal Units), to the energy output of that facility expressed in kilowatt hours.
- (i) "Net present value of revenue requirements" means the current worth of the total expected future revenue requirements associated with a particular resource portfolio, expressed in dollars in the year the plan is filed as discounted by the appropriate discount rate.
- (j) "Planning period" means the future period for which a utility develops its plan, and the period, over which net present value of revenue requirements for resources are calculated. For purposes of this rule, the planning period is twenty to forty years and begins from the date the utility files its plan with the Commission.
- (k) "Renewable energy resources" means all renewable energy resources as defined in the Commission's Renewable Energy Standard Rules.
- (l) "Resource acquisition period" means the first six to ten years of the planning period, in which the utility acquires specific resources to meet projected electric system demand and energy requirements. The resource acquisition period begins from the date the utility files its plan with the Commission.
- (m) "Resource plan" or "plan" means a utility plan consisting of the elements set forth in rule 3604.

- (n) "Resources" means supply-side resources and demand-side resources used to meet electric system requirements.
- (o) "Section 123 resources" means new energy technology or demonstration projects, including new clean energy or energy-efficient technologies under § 40-2-123 (1)(a), C.R.S. and § 40-2-123 (1)(bc), C.R.S., and Integrated Gasification Combined Cycle projects under § 40-2-123(2), C.R.S.
- (p) "Supply-side resources" means resources that provide electrical energy or capacity to the utility. Supply-side resources include utility owned generating facilities and energy or capacity purchased from other utilities and non-utilities.
- (q) "Typical day load pattern" means the electric demand placed on the utility's system for each hour of the day.

3603. Resource Plan Filing Requirements.

Jurisdictional electric utilities shall file a resource plan pursuant to these rules on or before October 31, 2011, and every four years thereafter. In addition to the required four-year cycle, a utility may file an interim plan, pursuant to rule 3604. If a utility chooses to file an interim plan more frequently than the required four-year cycle, its application must state the reasons and changed circumstances that justify the interim filing.

3604. Contents of the Resource Plan.

The utility shall file a plan with the Commission that contains the information specified below. When required by the Commission, the utility shall provide work-papers to support the information contained in the plan. The plan shall include the following:

- (a) A statement of the utility-specified resource acquisition period and planning period. The utility shall consistently use the specified resource acquisition and planning periods throughout the entire resource plan and resource acquisition process. The utility shall include a detailed explanation as to why the specific period lengths were chosen in light of the assessment of the needs of the utility system.
- (b) An annual electric demand and energy forecast developed pursuant to rule 3606.
- (c) An evaluation of existing resources developed pursuant to rule 3607.
- (d) An evaluation of transmission resources pursuant to rule 3608.
- (e) An assessment of planning reserve margins and contingency plans for the acquisition of additional resources developed pursuant to rule 3609.
- (f) An assessment of the need for additional resources developed pursuant to rule 3610.
- (g) The utility's plan for acquiring these resources pursuant to rule 3611, including a description of the projected emissions, in terms of pounds per MWh and short-tons per year, of sulfur dioxide, nitrogen oxides, particulate matter, mercury and carbon dioxide for any resources proposed to be

owned by the utility and for any new generic resources included in the utility's modeling for its resource plan.

- (h) The annual water consumption for each of the utility's existing generation resources, and the water intensity (in gallons per MWh) of the existing generating system as a whole, as well as the projected water consumption for any resources proposed to be owned by the utility and for any new generic resources included in the utility's modeling for its resource plan.
- (i) The proposed RFP(s) the utility intends to use to solicit bids for energy and capacity resources to be acquired through a competitive acquisition process, including model contracts, pursuant to rule 3615.
- (j) The proposed treatment of and possible future disclosure of bid prices, other bid details, costs of utility self-build proposals and details associated with such proposals, bid evaluation results, and any other information that the utility may seek to protect as highly confidential.
- (k) Descriptions of at least three alternate plans that can be used to represent the costs and benefits from increasing amounts of renewable energy resources, demand-side resources, or Section 123 resources as defined in rule 3602(o) potentially included in a cost-effective resource plan. One of the alternate plans shall represent a baseline case that describes the costs and benefits of the new utility resources required to meet the utility's needs during the planning period that minimize the net present value of revenue requirements and that complies with the Renewable Energy Standard, 4 CCR 723-3-3650 et seq., as well as with the demand-side resource requirements under § 40-3.2-104, C.R.S. The other alternate plans shall represent alternative combinations of resources that meet the same resource needs as the baseline case but that include proportionately more renewable energy resources, demand-side resources, or Section 123 resources. The utility shall propose a range of possible future scenarios and input sensitivities for the purpose of testing the robustness of the alternate plans under various parameters.
- (l) An assessment of the costs and benefits of the integration of intermittent renewable energy resources on the utility's system, including peer-reviewed studies, consistent with the amounts of renewable energy resources the utility proposes to acquire.

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[indicates omission of unaffected rules]

RENEWABLE ENERGY STANDARD

3650. Applicability.

- (a) Rules 3650 ~~to through 3665-3668~~ shall apply to all investor owned jurisdictional electric utilities in the state of Colorado that are subject to the Commission's regulatory authority.
- (b) Rules 3651, 3652, 3654(b), (d) through (i), and (l), 3659(a)(I) through (a)(V), (b), (d) through (i), 3660(l), 3661(b), (c), (g), and (i), 3662(a)(I), (a)(II), (a)(IV) through (a)(X), (a)(XIII), (a)(XV), (b), (d) and (e), and ~~3665-3667~~ shall apply to cooperative electric associations in the state of Colorado.

- (c) Rules 3651, 3652, 3653, 3654(b), (c), (d) through (i) and (l), 3659(a)(l) through (a)(V), (b), (d) through (i) shall apply to municipally owned electric utilities in the state of Colorado, which are QRUs.
- (d) The board of directors of each municipally owned electric utility not subject to these rules may, at its option, submit the question of whether to be subject to these rules to its consumers on a one meter equals one vote basis. Approval by a majority of those voting in the election shall be required for such inclusion, providing that a minimum of 25 percent of eligible consumers participates in the election.
 - (l) Within 45 days of the conclusion of any vote to be subject to these rules, the municipally owned electric utility shall provide written notification of the outcome of the vote to the Director of the Commission.
- (e) Nothing in these rules is intended to expand the Commission's regulatory oversight and powers over municipally owned electric utilities or cooperative electric associations.

3651. Overview and Purpose.

The purpose of these rules is to establish a process to implement the renewable energy standard for qualifying retail utilities in Colorado, pursuant to § 40-2-124, C.R.S.

Section 40-2-124, C.R.S., was enacted by the voters of the State of Colorado as 2004 Ballot Amendment 37 and was amended by the 2005 Colorado General Assembly by Senate Bill 05-143. Section 40-2-124 was further amended by the 2007 Colorado General Assembly by House Bill 07-1281. The 2008 Colorado General Assembly amended, by House Bill 08-1160, provisions of § 40-2-124, C.R.S., and added § 40-9.5-118, C.R.S., to cause cooperative electric associations to come under the Commission's interconnection rules. The 2009 Colorado General Assembly further amended § 40-2-124, C.R.S., by Senate Bill 09-051, and the 2010 Colorado General Assembly again amended § 40-2-124, C.R.S., by House Bills 10-1001, and 10-1418. House Bill 10-1342, which added the concept of community solar gardens to § 40-2-127, C.R.S., and referenced § 40-2-124, C.R.S., is also reflected in these rules. House Bill 10-1349 also created the Re-energize Colorado program concerning net metering for the Colorado Division of Parks and Outdoor Recreation.

Energy is critically important to Colorado's welfare and development, and its use has a profound impact on the economy and environment. Growth of the state's population and economic base will continue to create a need for new energy resources, and Colorado's renewable energy resources are currently underutilized.

Therefore, in order to save consumers and businesses money, attract new businesses and jobs, promote development of rural economies, minimize water use for electricity generation, diversify Colorado's energy resources, reduce the impact of volatile fuel prices, and improve the natural environment of the state, it is in the best interests of the citizens of Colorado to develop and utilize renewable energy resources to the maximum practicable extent.

It is the policy of this State to encourage local ownership of renewable energy generation facilities to improve the financial stability of rural communities.

3652. Definitions.

The following definitions apply only to rules 3650 – 366~~86~~. In the event of a conflict between these definitions and a statutory definition, the statutory definition shall apply.

- (a) "Annual compliance report" means the report a QRU is required to file annually with the Commission pursuant to rule 3662 to demonstrate compliance with the Renewable Energy Standard.
- (b) "Biomass" means nontoxic plant matter consisting of agricultural crops or their byproducts, urban wood waste, mill residue, slash, or brush; animal wastes and products of animal wastes; or methane produced at landfills or as a by-product of the treatment of wastewater residuals. With respect to nontoxic plant matter obtained from forests, both slash and brush shall mean products and materials derived from forest restoration and management, including, but not limited to, harvesting residues, precommercial thinnings, and materials removed as part of a federally recognized timber sale or removed to reduce hazardous fuels, to reduce or contain disease or insect infestation, or to restore ecosystem health.
- (c) "Community-based project" means a project located in Colorado that meets the following three conditions: (a1) the project that is owned by individual residents of a community, by an local nonprofit organization or, a cooperative that is controlled by individual residents of the community, by a local government entity, or by a tribal council; (b2) the project's whose generating capacity does not exceed thirty 30 megawatts; and (c3) for which there exists a resolution of support adopted by the local governing body of each local jurisdiction in which the project is to be located.
- (d) "Community solar garden" or "CSG" means a solar electric generation facility with a nameplate rating of two megawatts or less that is located in or near a community served by an investor owned QRU where the beneficial use of the renewable energy generated by the facility belongs to the subscribers of the CSG. A CSG shall have at least ten CSG subscribers. A CSG shall be deemed to be located on the site of each subscribing customer's facilities for the purpose of crediting the CSG subscribers' bills for the renewable energy purchased from the CSG by the investor owned QRU. The renewable energy generated by a CSG shall be sold only to the investor owned QRU serving the geographic area where the CSG is located. The renewable energy generated by a CSG shall constitute retail renewable distributed generation under paragraph 3652(aa).
- (de) "Compliance plan" means the annual plan a QRU is required to file with the Commission pursuant to rule 3657.
- (ef) "Compliance year" means a calendar year for which the renewable energy standard is applicable.
- (g) "CSG owner" means the owner of the solar generation facilities installed at a CSG that contracts to sell the unsubscribed renewable energy and RECs generated by the CSG to an investor owned QRU. A CSG subscriber organization operating a CSG not owned by it will be deemed to be a CSG owner for purposes of these rules. A CSG owner may be the QRU or any other for-profit or nonprofit entity or organization, including a CSG subscriber organization.

- (h) “CSG subscriber” means a retail customer of an investor owned QRU who owns a subscription to a CSG and who has identified one or more premises served by the QRU to which the CSG subscription shall be attributed.
- (i) “CSG subscriber organization” means any for-profit or nonprofit entity permitted by Colorado law and whose sole purpose shall be:
- (I) To beneficially own and operate the CSG; or
 - (II) To operate the CSG that is built, owned, and operated by a third party under contract with such CSG subscriber organization.
- (j) “CSG subscription” means a proportionate interest in the beneficial use of the electricity generated by the CSG, including without limitation, the renewable energy and RECs associated with or attributable to the CSG.
- ~~(k)~~ “Eligible energy” means renewable energy and recycled energy.
- ~~(l)~~ “Eligible energy resources” are renewable energy resources or facilities that generate recycled energy.
- (m) “Eligible low-income CSG subscriber” means a residential customer of an investor owned QRU who:
- (I) Has a household income at or below one hundred eighty-five percent of the current federal poverty level, as published each year in the federal register by the U.S. Department of Health and Human Services; and
 - (II) Otherwise meets the eligibility criteria set forth in rules of the Colorado Department of Human Services adopted pursuant to § 40-8.5-105, C.R.S.
- ~~(n)~~ “On-site solar system” means a solar renewable energy system that is retail renewable distributed generation.
- ~~(o)~~ “Person” means Commission staff or any individual, firm, partnership, corporation, company, association, cooperative association, joint stock association, joint venture, governmental entity, or other legal entity.
- ~~(p)~~ “Qualifying retail utility” or “QRU” means any provider of retail electric service in the state of Colorado other than municipally owned electric utilities that serve 40,000 customers or fewer.
- ~~(q)~~ “Recycled energy” means energy produced by a generation unit with a nameplate capacity of not more than fifteen megawatts that converts the otherwise lost energy from the heat from exhaust stacks or pipes to electricity and that does not combust additional fossil fuel. Recycled energy does not include energy produced by any system that uses energy, lost or otherwise, from a process whose primary purpose is the generation of electricity, including, without limitation, any process involving engine-driven generation or pumped hydroelectricity generation.

- (~~tr~~) “Renewable distributed generation” means retail renewable distributed generation and wholesale renewable distributed generation.
- (~~ms~~) “Renewable energy” means energy generated from renewable energy resources including renewable distributed generation.
- (~~rt~~) “Renewable energy credit” or “REC” means a contractual right to the full set of non-energy attributes, including any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, directly attributable to a specific amount of electric energy generated from a renewable energy resource. One REC results from one megawatt-hour of electric energy generated from an eligible energy resource. For the purposes of these rules, RECs acquired from on-site solar systems before August 11, 2010 shall qualify as RECs from retail renewable distributed generation for purposes of demonstrating compliance with the renewable energy standard. RECs acquired from off-grid on-site solar systems prior to August 11, 2010 shall also qualify as RECs from retail renewable distributed generation for purposes of demonstrating compliance with the renewable energy standard.
- (~~ou~~) “Renewable energy credit contract” means a contract for the sale of renewable energy credits without the associated energy.
- (~~pv~~) “Renewable energy resource” means facilities that generate electricity by means of the following energy sources: solar radiation, wind, geothermal, biomass, hydropower, and fuel cells using hydrogen derived from eligible energy resources. Fossil and nuclear fuels and their derivatives are not eligible energy resources. Hydropower resources in existence on January 1, 2005 must have a nameplate rating of 30 megawatts or less. Hydropower resources not in existence on January 1, 2005 must have a nameplate rating of ten megawatts or less.
- (~~qv~~) “Renewable energy standard” means the electric resource standard for eligible energy resources specified in § 40-2-124, C.R.S.
- (~~fx~~) “Renewable energy standard adjustment” or “RESA” means a forward-looking cost recovery mechanism used by an investor owned QRU to provide funding for implementing the renewable energy standard.
- (~~sy~~) “Renewable energy supply contract” means a contract for the sale of renewable energy and the RECs associated with such renewable energy. If the contract is silent as to renewable energy credits, the renewable energy credits will be deemed to be combined with the energy transferred under the contract.
- (~~tz~~) “Retail electricity sales” means electric energy sold to retail end-use electric consumers by a QRU or an electric utility that is eligible to become a QRU pursuant to § 40-2-124(5)(b), C.R.S.,
- (~~uaa~~) “Retail renewable distributed generation” means a renewable energy resource that is located on the premises of an end-use electric consumer located within the service territory of a QRU or an electric utility that is eligible to become a QRU pursuant to § 40-2-124(5)(b), C.R.S, and is interconnected on the end-use electric consumer’s side of the QRU’s meter. For the purposes of this definition, the non-residential end-use electric customer, prior to the installation of the renewable energy resource, shall not have its primary business being the generation of electricity for retail or wholesale sale from the same facility. In addition, at the time of the installation of the

renewable energy resource, the non-residential end-use electric customer must use its existing facility for a legitimate commercial, industrial, governmental, or educational purpose other than the generation of electricity. Retail renewable distributed generation shall be sized to supply no more than one hundred twenty percent of the average annual consumption of electricity by the end-use electric consumer at that site. The end-use electric consumer's site shall include all contiguous property owned or leased by the consumer, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way.

- (bb) "Rural renewable project" means a renewable energy resource located in Colorado with a nameplate rating of 30 MW or less that interconnects to electric transmission or distribution facilities owned by a cooperative electric association or municipally owned utility at a point of interconnection of 69 kV or less.
- (vcc) "Service entrance capacity" means the capacity of the QRU's electric service conductors that are physically connected to the customer's electric service entrance conductors.
- (wdd) "Solar renewable energy system" means a system that uses solar radiation energy to generate electricity.
- (xee) "Standard rebate offer" or "SRO" means a standardized incentive program offered by a QRU to its retail electric service customers for on-site solar systems as set forth in rule 3658.
- (yff) "Wholesale renewable distributed generation" means a renewable energy resource located in Colorado with a nameplate rating of 30 megawatts or less that does not qualify as retail renewable distributed generation.

3653. Municipal Utilities.

- (a) Each municipally owned QRU implementing a renewable energy standard substantially similar to the provisions of § 40-2-124, C.R.S., shall submit a statement to the Commission that demonstrates its renewable energy standard program, at a minimum, meets the following criteria:
 - (I) The eligible energy resources shall be limited to those identified in subsection § 40-2-124(1)(a);
 - (II) The percentage requirements shall be equal to or greater in the same years than those identified in subsection § 40-2-124(1)(c)(V) and counted in the manner allowed by rule 3654; and
 - (III) The utility must have an optional pricing program in effect that allows retail customers the option to support through utility rates emerging renewable energy technologies.
- (b) The statement to be submitted by a municipally owned QRU is for information purposes only and is not subject to approval by the Commission. Upon filing of the certification statement, the municipally owned QRU shall have no further obligations under these rules.
- (c) Nothing in this section prohibits a municipally owned electric utility from buying and selling RECs.

3654. Renewable Energy Standard.

- (a) Each investor owned QRU shall generate or cause to be generated (through purchase or by providing rebates or other form of incentive) eligible energy, including the renewable distributed generation required under paragraphs 3655(a) and (b), in the following minimum amounts:
 - (I) Three percent of its retail electricity sales in Colorado for the compliance year 2007;
 - (II) Five percent of its retail electricity sales in Colorado for each of the compliance years 2008 through 2010;
 - (III) Twelve percent of its retail electricity sales in Colorado for each of the compliance years 2011 through 2014;
 - (IV) Twenty percent of its retail electricity sales in Colorado for each of the compliance years 2015 through 2019; and
 - (V) Thirty percent of its retail electricity sales in Colorado for each of the compliance years beginning in 2020 and continuing thereafter.
- (b) Each cooperative electric association QRU and municipally owned QRU shall generate or cause to be generated eligible energy in the following minimum amounts:
 - (I) One percent of its retail electricity sales in Colorado for each of the compliance years 2008 through 2010;
 - (II) Three percent of its retail electricity sales in Colorado for each of the compliance years 2011 through 2014;
 - (III) Six percent of its retail electricity sales in Colorado for each of the compliance years 2015 through 2019; and
 - (IV) Ten percent of its retail electricity sales in Colorado for each of the compliance years beginning in 2020 and continuing thereafter.
- (c) For municipal utilities that become municipally owned QRUs after December 31, 2006, the minimum percentage requirements of eligible energy shall begin in the first calendar year following qualification as follows:
 - (I) Years one through three: One percent of retail electricity sales;
 - (II) Years four through seven: Three percent of retail electricity sales;
 - (III) Years eight through twelve: Six percent of retail electricity sales; and
 - (IV) Years thirteen and thereafter: Ten percent of retail electricity sales.

- (d) For purposes of compliance with the renewable energy standard specified in rules 3654(b) and (c), for cooperative electric association QRUs and municipal QRUs, each kilowatt-hour of eligible energy generated from solar electric generation technology shall be counted as 3.0 kilowatt-hours of eligible energy, provided that the solar electric generation technology commenced producing electricity prior to July 1, 2015. For solar electric generation technology that commenced producing electricity on or after July 1, 2015, each kilowatt-hour of eligible energy generated from solar electric generation technology shall be counted as 1.0 kilowatt-hours of eligible energy for compliance purposes.
- (e) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy generated in Colorado, other than retail renewable distributed generation, shall be counted as 1.25 kilowatt-hours of eligible energy. Eligible energy generated by retail renewable distributed generation for which a QRU has entered into a purchase transaction prior to August 11, 2010 shall also be counted as 1.25 kilowatt-hours of eligible energy.
- (f) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy generated from a community-based project shall be counted as 1.5 kilowatt-hours of eligible energy.
- ~~(g) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy generated from a rural renewable project may be counted as two kilowatt-hours of eligible energy subject to the restrictions on rural renewable projects in rule 3666.~~
- ~~(gh)~~ For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy shall be subject to only one of the compliance multipliers in paragraphs 3654(d), (e), ~~(f)~~, or ~~(fg)~~.
- ~~(hi)~~ For purposes of compliance with the renewable energy standard, a QRU may generate, or cause to be generated, and count eligible energy or RECs for compliance:
 - (I) For the compliance year immediately preceding the compliance year during which they were generated, provided that such eligible energy and RECs are generated no later than July 1 of the calendar year immediately following the end of the compliance year for which they are being counted;
 - (II) For the compliance year during which they were generated; or
 - (III) For the five compliance years immediately following the compliance year during which they were generated.
 - (IV) Eligible energy or RECs generated on or after January 1, 2004 may be counted for compliance with this renewable energy standard. Eligible energy or RECs generated on or before December 31, 2003 shall not be eligible for, and shall not be counted for, compliance with this renewable energy standard. The eligibility for compliance of all eligible energy and RECs shall expire at the end of the fifth calendar year following the calendar year during which they were generated.
- ~~(ij)~~ For purposes of compliance with this renewable energy standard, a QRU may substitute the equivalent RECs for eligible energy.

- (jk) For the first four compliance years, 2007 through 2010, the QRU may borrow forward eligible energy and RECs generated during the following two compliance years. Any borrowed eligible energy and RECs generated during a compliance year must be made up by actual eligible energy and RECs generated during that compliance year or borrowed from subsequent compliance years, provided that the fourth compliance year is the last compliance year that borrowing forward may occur pursuant to this rule. For purposes of this rule, the term “borrow forward” means that a QRU may count eligible energy and RECs that it has not yet generated or caused to be generated to satisfy its current year obligations toward compliance with the renewable energy standard and the term “made up” means that any counting of eligible energy and RECs by a QRU in a compliance year that it had not actually generated nor caused to be generated shall be actually generated or caused to be generated in a subsequent year.
- (kl) For the first four compliance years, 2007 through 2010, no administrative penalties shall be assessed against an investor owned QRU if the failure to meet the renewable energy standard results from events beyond the reasonable control of the QRU which could not have reasonably been mitigated by the QRU.
- (lm) For purposes of compliance with this renewable energy standard, there shall be no “double counting” of eligible energy or RECs. RECs shall be used for a single purpose only, and shall be retired upon use for that purpose. Notwithstanding the foregoing, eligible energy and RECs generated or acquired by a QRU and counted toward compliance with a federal renewable energy standard may also be counted by the QRU toward compliance with the renewable energy standard.
- (mn) RECs associated with eligible energy sold by the investor owned QRU under an optional renewable energy pricing program shall be retired by the investor owned QRU and may not be counted by the investor owned QRU toward compliance with the renewable energy standard.
- (no) For purposes of compliance with this renewable energy standard, if a generation system uses a combination of fossil fuel and eligible energy resources to generate electricity, a QRU may count only as eligible energy the proportion of the total electric output of the generation system that results from the use of eligible energy resources. The QRU shall include in its annual compliance plan the method of calculation used to determine the proportion of eligible energy.
- (op) The QRU may generate, or cause to be generated, eligible energy without regard to economic dispatch procedures.

3655. Renewable Distributed Generation.

- (a) In conjunction with the renewable energy standard set forth in paragraph 3654(a), each investor owned QRU shall generate or cause to be generated (through purchase or by providing rebates or other form of incentive) renewable distributed generation in the following minimum amounts, unless the Commission amends such minimum amounts under paragraph 3655(c):
 - (I) One percent of its retail electricity sales in Colorado for each of the compliance years 2011 through 2012;
 - (II) One and one-fourth percent of its retail electricity sales in Colorado for each of the compliance years 2013 through 2014;

- (III) One and three-fourths percent of its retail electricity sales in Colorado for each of the compliance years 2015 through 2016;
 - (IV) Two percent of its retail electricity sales in Colorado for each of the compliance years 2017 through 2019;
 - (V) Three percent of its retail electricity sales in Colorado for each of the compliance years beginning in 2020 and continuing thereafter.
- (b) Of the amounts of renewable distributed generation set forth in paragraph 3655(a), at least one-half shall be derived from retail renewable distributed generation unless modified by the Commission under paragraph 3655(c).
 - (c) The Commission may change the minimum amounts of retail renewable distributed generation and wholesale renewable distributed generation set forth in paragraphs 3655(a) and (b) pursuant to a filing under paragraph 3657(a). The Commission may reduce the minimum amounts of retail renewable distributed generation and wholesale renewable distributed generation set forth in paragraphs 3655(a) and (b) for effect after December 31, 2014 upon finding that those minimum amounts are no longer in the public interest. In the event that the Commission finds that the public interest requires an increase in such minimum amounts after December 31, 2014, the Commission shall report such findings to the Colorado General Assembly.
 - (d) The investor owned QRU may propose in a compliance plan filing under rule 3657, or by a separate application, that the Commission reduce the percentages set forth in paragraph 3655(a) and (b).
 - (e) Renewable energy credits associated with retail renewable distributed generation and wholesale renewable distributed generation will be used to comply with the renewable distributed generation requirements as set forth in this rule 3655. Eligible energy and RECs produced by renewable distributed generation shall be governed by rule 3659, unless otherwise exempt from those provisions, and by paragraphs 3654(e) through (i) and (l) through (o).
 - (f) In a final decision concerning the investor owned QRU's compliance plan, as between residential and nonresidential retail renewable distributed generation, the Commission shall direct the investor owned QRU to allocate its expenditures for the acquisition of retail renewable distributed generation according to the proportion of RESA revenues derived from each of these customer groups; except that the investor owned QRU may acquire retail renewable distribution generation at levels that differ from these group allocations based upon market response to the QRU's programs.
 - (g) RECs generated from CSGs shall not be used to achieve more than 20 percent of the retail renewable distributed generation requirements as set forth in paragraph 3655(a) for compliance years 2011, 2012, and 2013.

3656. Resource Acquisition.

- (a) It is the Commission's policy that utilities should meet the renewable energy standard in the most cost-effective manner. To this end, the competitive acquisition provisions and exemptions of the Commission's Electric Resource Planning Rules shall apply to the acquisition of eligible energy resources by investor owned QRUs. Notwithstanding the exemptions in the Electric Resource Planning Rules, investor owned QRU shall acquire renewable distributed generation in accordance with a process set forth in a Commission-approved compliance plan or by separate application.
- (b) When evaluating resource acquisitions to comply with the renewable energy standard, the Commission shall consider, on a qualitative basis, factors that affect employment and the long-term economic viability of Colorado communities, including best value employment metrics.
- (c) For new eligible energy resources that the investor owned QRU acquires from third-party suppliers, the investor owned QRU shall request from the suppliers and provide to the Commission the following best value employment metrics:
 - (I) The availability of training programs, including training through apprenticeship programs registered with the United States Department of Labor, Office of Apprenticeship and Training;
 - (II) The employment of Colorado workers as compared to importation of out-of-state workers;
 - (III) Long-term career opportunities; and
 - (IV) Industry-standard wages, health care, and pension benefits.
- (d) In the event that an investor owned QRU proposes in a resource acquisition plan to construct a new eligible energy resource, the investor owned QRU shall provide the Commission with the same best value employment metrics as set forth in paragraph 3656(c).
- (e) The investor owned QRU may apply to the Commission, at any time, for review and approval of renewable energy credit contracts of any size, and renewable energy supply contracts with renewable distributed generation. The Commission will review and rule on these contracts within 90 days of their filing. The Commission may set the contract for expedited hearing, if appropriate, under the Commission's Rules of Practice and Procedure. If the QRU enters into a renewable energy supply contract or a renewable energy credit contract in a form substantially similar to the form of contract approved by the Commission as part of the investor owned QRU's compliance plan, that contract shall be deemed approved by the Commission under this rule.
- (f) Renewable energy supply contracts entered into after July 2, 2006:
 - (I) Shall be for the acquisition of both renewable energy and the associated RECs;
 - (II) May reflect a fixed price, or a price that varies by year;
 - (III) Shall have a minimum term of 20 years (or shorter at the sole discretion of the seller); and

- (IV) Shall require the seller to relinquish all REC ownership associated with contracted renewable energy to the buyer.
- (g) Renewable energy credit contracts entered into after July 2, 2006:
- (I) Shall be for the acquisition of RECs only;
 - (II) May reflect a fixed price, or a price that varies by time period; and
 - (III) Shall have a minimum term of 20 years if the REC is from an on-site solar system, except that such contracts for on-site solar systems of between 100 kilowatts and one megawatt may have a different term if mutually agreed to by the parties.
- (h) If the investor owned QRU intends to accept proposals as part of a competitive solicitation for eligible energy resources from the QRU or from an affiliate of the QRU, it shall include a written separation policy and name an independent auditor whom the utility proposes to hire to review and report to the Commission on the fairness of the competitive acquisition process. The independent auditor shall have at least five years' experience conducting and/or reviewing the conduct of competitive electric utility resource acquisition, including computerized portfolio costing analysis. The independent auditor shall be unaffiliated with the utility; and shall not, directly or indirectly, have benefited from employment or contracts with the utility in the preceding five years, except as an independent auditor under these rules. The independent auditor shall not participate in, or advise the utility with respect to, any decisions in the bid-solicitation or bid-evaluation process. The independent auditor shall conduct an audit of the utility's bid solicitation and evaluation process to determine whether it was conducted fairly. For purposes of such audit, the utility shall provide the independent auditor immediate and continuing access to all documents and data reviewed, used or produced by the utility in its bid solicitation and evaluation process. The utility shall make all its personnel, agents and contractors involved in the bid solicitation and evaluation available for interview by the auditor. The utility shall conduct any additional modeling requested by the independent auditor to test the assumptions and results of the bid evaluation analyses. Within 60 days of the utility's selection of final resources, the independent auditor shall file a report with the Commission containing the auditor's views on whether the utility conducted a fair bid solicitation and bid evaluation process, with any deficiencies specifically reported. After the filing of the independent auditor's report, the utility, other bidders in the resource acquisition process and other interested parties shall be given the opportunity to review and comment on the independent auditor's report.
- (i) Responses to competitive solicitations shall be evaluated and ranked by the investor owned QRU.
- (I) In addition to the cost of the eligible energy and RECs, the QRU may take into consideration the characteristics of the underlying eligible energy resource that may impact the ability of the bidder to fulfill the terms of the bid including, but not limited to project in-service date, resource reliability, viability, energy security benefits, amount of water used, fuel cost savings, environmental impacts including tradable emissions allowances savings, load reduction during higher cost hours, transmission capacity and scheduling, employment, the long-term economic viability of Colorado communities, best value employment metrics, and any other factor the investor owned QRU determines is relevant to the investor owned QRU's needs.

- (II) Bids with prices that vary by year will be evaluated by discounting the yearly prices at the utility discount rate.
 - (III) An investor owned QRU is not required to accept any bid and may reject any and all bids offered. However, each solicitation shall culminate in a report detailing the outcome of the solicitation and identifying which bids were selected, which were rejected, and why.
 - (IV) For purposes of comparing bids for RECs only with bids for electricity and RECs, the investor owned QRU shall assign a value for the electricity and subtract this value from the electricity and RECs bid, and evaluate bids on the basis of RECs only. The investor owned QRU shall include, as part of its compliance plan, a description of its methodology and price(s) it intends to use for this evaluation.
- (j) Within 15 days of the due date for bids in a competitive solicitation, the investor owned QRU shall notify respondents as to whether their bid has met the bid submission criteria.
 - (k) Upon ranking of eligible bids to a competitive solicitation, each investor owned QRU shall within 15 days indicate to all respondents with which proposals it intends to pursue a contract.
 - (l) For eligible energy resources greater than 250 kW, the owner shall provide, at the QRU's request, real time electronic access to the QRU to system operation data. In the event that an eligible energy resource greater than 250 kW also collects meteorological data, the owner shall provide, at the QRU's request, real time electronic access to the QRU to such meteorological data.

3657. QRU Compliance Plan.

- (a) Each investor owned QRU shall file for Commission approval, by application, a proposed plan detailing how the QRU intends to comply with these rules in accordance with the following schedule:
 - (I) On or before May 1, 2011, the investor owned QRU shall file a plan detailing how the QRU intends to comply with these rules during the 2012 compliance year.
 - (II) With the electric resource plan filed under rule 3603 on or before October 31, 2011, the investor owned QRU shall file a plan detailing how the QRU intends to comply with these rules during the resource acquisition period addressed in that rule 3603 filing.
 - (III) On or before October 31, 2013, the investor owned QRU shall file a plan detailing how the QRU intends to comply with these rules during a minimum compliance period extending from 2015 through 2017.
 - (IV) With the electric resource plan filed with the Commission under rule 3603 on or before October 31, 2015, and with each electric resource plan filed under rule 3603 thereafter, the investor owned QRU shall file a plan detailing how the QRU intends to comply with these rules during the resource acquisition period addressed in that rule 3603 filing.

- (V) At any time after October 31, 2011, the investor owned QRU may file an interim plan by application at the Commission explaining the reasons and changed circumstances that justify the interim plan.
- (b) Each QRU compliance plan shall include:
 - (I) The investor owned QRU's:
 - (A) Determination of the retail rate impact pursuant to rule 3661 and a presentation of projected RESA revenues, surcharges collected under paragraph 3664(h), expenditures, and deferred account balances (both positive and negative) over a minimum of ten years;
 - (B) For each eligible energy resource other than retail renewable distributed generation, a listing of each eligible energy resource whose on-going annual net incremental costs have been locked down and the value of the locked down on-going annual net incremental costs for each listed eligible energy resource. For retail renewable distributed generation, the QRU shall set forth this information in the aggregate, listed by the year in which the resources were acquired.
 - (C) For each eligible energy resource other than retail renewable distributed generation, a listing of the eligible energy resources whose on-going annual net incremental costs are expected to be locked down during the period covered by the compliance plan and the current projection of the locked down on-going annual net incremental costs for each listed eligible energy resource. For retail renewable distributed generation, the QRU shall set forth this information in the aggregate, listed by the year in which the resources were acquired.
 - (D) Estimate of its retail electricity sales over a minimum of ten years;
 - (E) Estimate of the eligible energy and RECs that the QRU already has acquired and the QRU's estimate of the additional eligible energy and RECs that will be needed to meet both the renewable energy standard under rule 3654 and the requirements for renewable distributed generation under rule 3655;
 - (F) Estimate of the funds that the QRU will have available to generate, or cause to be generated, additional eligible energy and RECs under the retail rate impact established in rule 3661, including, but not limited to, the RESA revenues collected from residential and nonresidential retail customers and other revenue resources;
 - (G) Plan to acquire additional eligible energy and RECs given the constraints of the retail rate impact specified at rule 3661, including the allocation of the funds available under the retail rate impact rule to acquire eligible energy or RECs from each of the following: retail renewable distributed generation to be acquired under rule 3658 from residential retail customers; retail renewable distributed generation to be acquired under rule 3658 from nonresidential retail customers; wholesale renewable distributed generation; and eligible energy resources with

nameplate ratings of more than 30 megawatts to be acquired pursuant to the Commission's Electric Resource Planning Rules;

- (H) The standard offers the investor owned QRU intends to offer customers to purchase RECs from on-site solar systems that are no larger than 500 kW and a proposal, at the discretion of the QRU, to reduce the SRO based on market conditions-;
 - (I) Proposal, at the discretion of the investor owned QRU, to advance funds from year to year to augment the amounts collected from retail customers through the RESA for the acquisition of more eligible energy resources;
 - (J) Proposed request for proposals including any standard contracts the investor owned QRU plans to use as part of a competitive acquisition process; ~~and~~
 - (K) Proposed ownership investment, if any, in eligible energy resources and estimate of whether its investment will provide net economic benefits to the QRU's customers, entitling the QRU to extra profit on its investment, pursuant to rule 3660~~7~~;
 - (L) Plan to purchase renewable energy and RECs from one or more CSGs over the period covered by the plan and subject to the requirements of rule 3665; and
 - (M) Plan to encourage eligible low-income customer subscriptions in CSGs pursuant to subparagraph 3665(d)(V).
 - (II) The acquisition process for eligible energy resources, pursuant to rule 3656;
 - (III) The treatment, tracking, counting and trading of RECs, pursuant to rule 3659;
 - (IV) Rules, regulations, and tariffs for the net metering for renewable energy resources, pursuant to rule 3664; and
 - (V) Application forms, standard agreements, and general procedures for the investor owned QRU's SRO programs under rule 3658 and for the interconnection of renewable energy resources pursuant to rule ~~3665~~3667.
- (c) The Commission shall either approve the investor owned QRU's compliance plan or order modifications to the compliance plan. Investor owned QRU actions under an approved compliance plan shall carry a rebuttable presumption of prudence.
- (d) The investor owned QRU may apply to the Commission at any time for approval of amendments to an approved compliance plan.

3658. Standard Rebate Offer.

- (a) Each investor owned QRU shall make available to its retail electricity customers a standard rebate offer (SRO) expressed in terms of dollars per watt for on-site solar systems that become operational on or after December 1, 2004. The SRO shall be \$2.00 per watt except that the Commission may set the SRO at a lower amount upon finding that market changes support such lower amount.
- (b) The maximum rebate per site shall be 100 kW times the SRO. At the investor owned QRU's option, the SRO may be paid based upon the direct current (DC) watts produced by the on-site solar systems. The SRO shall be contingent upon the transfer to the investor owned QRU of the RECs produced by the on-site solar system. Any RECs acquired by the investor owned QRU pursuant to such SRO program, regardless of whether the associated renewable energy is specifically metered or contractually specified without specific metering, may be counted by the investor owned QRU for purposes of compliance with the renewable energy standard.
- (c) When establishing an SRO below \$2.00 per watt, the Commission shall target an amount such that the SRO, in combination with the investor owned QRU's standard offers to purchase RECs from on-site solar systems and with other financial incentives and tax benefits, results in reasonable overall levels of incentives to the customers participating in the investor owned QRU's SRO programs.
- (d) With each compliance plan filed by the investor owned QRU under rule 3657, or by separate application, the investor owned QRU may propose that the Commission reduce the SRO in accordance with projected changes in the standard prices the investor owned QRU offers customers for RECs from on-site solar systems.
- (e) Investor owned QRUs may establish one or more standard offers to purchase RECs from on-site solar systems that meet the definition of paragraph 3652(h) so long as the on-site solar system is 500 kW or less in size. Subject to the retail rate impact in rule 3661:
 - (I) The investor owned QRU shall design standard offers that allow consumers of all income levels to obtain the benefits offered by on-site solar systems and that extend participation to consumers in all market segments eligible for SRO programs.
 - (II) The QRU shall have the discretion to determine, in a nondiscriminatory manner, the price it will pay for RECs from on-site solar systems that are no larger than 500 kW.
- (f) The SRO and the standard offers to purchase RECs from on-site solar systems shall meet the following requirements:
 - (I) The investor owned QRU need not offer a SRO for or purchase RECs from an on-site solar system smaller than 500 watts.
 - (II) The SRO and the standard offer to purchase RECs must be made available to all retail utility customers of the investor owned QRU on a non-discriminatory, first-come, first-served basis, based upon the date of contract execution.

- (III) Applicants who are accepted for the SRO rebates shall have one year from the date of contract execution to demonstrate substantial completion of their proposed on-site solar system. Substantial completion means the purchase and installation on the customer's premises of all major system components of the on-site solar system. Customers who do not achieve substantial completion within one year will not receive an SRO rebate, unless the substantial completion date is extended. When substantial completion of an on-site solar system has been achieved by an applicant pursuant to this rule, the RECs may be counted for purposes of compliance with the renewable energy standard. Within 30 days of substantial completion, the SRO rebate, pursuant to paragraphs 3658(a) and (b), and REC payment, pursuant to subparagraph 3658(f)(VIII), shall be paid to the applicant.
- (IV) With the exception of batteries, all on-site solar systems eligible for SRO rebates shall be covered by a minimum five-year warranty. Contracts will require customers to maintain the on-site solar system so that it remains operational for the term of the contract.
- (V) On-site solar systems must consist of equipment that is commercially available and factory new when installed on the original customer's premises to be eligible for the SRO rebate. Rebuilt, used, or refurbished equipment is not eligible to receive the rebate unless the equipment is transferred by a commercial tenant from another premise as permitted by subparagraph 3658(f)(VII)(C).
- (VI) Customers may contract to expand their on-site solar systems within program parameters and obtain a rebate for the expanded capacity up to the cap set forth in paragraph 3658(b).
- (VII) In order to receive the SRO rebate payment:
 - (A) A residential customer must enter into an agreement with the investor owned QRU, with a minimum term of 20 years, that transfers the RECs generated by the on-site solar system during the term of the agreement from the customer to the investor owned QRU.
 - (B) A commercial customer may enter into an agreement with the investor owned QRU, with a minimum term of 20 years, that transfers the RECs generated by the on-site solar system during the term of the agreement from the customer to the investor owned QRU; provided, however, that if the agreement is different than 20 years as permitted by subparagraph 3656(f)(III) the rebate shall be prorated to reflect the different term.
 - (C) Irrespective of the term of the REC transfer agreement between the commercial customer and the investor owned QRU, if the commercial customer is in a leased facility, the commercial customer must obtain the approval of the investor owned QRU, which shall not be unreasonably conditioned, delayed or withheld, and either permission from the commercial customer's landlord, or other documentation evidencing the tenant's unequivocal right to install an on-site solar system. Such commercial tenant customer may relocate the on-site solar system to a substitute premise reasonably acceptable to the investor owned QRU at any time during the term of the agreement, provided that:

- (i) Payment for all RECs shall be made by the investor owned QRU on a metered basis;
 - (ii) The new location is within the investor owned QRU's service territory;
 - (iii) The on-site solar system is not out of operation for more than 90 days due to such relocation;
 - (iv) The agreement is extended for the period of time the on-site solar system is out of operation; and
 - (v) The customer bears the cost of relocating the production meter, or the costs of setting a new production meter, at the new location.
- (D) If the on-site solar system of a commercial customer is out of operation for more than 90 days, the investor owned QRU may terminate the agreement and upon such termination the customer must repay the pro rata share of the rebate based on the number of years remaining in the term of the agreement.
- (VIII) Except for on-site solar systems of commercial tenants who opt for an agreement under subparagraph 3658(f)(VII)(C), and except for solar facilities that are owned by entities other than the on-site consumer of the solar energy, for on-site solar systems, up to and including ten kW, that become operational on or after December 1, 2004, the investor owned QRU shall offer to make a one-time payment, in addition to the standard rebate payment, for the RECs contracted to be transferred from the customer to the investor owned QRU. Any customer that receives the rebate payment and one-time REC payment under this program shall not be entitled to any other compensation for the RECs contracted to be transferred to the investor owned QRU. To facilitate installation of these small systems, all procedures, forms, and requirements shall be clear, simple, and straightforward to minimize the time and effort of homeowners and small businesses.
- (IX) For on-site solar systems greater than ten kW that become operational on or after December 1, 2004, and for all on-site solar systems of whatever size that are owned by an entity other than the on-site consumer of the solar energy, the investor owned QRU, in addition to the standard rebate payment, shall offer to pay for the RECs contracted to be transferred from the customer to the investor owned QRU. Such SO-RECs and the associated payments shall be determined by the specifically metered renewable energy output from the on-site solar system.
- (X) The customer or its representative shall provide a calculation of the annual expected kilowatt-hour production from the customer's on-site solar system. The customer or its representative shall provide the following documentation to back up the customer's calculation:
- (A) Tilt of the system in degrees (horizontal = 0 degrees);
 - (B) Orientation of the system in degrees (south = 180 degrees);

- (C) A representation that the orientation of the system is free of trees, buildings and or other obstructions that might shade the system measured from the center point of the solar array through a horizontal angle plus or minus 60 degrees and a through vertical angle between 15 degrees and 90 degrees above the horizontal plane.
- (D) A calculation of the annual expected kWh of electricity produced by the system. For PV systems, the calculation of annual expected kWh of electricity will be based on the public domain solar calculator PVWatts Version 1 (or equivalent upgrade).
 - (i) The weather station that is either nearest to or most similar in weather to the installation site;
 - (ii) The system output rating which equals the module rating times the inverter efficiency times the number of modules;
 - (iii) Array type: fixed tilt, single axis tracking, or 2 axis tracking; For variable tilt systems, the PVWatts calculations can be run multiple times corresponding to the number of times per year that the system tilt is expected to be changed using those months corresponding to the specific tilt angle used;
 - (iv) Array tilt (degrees); and
 - (v) Array azimuth (degrees).
- (E) In the event PVWatts is no longer available, an equivalent tool shall be established.
- (F) For on-site solar systems up to and including ten kW, the REC payment may be adjusted, either up or down, based on the calculation of expected kWh of electric output derived from subparagraph 3658(f)(X)(D) as compared with an optimally oriented fixed, i.e. non-tracking, system at the customer's location, but only if the calculated system output differs from the optimally oriented system output by more than ten percent.
- (XI) The level of REC payments for systems of ten kW and smaller offered in connection with an investor owned QRU's SRO program may be adjusted from time to time as needed to achieve compliance with the renewable energy standard.
- (XII) Except for on-site solar systems of commercial tenants who opt for an agreement under subparagraph 3658(f)(VII)(C), the on-site solar system installed must remain in place on the customer's premises for the duration of its contract life. However, all customer equipment must have electrical connections in accordance with industry practice for permanently installed equipment, and it must be secured to a permanent surface (e.g., foundation, roof, etc.). Any indication of portability, including, but not limited to, wheels, carrying handles, dolly, trailer or platform, will render any on-site solar system ineligible for participation and payments under the SRO program.

- (XIII) On-site solar systems installed on an apartment building must either be owned and operated by the owner of the building or the owner of the facility must provide documentation of the right to install and maintain the solar panels on the apartment building premises for 20 years. Each on-site solar system must be dedicated to a specific meter and the load at the meter must meet the size limits for net metering of on-site solar systems.
- (XIV) On-site solar systems installed on condominiums must be owned by the condominium owner, or by a third party on behalf of the condominium owner, and metered to that owner's unit. The owner must provide documentation that the owner has the legal right to install and maintain the solar panels at the site for the term of the 20-year agreement. If the on-site solar system serves a general common element common area, the contract will be with the condominium owners' association. If the on-site solar system serves a limited common element common area, the contract will be with the condominium unit owner or owners.
- (g) The investor owned QRU shall modify the standard contracts for its SRO programs to enable governmental entities to participate in such programs.
- (h) Sales of electricity may be made by an owner or operator of an on-site solar system to the end-use electric consumer located at the site of the on-site solar system. If the on-site solar system is not owned by the electric consumer, the investor owned QRU shall pay for the RECs on a metered basis. The owner or operator of the on-site solar system shall pay the cost of installing the production meter.

3659. Renewable Energy Credits.

- (a) Renewable energy credits and recycled energy will be used to comply with the renewable energy standard. Eligible RECs acquired by contracts or through a system of tradable renewable energy credits, exchanges, or brokers may also be used by QRUs to comply with this standard. In calculating compliance, the total RECs acquired from renewable energy resources during a compliance year may include:
 - (I) RECs generated by renewable energy resources owned by the QRU or by a QRU affiliate;
 - (II) RECs acquired by the QRU pursuant to renewable energy supply contracts;
 - (III) RECs acquired by the QRU pursuant to renewable energy credit contracts;
 - (IV) RECs acquired by the QRU pursuant to a standard offer program;
 - (V) RECs acquired through a system of tradable renewable energy credits, from exchanges or from brokers
 - (VI) RECs carried forward from previous compliance years, pursuant to paragraph 3654(h);
 - (VII) RECs borrowed forward from future compliance years, pursuant to paragraph 3654(j).

- (b) RECs representing electricity generated at renewable energy resources shall be counted for compliance purposes consistent with the compliance multipliers in paragraphs 3654(d), (e), and (f).
- (c) The Commission shall not restrict the investor owned QRU's ownership of RECs if the investor owned QRU complies with both the renewable energy standard established in rule 3654 and the requirements for renewable distributed generation established in rule 3655 and if the investor owned QRU complies with the retail rate impact established in paragraph 3661(a).
- (d) All contracts between QRUs and the owners of renewable energy resources entered into after the effective day of these rules shall clearly specify the entity who shall own the RECs associated with the energy generated by the facility.
- (e) A REC shall expire at the end of the fifth calendar year following the calendar year during which it was generated.
- (f) RECs shall be used for a single purpose only, and shall expire or be retired upon use for that purpose. All RECs utilized by the QRU to comply with the renewable energy standard:
 - (I) May not be sold or otherwise exchanged with any other party, or in any other state or jurisdiction;
 - (II) May not be included within a blended energy product certified to include a fixed percentage of renewable energy in any other state or jurisdiction;
 - (III) May be counted simultaneously toward compliance with a federal renewable portfolio standard and with the renewable energy standard.
- (g) RECs that are generated with fuel cell energy using hydrogen derived from an eligible energy resource are eligible for compliance purposes only to the extent that the energy used to generate the hydrogen did not create renewable energy credits.
- (h) If a renewable energy system uses a renewable energy resource in combination with a nonrenewable energy source to generate electricity, only the RECs associated with the proportion of the total electric output of the renewable energy system that results from the use of renewable energy resources shall be eligible to count toward compliance with the renewable energy standard.
- (i) If an on-site solar systems of ten kW or below has received a one-time REC payment from a QRU under rule 3658, the QRU shall be entitled to count the anticipated RECs purchased by the one-time REC payment for compliance with the renewable energy standard even if the on-site solar systems is removed or becomes inoperable.
- (j) All renewable energy resources located in the region covered by the Western Electricity Coordinating Council (WECC) that generate RECs used by an investor owned QRU for compliance with the renewable energy standard shall be registered with the Western Renewable Energy Generation Information System (WREGIS) and shall record their RECs in WREGIS, after August 11, 2010, with the exception of retail renewable distributed generation facilities less than one megawatt.

- (k) All investor owned QRUs shall register in WREGIS. The investor owned QRU shall recover through its RESA the costs associated with WREGIS that are allocated to its retail customers.
- (l) To the extent that the investor owned QRU acquires RECs from renewable energy resources that are not recorded in WREGIS, the investor owned QRU shall record such RECs in a central database. The database shall include, but not be limited to, a list of the renewable distributed generation whose RECs the investor owned QRU intends to use for compliance with the renewable energy standard under rule 3654 and the requirements for renewable distributed generation under rule 3655, including ~~their~~ its type, location, owner, operator, and start of operation. ~~The~~ database shall also record the RECs generated and the ownership, transfer and retirement of those RECs.
- (m) An investor owned QRU may own and use for compliance with the renewable energy standard RECs generated by renewable energy resources that the Commission has designated as new energy technologies or demonstration projects under § 40-2-123(1)~~(a)~~, C.R.S., and that are therefore not subject to the retail rate impact established in rule 3661.
- (n) The investor owned QRU shall have the discretion to sell or trade RECs at any time as long as the investor owned QRU obtains and retires sufficient levels of RECs to comply with the renewable energy standard under rule 3654 and the requirements for renewable distributed generation under rule 3655. Proceeds from the sales of RECs shall be credited to the account associated with the RESA. The investor owned QRU may seek approval in an annual compliance plan filing under rule 3657 or by separate application to retain as earnings a percentage of the funds from REC sales that the investor owned QRU expects to have available to acquire eligible energy and RECs under the retail rate impact in rule 3661 for the compliance year. In considering the percentage of funds to be retained as earnings by the investor owned QRU, the Commission shall take into account the development of the REC market and the expected value added by the investor owned QRU in marketing and trading the RECs.

3660. Cost Recovery and Incentives.

- (a) The investor owned QRU shall be entitled to timely cost recovery through retail rate mechanisms for all funds prudently expended to comply with these rules, including the costs the QRU incurs to administer the standard rebate offer and the acquisitions of eligible energy and RECs. The QRU shall be entitled to recover its investment and expenses associated with these rules through appropriate adjustment clauses, including the RESA, that allow recovery of expenditures without the full resetting of electric rates.
- (b) In its compliance plans and reports, the investor owned QRU must demonstrate that the RESA satisfies the retail rate impact established in paragraph 3661(a).
- (c) So long as the RESA does not exceed the retail rate impact under paragraph 3661(a) and in accordance with either an approved resource plan under the Commission's Electric Resource Planning Rules or an approved compliance plan under rule 3657, the investor owned QRU may:
 - (l) Collect and bank funds in the RESA account for acquiring eligible energy in future periods.

- (II) Advance funds from compliance year to compliance year to augment the amounts collected from the RESA for the acquisition of more eligible energy resources.
- (d) Each QRU shall separately identify the RESA on its customers' bills.
- (e) Interest shall accrue on the deferred balance (positive or negative) of the RESA account at the investor owned QRU's most recent authorized after-tax weighted average cost of capital, so long as the RESA does not exceed two percent of the total annual electric bill for each customer.
- (f) If the investor owned QRU incurs costs in acquiring eligible energy to meet the renewable energy standard, the QRU shall be entitled to carry forward these costs to a future year for cost recovery so long as the investor owned QRU complies with limit on the retail rate impact under paragraph 3661(a).
- (g) The investor owned QRU shall be entitled to earn an extra profit on the QRU's ownership investment in a specific eligible energy resource if that eligible energy resource provides net economic benefits to customers. For these investments, the QRU shall be entitled to a return equal to the QRU's most recent authorized rate of return on rate base plus a bonus limited to 50 percent of the of the net economic benefit as long as the QRU is in compliance with these rules implementing the renewable energy standard. If the QRU's investment in a specific eligible renewable energy resource does not provide a net economic benefit to customers, the QRU shall be entitled to a return equal to the QRU's most recent authorized rate of return on rate base.
 - (I) For the purposes of this rule 3660, net economic benefit shall mean that the specific eligible energy resource in which the QRU has made an ownership investment results in an average retail rate impact less than the rate impact that would have resulted from the acquisition of the alternative eligible energy resource meeting the same component of the renewable energy standard that would have been selected absent the QRU's investment. The QRU shall set forth its calculation of the proposed net economic benefit either at the time of a compliance plan filing, an annual compliance report filing, a QRU rate filing or by application. The Commission shall determine the level of the net economic benefit and the level of the bonus after review of the utility's filing. The Commission may set the matter for hearing if appropriate under the Commission's Rules of Practice and Procedure.
 - (II) To the extent that a QRU uses computer modeling in its analysis of net economic benefit, the QRU shall use the same methodologies and assumptions it used in its most recently approved electric resource planning case, except as otherwise approved by the Commission. Confidential information may be protected in accordance with rules 1100 through 1102 of the Commission's Rules of Practice and Procedure.
 - (III) Any net economic benefit for which the QRU qualifies to receive a bonus shall be charged against the RESA account.
- (h) An investor owned QRU may propose to develop and own, in whole or in part, a new eligible energy resource by filing an application with the Commission. The Commission may set the matter for hearing, if appropriate, under the Commission's Rules of Practice and Procedure. For the purpose of this paragraph 3660(h):

- (I) A QRU shall be allowed to develop and own as utility rate-based property, without being required to comply with the competitive bidding requirements in rule 3656, up to twenty-five percent of the total new eligible energy resources that the QRU acquires from entering into power purchase agreements and from developing and owning resources after March 27, 2007 if the Commission determines that the QRU-owned new eligible energy resource can be constructed at a reasonable cost compared to the cost of similar eligible energy resources available in the market.
- (II) A QRU shall be allowed to develop and own as utility rate-based property, without being required to comply with the competitive bidding requirements in rule 3656, up to fifty percent of the total new eligible energy resources that the QRU acquires from entering into power purchase agreements and from developing and owning resources after March 27, 2007 if the Commission determines that the QRU-owned new eligible energy resource can be constructed at a reasonable cost compared to the cost of similar eligible energy resources available in the market and that the proposed new eligible energy resource would provide significant economic development, employment, energy security, or other benefits to the state of Colorado.
- (III) The QRU shall be allowed to develop and own as utility rate-based property more than the percentages of total new eligible energy resources set forth in rules 3660(h)(I) and (h)(II), if the QRU bids to own the new eligible energy resources in a competitive solicitation and is selected as a winning bidder in that competitive solicitation.
- (IV) The QRU may develop and own new eligible energy resources either solely or jointly with other owners. If the QRU owns the new eligible energy resource jointly, the entire jointly owned resource shall count toward the percentage limitations set forth in paragraph 3660(h). For purposes of this rule, participation by any parent, affiliate or subsidiary of a QRU in a QRU's owned new eligible energy resource shall count towards the percentage limitations. The QRU's rate base portion of any new eligible energy resource is limited to only the QRU's ownership percentage in the new eligible energy resource.
- (V) If the QRU intends to develop and own new eligible energy resources as provided for under subparagraphs 3660(h)(I) or (h)(II), it shall propose for Commission approval, in advance of filing its application under this rule, the name of the independent evaluator whom the utility intends to hire to conduct an assessment of whether the proposed new eligible energy resources can be constructed at a reasonable cost compared to the cost of similar eligible energy resources available in the market. The independent evaluator will develop a report to the Commission on its assessment of whether the proposed new eligible energy resources can be constructed at a reasonable cost compared to the cost of similar eligible energy resources available in the market. The independent evaluator shall have at least five years' experience conducting and/or reviewing the conduct of competitive electric utility resource acquisition, including computerized portfolio costing analysis. The independent evaluator shall be unaffiliated with the utility; and shall not, directly or indirectly, have benefited from employment or contracts with the utility in the preceding five years, except as an independent evaluator under these rules. The independent evaluator shall not participate in, or advise the utility with respect to, any decisions relating to the proposed new eligible energy resource. The utility shall conduct any additional modeling requested by the independent evaluator to test the assumptions and results of the cost analyses. The independent evaluator's report shall be filed with

the utility's application for approval of the proposed new eligible energy resource. The evaluator's report shall contain the evaluator's views on whether the proposed new eligible energy project can be constructed at a reasonable cost compared to the cost of similar eligible energy resources available in the market.

- (VI) Nothing in paragraph 3660(h) shall prevent the Commission from waiving, repealing, or revising any Commission rule in a manner otherwise consistent with applicable law.
- (i) When an investor owned QRU applies for a certificate of public convenience and necessity, the Commission shall consider rate recovery mechanisms that provide for earlier and timely recovery of costs prudently and reasonably incurred by the QRU in developing, constructing, and operating the eligible energy resource, including: (a) rate adjustment clauses until the costs of the eligible energy resource can be included in the utility's base rates; and (b) a current return on the utility's capital expenditures during construction at the utility's most recently authorized weighted average cost of capital, including its cost of debt and its most recently authorized rate of return on equity, during the construction, startup, and operation phases of the eligible energy resource.
- (j) The utility is entitled to recover through rates, its prudently incurred expenditures. While not the exclusive method for establishing prudence, if the Commission approves a renewable energy supply contract or a renewable energy credit contract, the expenditures of the investor owned QRU under the contract shall be deemed to be prudent expenditures.
- (k) If the investor owned QRU recovers fuel and purchased energy expense through an incentive adjustment clause, the QRU shall not receive a benefit from the incentive adjustment clause for the energy generated from QRU-owned eligible renewable energy resources, but the QRU shall be entitled to recover all the fuel and purchased energy costs associated with the eligible energy resource.
- (l) Each wholesale energy provider shall offer to its wholesale customers that are cooperative electric associations the opportunity to purchase their load ratio share of the wholesale energy provider's electricity from eligible energy resources. If a wholesale customer agrees to pay the full costs associated with the acquisition of eligible energy resources and associated renewable energy credits by its wholesale provider by providing notice of its intent to pay the full costs within sixty days after the wholesale provider extends the offer, the wholesale customer shall be entitled to receive the appropriate credit toward the renewable energy standard as well as any associated renewable energy credits. To the extent that the full costs are not recovered from wholesale customers, a qualifying retail utility shall be entitled to recover those costs from retail customers.

3661. Retail Rate Impact.

- (a) The net retail rate impact of actions taken by an investor owned QRU to comply with the renewable energy standard shall not exceed two percent of the total electric bill annually for each customer of that QRU. However, a retail customer who installs renewable distributed generation may pay a RESA charge under paragraph 3664(h) that exceeds two percent of that customer's annual electric bill.
- (b) The net retail rate impact of actions taken by a cooperative electric association QRU to comply with the renewable energy standard shall not exceed one percent of the total electric bill annually for each customer of that QRU.

- (c) The net retail rate impact shall include the prudently incurred direct and indirect costs of all actions by a QRU to meet the renewable energy standard, including, but not limited to, program administration, rebates and performance-based incentives, payments under renewable energy supply contracts, payments under renewable energy credit contracts, payments made for RECs purchased through brokers or exchanges, computer modeling and analysis time, ~~and~~ QRU investment in and return on investment for eligible energy resources, and expenditures made to purchase unsubscribed energy and RECs from CSGs.
- (d) The administrative costs of a QRU to implement these rules are capped at ten percent per year of the total annual collection. A QRU may include in its compliance plan a waiver request of this rule during the initial ramp-up stage of the QRU's program.
- (e) For purposes of calculating the retail rate impact, the investor owned QRU shall use the same methods and assumptions it used in its most recently approved electric resource plan under the Commission's Electric Resource Planning Rules, unless otherwise approved by the Commission. Confidential information may be protected in accordance with rules 1100 through 1102 of the Commission's Rules of Practice and Procedure.
- (f) In its compliance plan filed under rule 3657, the investor owned QRU shall estimate the retail rate impact of its plan to comply with the renewable energy standard at the time of the beginning of the compliance period year and for a minimum of the ten years thereafter (the "RES planning period") and shall submit a report detailing the development of the retail rate impact estimate. The compliance plan shall identify the funds that need to be made available to the QRU, including RESA account balances over the RES planning period and any carried-forward deferred account balances from before the RES planning period, to comply with the renewable energy standard under rule 3654, the requirements for renewable distributed generation under rule 3655, and the retail rate impact under this rule 3661.
- (g) The retail rate impact shall be determined net of new alternative sources of electricity supply from non-eligible energy resources that are reasonably available at the time of the determination.
- (h) The basic method for investor owned QRUs for performing the estimate of the retail rate impact cap is as follows:
 - (I) The QRU shall determine all commercially available resources to the QRU, either through ownership or by contract, for the RES planning period. The projected costs of these available resources shall be reflected in both of the scenarios analyzed under this paragraph.
 - (II) The QRU shall determine the QRU's capacity and energy requirements over the RES planning period. The QRU shall develop two scenarios to estimate the resource composition of the QRU's future electric system and the cost and benefits of that system over the RES planning period. The first scenario, a renewable energy standard plan or "RES plan" should reflect the QRU's plans and actions to acquire new eligible energy resources necessary to meet the renewable energy standard. The second scenario, a "No RES plan" should reflect the QRU's resource plan that replaces the new eligible energy resources in the RES plan with new nonrenewable resources reasonably available.

- (III) Eligible energy resources whose acquisition commenced prior to July 2, 2006 shall be included in both the RES and No RES plans. Eligible energy resources acquired pursuant to a Commission-approved electric resource plan as new energy technologies or demonstration projects under § 40-2-123(1)(a), C.R.S., shall be included in both the RES and No RES plans.
 - (IV) The QRU shall compare the costs and benefits of the two plans to project the estimated annual net retail rate impact for the RES planning period. The maximum retail rate impact shall not exceed two percent of the total retail bill annually for each customer. To the extent the RES plan exceeds this maximum retail rate impact over the RES planning period, the investor owned QRU shall modify the RES plan to limit the acquisition of eligible energy resources so as not to exceed the maximum retail rate impact for the RES planning period. In calculating the net retail rate impact, the QRU shall take into account the projected net retail rate impact of the new eligible energy resources and the sum of the on-going annual net incremental costs of all eligible energy resources that the investor owned QRU has contracted to acquire under the SRO programs under rule 3658 and all eligible energy from resources that were constructed by the investor owned QRU or contracted for by the investor owned QRU after July 2, 2006.
 - (V) The on-going annual net incremental costs used in the retail rate impact calculation under subparagraph 3661(h)(IV) shall be established in each compliance plan filed under rule 3657. These costs shall then be locked down until the Commission issues a final decision regarding the investor owned QRU's next compliance plan filing when such costs shall be unlocked and reset to reflect changes in methods and assumptions used by the investor owned QRU under the Commission's Electric Resource Planning Rules, unless otherwise approved by the Commission. On-going annual net incremental costs locked down before October 31, 2015 shall not be reset until the Commission issues a final decision regarding the investor owned QRU's compliance plan filed on or before October 31, 2015.
 - (VI) If, in a compliance plan filed under rule 3657, the Commission approves a calculation of the retail rate impact that differs from a calculation in an earlier approved plan, the Commission shall allow the investor owned QRU to fully recover the costs of eligible energy resources and RECs already acquired by the investor owned QRU through one or more adjustment clauses.
- (i) If the retail rate impact does not exceed the maximum percent level, a QRU may acquire more than the minimum amount of eligible energy resources and RECs required under the renewable energy standard.

3662. Annual Compliance Report.

- (a) Each investor owned and cooperative electric association QRU shall file an annual compliance report no later than June 1 to report on the status of the QRU's compliance with the renewable energy standard for the most recently completed compliance year. Unless expressly noted otherwise, the annual compliance report of each investor owned and cooperative electric association QRU shall provide the following information for the most recently completed compliance year:

- (I) The total megawatt-hours sold by the QRU to its retail customers in Colorado and the associated eligible energy required for compliance with the renewable energy standard, including the requirements for retail renewable distributed generation and wholesale renewable distributed generation, as applicable;
- (II) The total amount and source of eligible energy and RECs acquired by the QRU during the compliance year for to meet the renewable energy standard, including the requirements for retail renewable distributed generation and wholesale renewable distributed generation, as applicable. The QRU shall separately identify amounts of eligible energy and RECs by each type of resource, including residential retail renewable distributed generation and nonresidential renewable distributed generation, as applicable;
- (III) The total amount of RECs by category acquired by the investor owned QRU during the compliance year and the total amount and source of eligible energy generated by the QRU-owned eligible energy resources;
- (IV) The total amount of eligible energy and RECs borrowed forward, pursuant to paragraph 3654(j), in previous compliance years that were made up during the compliance year to achieve compliance with each component of the renewable energy standard;
- (V) The total amount of eligible energy and RECs borrowed forward, pursuant to paragraph 3654(j), from future compliance years to achieve compliance with each component of the renewable energy standard in the compliance year;
- (VI) The total amount and source of eligible energy and RECs the QRU is carrying back from the year following the compliance year under subparagraph 3654(h)(I) to achieve compliance with each component of the renewable energy standard in the compliance year;
- (VII) The total amount of eligible energy and RECs the QRU has carried forward from prior calendar years under subparagraph 3654(h)(III) to apply in the compliance year for each component of the renewable energy standard.
- (VIII) The total amount of eligible energy and RECs the QRU has acquired in the compliance year that the QRU proposes to carry forward under subparagraph 3654(h)(III) to future years for each component of the renewable energy standard;
- (IX) The total amount of eligible energy and RECs the QRU has counted toward compliance with the renewable energy standard, including the requirements for retail renewable distributed generation and wholesale renewable distributed generation, as applicable, in the compliance year. The QRU shall separately identify amounts of renewable energy by each type of resource;
- (X) The total amount of renewable energy or RECs acquired by the QRU during the compliance year pursuant to the SRO program;
- (XI) The total amount of RECs retired by the investor owned QRU during the compliance year pursuant to a voluntary green pricing program;

- (XII) The total amount of RECs sold or traded by the investor owned QRU during the compliance year along with the profit and losses of such transactions and the method for calculating these margins;
 - (XIII) Whether the QRU has invested in any eligible energy resource and whether that resource is under construction or in operation; and
 - (XIV) The funds expended from the RESA account and other revenue sources and the retail rate impact of the eligible energy and RECs acquired by the investor owned QRU. If the investor owned QRU has not acquired sufficient eligible energy and RECs to meet the renewable energy standard under rule 3654 or the requirements for renewable distributed generation under rule 3655 due to the retail rate impact cap under rule 3661, the retail rate impact cap shall be recalculated based on the actual compliance year values. To the extent the recalculation of the retail rate impact cap demonstrates that additional funds are available based on actual compliance year values, the investor owned QRU shall use those additional funds to acquire RECs, to the extent necessary, to achieve the compliance levels set forth in rules 3654 and 3655 or until the additional funds have been spent if the investor owned QRU intends to claim that the retail rate impact cap prevented it from achieving compliance with the standard.
 - (XV) A description of the method used to develop the retail rate impact calculation.
 - (XVI) The proposed calculation of on-going annual net incremental costs for eligible energy resources that will come on line prior to the end of the following compliance year that have not been locked down pursuant to an investor owned QRU's compliance plan filing.
 - (XVII) The funds advanced by the investor owned QRU during the compliance year, if any, to augment the amounts collected from retail customers through the RESA.
 - (XVIII) The average hourly incremental cost of electricity during the compliance year, the total number of CSG kilowatt-hours which were unsubscribed for each CSG during that period, and the total kilowatt-hours and corresponding billing credits paid to CSG subscribers during the compliance year by each retail rate class for each CSG.
- (b) In the annual compliance report, the QRU must explain whether it achieved compliance with the renewable energy standard, including the requirements for retail renewable distributed generation and wholesale renewable distributed generation, as applicable, during the most recently completed compliance year, or explain why the QRU had difficulty meeting the renewable energy standard or the requirements for retail renewable distributed generation and wholesale renewable distributed generation, as applicable.
- (c) If, in its annual compliance report, the QRU did not comply with its renewable energy standard as a direct result of absolute limitations within a requirements contract from a wholesale electric supplier, then the QRU must explain whether it acquired a sufficient amount of either eligible RECs or documented and verified energy savings through energy efficiency and/or conservation programs, or both to rectify the noncompliance so as to excuse the investor owned QRU from any administrative fine or other administrative action.

- (d) On the same date that the QRU files its annual compliance report, the QRU shall post an electronic copy of its annual compliance report excluding confidential material on its website to facilitate public access and review.
- (e) On the same date that the QRU files its annual compliance report, it shall provide the Commission with an electronic copy of its annual compliance report excluding confidential material. The Commission may place the non-confidential portion of each QRU's annual compliance report on the Commission's website in order to facilitate public review.

3663. Compliance Report Review.

- (a) Compliance reporting for investor owned QRUs.
 - (I) In the annual compliance report, the QRU must explain whether it complied with its renewable energy standard and whether it satisfied the requirements for renewable distributed generation during the most recently completed compliance year.
 - (II) Upon receipt of the QRU annual compliance report, the Commission will provide notice to interested persons. Interested persons will have 30 days within which to provide comment to the Commission on the content of the annual compliance report. The QRU shall have the opportunity to reply to all comments on or before 45 days following the filing of the annual compliance report.
 - (III) The Staff of the Commission shall review the annual compliance report and any comments received and within 60 days of the filing of the annual compliance report make a recommendation to the Commission as to whether:
 - (A) No action should be taken by the Commission because the QRU has met the renewable energy standard and the requirements for renewable distributed generation and has correctly calculated the on-going annual net incremental costs for new eligible energy resources under subparagraph 3662(a)(XVI);
 - (B) Changes are needed to the compliance report; or
 - (C) A hearing is necessary.
 - (IV) Upon review of the QRU's annual compliance report, the Staff recommendation and all comments filed, the Commission will issue an order stating whether:
 - (A) The QRU complied with the renewable energy standard during the most recently completed compliance year;
 - (B) The QRU satisfied the requirements for renewable distributed generation during the most recently completed compliance year;
 - (C) The QRU has correctly calculated the on-going annual net incremental costs for new eligible energy resources under subparagraph 3662(a)(XVI); and
 - (D) A hearing is necessary.

- (V) If the Commission determines that the total number of RECs which the QRU generated or acquired from renewable energy systems during the most recently completed compliance year exceeded the total number of RECs which the QRU needed to comply with its renewable energy standard or with its requirements for renewable distributed generation for the recently completed compliance year:
 - (A) The Commission will state in its order the number of excess RECs which the QRU has available to carry forward from that compliance year or use for any other legal purpose.
 - (B) The QRU may use those excess RECs to comply with its renewable energy standard or with its requirements for renewable distributed generation for the five compliance years immediately following that compliance year.
- (b) Compliance report hearing for investor owned QRUs.
 - (I) If the Commission determines that the QRU did not comply with its renewable energy standard or with its requirements for renewable distributed generation during the most recently completed compliance year, the Commission will determine whether the QRU failed to meet the renewable energy standard because of the retail rate impact limit. The Commission will:
 - (A) State in its order the number of RECs by which the QRU failed to comply with its renewable energy standard or with its requirements for renewable distributed generation; and
 - (B) State whether the Commission is satisfied that the failure to meet the renewable energy standard or the requirements for renewable distributed generation was due to the retail rate impact limit. If the Commission is not satisfied on this issue, the Commission will issue a notice of possible noncompliance and schedule an evidentiary hearing on the matter.
 - (II) At the evidentiary hearing, if the QRU asserts that the renewable energy standard or the requirements for renewable distributed generation was not met due to the retail rate impact, it will have the burden of proof that it failed to comply with its renewable energy standard or its requirements for renewable distributed generation during the most recently completed compliance year because of the retail rate impact.
 - (III) At the evidentiary hearing, any party that advocates that the QRU failed to comply with the QRU's renewable energy standard or its requirements for renewable distributed generation during the most recently completed compliance year is the proponent of a Commission order finding non-compliance, and that party shall have the burden of proof that the QRU failed to comply with the renewable energy standard or the requirements for renewable distributed generation during the most recently completed compliance year. The QRU may assert that the renewable energy standard or the requirements for renewable distributed generation was not met due to events beyond the reasonable control of the QRU that could not have been reasonably mitigated.

- (IV) If the Commission determines that the QRU did not correctly calculate the on-going annual net incremental costs for new eligible energy resources under subparagraph 3662(a)(XVI), the Commission will determine the correct on-going annual net incremental costs to be applied in the retail rate impact calculation.
- (c) Compliance penalties for investor owned QRUs.
- (I) After notice and hearing, if the Commission determines that the QRU did not fully comply with its renewable energy standard or with its requirements for renewable distributed generation during the most recently completed compliance year, the Commission shall determine what, if any, administrative penalties should be assessed against the QRU for its failure to meet the renewable energy standard or the requirements for renewable distributed generation. In assessing penalties, the Commission may take one or more of the following actions:
 - (A) Determine the cost that would have been incurred by the QRU to fully comply with the renewable energy standard or the requirements for renewable distributed generation through the acquisition of RECs and assess all or part of this amount as part of an administrative penalty.
 - (B) No administrative penalties shall be assessed against a QRU if the amount of the shortfall is attributable to the retail rate impact limit.
 - (C) Assess no administrative penalties against a QRU if the failure to meet the renewable energy standard or the requirements for renewable distributed generation results from events beyond the reasonable control of the QRU that could not have been reasonably mitigated including, but not limited to, failures to perform by counterparties to renewable energy supply contracts and renewable energy credit contracts, events that delay the construction or commercial operation of QRU-owned eligible renewable energy resources, and lack of customer interest in the SRO.
 - (II) The cost of such administrative penalties shall not be recovered from retail customers through the QRU's rates.

3664. Net Metering.

- (a) Except as provided in paragraph 3664(i), aAll investor owned QRUs shall allow the customer's retail electricity consumption to be offset by the electricity generated from retail renewable distributed generation, provided that the generating capacity of the customer's facility meets the following two criteria:
 - (I) The retail renewable distributed generation shall be sized to supply no more than 120 percent of the customer's average annual electricity consumption at that site, where the site includes all contiguous property owned or leased by the consumer, without regard to interruptions in contiguity caused by easements, public thoroughfares, transportation rights-of-way, or utility rights-of-way; and

- (II) The rated capacity of the retail renewable distributed generation does not exceed the customer's service entrance capacity.

- (b) If a customer with retail renewable distributed generation generates renewable energy pursuant to paragraph 3664(a) in excess of the customer's consumption, the excess kilowatt-hours shall be carried forward from month to month and credited at a ratio of 1:1 against the customer's retail kilowatt-hour consumption in subsequent months. Within 60 days of the end of each calendar year, or within 60 days of when the customer terminates its retail service, the investor owned QRU shall compensate the customer for any accrued excess kilowatt-hour credits, at the investor owned QRU's average hourly incremental cost of electricity supply over the most recent calendar year. However, the customer may make a one-time election, in writing, on or before the end of a calendar year, to request that the excess kilowatt hours be ~~carried forward~~rolled over as a credit from month to month indefinitely until the customer terminates service with the investor owned QRU, at which time no payment shall be required from the investor owned QRU for any remaining excess kilowatt hour credits supplied by the customer.

- (c) The investor owned QRU shall file tariffs that comply with these rules within 30 days of the effective date of these rules.

- (d) A customer's retail renewable distributed generation shall be equipped with metering equipment that can measure the flow of electric energy in both directions. The investor owned QRU shall utilize a single bi-directional electric revenue meter.

- (e) If the customer's existing electric revenue meter does not meet the requirements of these rules, the investor owned QRU shall install and maintain a new revenue meter for the customer, at the company's expense. Any subsequent revenue meter change necessitated by the customer shall be paid for by the customer.

- (f) The investor owned QRU shall not require more than one meter per customer to comply with this rule 3664. Nothing in this rule 3664 shall preclude the QRU from placing a second meter to measure the output of a solar renewable energy system for the counting of RECs subject to the following conditions:
 - (I) For customer facilities over ten kW, a second meter shall be required to measure the solar renewable energy system output for the counting of RECs.

 - (II) For systems ten kW and smaller, an additional meter may be installed under either of the following circumstances:
 - (A) The QRU may install an additional production meter on the solar renewable energy system output at its own expense if the customer consents; or

 - (B) The customer may request that the QRU install a production meter on the solar renewable energy system output in addition to the revenue meter at the customer's expense.

 - (III) If the on-site solar system is not owned by the electric consumer, the owner or operator of the on-site solar system shall pay the cost of installing the production meter.

- (g) An investor owned QRU shall provide net metering service at non-discriminatory rates to customers with retail renewable distributed generation. A customer shall not be required to change the rate under which the customer received retail service in order for the customer to install retail renewable distributed generation. Nothing in this rule shall prohibit an investor owned QRU from requesting changes in rates at any time.
- (h) Unless the Commission approves under § 40-2-124(1)(g)(IV)(B), C.R.S., an alternative surcharge for net metered customers served by an investor owned QRU, the investor owned QRU shall bill a retail customer receiving net metering service a surcharge to supplement that customer's contribution toward the investor owned QRU's RESA account.
- (I) For retail renewable distributed generation that is production metered, the surcharge shall increase the customer's total contribution to the investor owned QRU's RESA account to the calculated level it would have been had all of the customer's consumption been billed at the investor owned QRU's applicable rates.
- (II) For retail renewable distributed generation that is not production metered, the surcharge shall increase the customer's total contribution to the investor owned QRU's RESA account as follows, based upon the size of the customer's system.
- (A) For customers with a system that is from 500 watts to ~~five~~ kW, a 500 kWh volume proxy shall be used. The 500 kWh volume proxy will be multiplied by the current monthly per kWh effective residential energy rate and effective riders. That product will then be multiplied by two percent to obtain the customer's RESA contribution amount.
- (B) For customers with a system that is from ~~five~~ kW up to ~~ten~~ kW, a 1,000 kWh volume proxy shall be used. The 1,000 kWh volume proxy will be multiplied by the current monthly per kWh effective residential energy rate and effective riders. That product will then be multiplied by two percent to obtain the customer's RESA contribution amount.
- (i) If more than one meter is used to measure the electricity consumption of a customer with retail renewable distributed generation at the premises where the retail renewable distributed generation is installed or to which a CSG subscription is attributed, the following provisions apply:
- (I) For the purpose of measuring electricity consumption for net metering under rule 3664, an investor owned QRU must, upon request from such customer, aggregate for billing purposes a meter to which the retail renewable distributed generation is physically attached (the designated meter) with one or more meters (the additional meters) in the manner set out in this subsection when:
- (A) Each additional meter is located on the customer's contiguous property; and
- (B) Each additional meter is used to measure only the customer's own electricity consumption.

- (II) A net metering customer must give at least 30 days notice to the QRU to request that additional meters be aggregated pursuant to this paragraph. The specific designated and additional meters must be identified at the time of such request. In the event that more than one additional meter is identified, the customer must designate the rank order for the additional meters to which kilowatt-hour credits are to be applied for net metering or billing credits to be applied for CSG subscriptions.
- (III) If, in a monthly billing period, the customer's retail renewable distributed generation generates more renewable energy than the customers' consumption as measured by the designated meter, the investor owned QRU will apply the excess kilowatt-hour credits to the additional meters in the rank order provided by the customer, and any remaining excess kilowatt-hour credits will be rolled over as a credit from month to month indefinitely until the customer terminates service with the investor owned QRU, at which time no payment shall be required from the investor owned QRU for any remaining excess kilowatt hour credits supplied by the customer.
- (IV) If, in a monthly billing period, the customer's billing credit associated with a CSG subscription exceeds the customers' bill from the investor owned QRU, the QRU will apply the excess billing credits to the additional meters in the rank order provided by the customer, and any remaining excess billing credits will be rolled over as a credit from month to month indefinitely until the customer terminates service with the investor owned QRU, at which time no payment shall be required from the investor owned QRU for any remaining billing credits associated with the customer's CSG subscription.
- (V) All meters aggregated pursuant to this paragraph must be on the same rate schedule for net metering under rule 3664.
- (j) Pursuant to § 24-33-115(2), C.R.S., for the Colorado Division of Parks and Outdoor Recreation (CDPOR) as the customer of an investor owned QRU, the investor owned QRU may, on a case-by-case or project-by-project basis:
- (I) Waive any existing limits on the net metering of electricity generated on contiguous property constituting the CDPOR customer's site;
- (II) Waive any existing limits on generating capacity or customer service entrance capacity if the customer proposes to make any necessary upgrades to its service entrance capacity at its own expense; and
- (III) Have the right of first refusal to purchase, and the right not to purchase, electricity from retail renewable distributed generation that is sized to provide more than 120 percent of the average annual consumption of electricity by the CDPOR customer at that site. If the investor owned QRU exercises its option to purchase excess generation under this subparagraph 3664(i)(III), it may claim the RECs based on such purchases.
- (IV) This paragraph does not confer upon CDPOR the right to make retail sales of electricity or distribute electricity to other state agencies or to noncontiguous properties.

3665. Community Solar Gardens.

The following rules shall apply to all community solar gardens (CSGs) developed pursuant to § 40-2-127, C.R.S. These rules shall not apply to cooperative electric associations or to municipally owned utilities.

(a) CSG subscriptions, subscribers, and subscriber organizations.

(I) Requirements for CSG subscribers, CSG subscriptions, and CSG subscriber organizations.

(A) No CSG subscriber may own more than a 40 percent interest in the beneficial use of the electricity generated by the CSG, including without limitation, the renewable energy and RECs associated with or attributable to the CSG.

(B) Each CSG subscription shall be sized to represent at least one kW of the CSG's nameplate rating and supply no more than 120 percent of the CSG subscriber's average annual electricity consumption at the premises to which the subscription is attributed, with a deduction for the amount of any existing retail renewable distributed generation at such premises. The minimum one kW sizing requirement herein shall not apply to subscriptions owned by an eligible low-income CSG subscriber.

(C) The premises to which a subscription is attributed by a CSG subscriber shall be served by the investor owned QRU and shall be within either the same municipality or the same county as the CSG except that, if a subscriber's designated premise is located in a county with a population of less than 20,000 residents according to the most recent available census figures, the designated premise may be in another county adjacent to the county where the CSG is located, so long as the adjacent county also has a population of less than 20,000 residents and is within the service territory of the QRU. The CSG subscriber may change from time to time the premises to which the CSG subscription shall be attributed, so long as the premises is within the geographical limits of the investor owned QRU.

(D) No CSG subscriber organization may own more than a 40 percent interest in the beneficial use of the electricity generated by the CSG, including without limitation, the renewable energy and RECs associated with or attributable to the CSG, after the CSG has operated commercially for 18 months.

(II) Share transfers and portability.

(A) A CSG subscription may be transferred or assigned to the associated CSG subscriber organization or to any person or entity who qualifies to be a subscriber in the CSG.

- (B) A CSG subscriber who desires to transfer or assign all or part of his subscription to the CSG subscriber organization, in its own name or to become unsubscribed shall notify the CSG subscriber organization and the transfer of the subscription to the CSG subscriber organization shall be effective upon such notification, unless the CSG subscriber specifies a later effective date.
- (C) A CSG subscriber who desires to transfer or assign all or part of his subscription to an eligible QRU customer desiring to purchase a subscription may do so only in compliance with the terms and conditions of the subscription and will be effective in accordance therewith.
- (D) If the CSG is fully subscribed, the CSG subscriber organization shall maintain a waiting list of eligible QRU customers who desire to purchase subscriptions. The CSG subscriber organization shall offer the CSG subscription of the CSG subscriber desiring to transfer or assign their interest, or a portion thereof, on a first-come, first-serve basis to customers on the waiting list.
- (E) The CSG subscriber organization and the investor owned QRU shall jointly verify that each CSG subscriber is eligible to be a subscriber in the CSG pursuant to subparagraph 3665(a)(l). The CSG subscriber roll shall include, at a minimum, the percentage share owned by the CSG subscriber, the effective date of the ownership of that percentage share, the CSG subscriber's designated meter at the premise to which the CSG subscription is attributed, and any additional meters to be aggregated with the designated meter under paragraph 3664(i), including the rank order of those meters for the purpose of applying billing credits. Changes in the CSG subscriber roll shall be communicated by the CSG subscriber organization to the QRU, in written or electronic form, as soon as practicable, but on no less than a monthly basis.
- (F) Prices paid for subscriptions in a CSG shall not be subject to regulation by the Commission.

(b) Production data.

- (I) The amount of renewable energy and RECs generated by each CSG shall be measured by a production meter installed by the investor owned QRU or the CSG owner and paid for by the CSG owner.
- (II) The owner of a CSG with a nameplate rating of one MW or greater shall register the CSG and report the CSG's production data to the WREGIS in accordance with paragraph 3659(j).
- (III) CSGs are required to provide real time reporting of production as specified by the QRU. For CSGs greater than 250 kW, the CSG owner shall provide real time electronic access to production data under paragraph 3656(l). A QRU may require different real time reporting for CSGs 250 kW and smaller.

(III) Production from the CSG shall be reported by the CSG subscriber organization to its CSG subscribers at least monthly. To facilitate the tracking of production data by CSG subscribers, CSG owners or CSG subscriber organizations are encouraged to provide website access to subscribers showing real time output from the CSG, if practicable, as well as historical production data.

(c) Billing credits and unsubscribed renewable energy.

(I) Compensation to the CSG subscriber for its share of the renewable energy generated by a CSG shall take the form of a billing credit paid to the CSG subscriber by the investor owned QRU.

(A) The billing credit shall be calculated by multiplying the CSG subscriber's share as a percentage of the renewable energy generated by the CSG times the QRU's total aggregate retail rate (including all billed components) as charged to the CSG subscriber.

(B) For the purpose of calculating the billing credit for a commercial or industrial customer on a demand tariff, the total aggregate retail rate (including all billed components) shall be determined by dividing the total electric charges to be paid by the customer to the investor owned QRU for the most recent calendar year (including demand charges) by the customers' total electricity consumption for that year. In the event that the designated premises to which the CSG subscription is attributed has less than one year of billing history, an estimate of the total annual charges shall be made by the QRU.

(C) Billing credits shall be reflected in the CSG subscriber's bill from the investor owned QRU no later than the 60th day after the QRU receives the information required to calculate the billing credit from the CSG subscriber organization.

(II) The investor owned QRU may assess a Commission-approved charge to cover the QRU's costs of delivering to the CSG subscriber's premises the renewable energy generated by the CSG, integrating the generation from the CSG into the utility's system, and administering the contracts with CSG owners and billing credits. This charge shall be a fixed amount and shall not reflect costs that are already recovered by the QRU from CSG subscribers through other charges. The QRU may seek a revision of this charge no more frequently than once per year in conjunction with its acquisition plan submitted under paragraph 3665(d).

(III) If, in a monthly billing period, the CSG subscriber's billing credit associated with a CSG subscription exceeds the customer's bill from the investor owned QRU, the excess billing credit will be rolled over as a credit from month to month indefinitely until the customer terminates service with the investor owned QRU, at which time no payment shall be required from the investor owned QRU for any remaining billing credits associated with the customer's CSG subscription..

(IV) The investor owned QRU shall purchase all of the renewable energy and RECs generated by a CSG if the QRU enters into a contract with the CSG owner pursuant to a Commission-approved acquisition plan under paragraph 3665(d). For RECs purchased by the QRU, the QRU and the CSG owner shall agree on whether subscribers will be compensated by a credit on each CSG subscriber's bill from the QRU or by a payment to the CSG owner.

(V) The investor owned QRU shall purchase from the CSG owner the unsubscribed renewable energy and RECs at a rate equal to the QRU's average hourly incremental cost of electricity supply over the immediately preceding calendar year.

(d) Acquisitions of renewable energy and RECs from CSGs.

(I) The Commission shall establish the minimum and maximum purchases of renewable energy from newly installed CSG generation (new CSGs) by the investor owned QRU for each compliance year under the renewable energy standard, except that for compliance years 2011 through 2013, the QRU shall not be obligated to purchase the renewable energy from more than six MW of new CSGs. For compliance years 2014 and thereafter, the Commission shall determine the minimum and maximum purchases of renewable energy and RECs from new CSGs of different segments based on the capacity of the CSGs (capacity segments) without regard to the six MW ceiling for the period 2011 through 2013. The Commission shall establish such minimum and maximum levels of purchases in consideration of a plan for the acquisition of renewable energy and RECs from CSGs filed by the investor owned QRU.

(A) For compliance years 2011, 2012, and 2013, the RECs acquired from CSGs shall not be used to meet more than 20 percent of the investor owned QRU's retail renewable distributed generation requirement under rule 3655.

(B) For compliance years 2011 through 2014, the investor owned QRU shall submit an application to obtain renewable energy and RECs from CSGs. Beginning with the 2015 compliance year, the investor owned QRU's plan for the acquisition of renewable energy and RECs from CSGs shall be part of the QRU's compliance plan filed pursuant to rule 3657.

(II) The investor owned QRU shall acquire renewable energy and RECs by entering into contracts with CSG owners. A CSG whose owner enters into a contract with the QRU shall be deemed to be part of the QRU's Commission-approved acquisition plan if the cumulative total of the nameplate capacity of the new CSGs acquired in the compliance year does not exceed the maximum purchases established by the Commission for that compliance year.

(III) For compliance years 2011, 2012, and 2013, each investor owned QRU shall issue one or more standard offers to purchase the RECs from CSGs of 500 kilowatts or less at prices that are comparable to the prices offered by the QRU under its existing standard offers for on-site solar generation.

- (A) For compliance years 2011, 2012, and 2013, each QRU shall acquire through these standard offers one-half of the CSG generation it plans to acquire, subject to receiving responses to these standard offers.
- (B) The QRU shall establish a reservation process for such standard offers that includes a refundable reservation deposit paid by the CSG owner to prioritize applications in the event that applications exceed the maximum purchases established by the Commission for that capacity segment. Such deposit shall not exceed \$100 per kilowatt. The deposit shall be refunded to the CSG owner within three months after the CSG achieves commercial operation.
- (IV) The investor owned QRU shall conduct due diligence on proposed contracts with new CSG owners to reasonably assure that the CSG owner and CSG subscriber organization have sufficient resources to successfully construct and commence operations of the CSG.

 - (A) Except for CSGs owned by governmental or quasi-governmental entities, the investor owned QRU shall be deemed to have conducted sufficient due diligence by requiring from the CSG owner documentation of escrowed funds of not less than \$100 per kW of the CSG's nameplate rating. The escrow shall be maintained by its terms until such time as the CSG commences commercial operation as certified by the QRU's acceptance of renewable energy generated by the CSG.
 - (B) If a CSG owner properly documents escrowed funds consistent with this subparagraph 3665(d)(IV), the investor owned QRU may not refuse to enter into a contract with the CSG owner for failure to demonstrate sufficient resources to reasonably assure successful construction and commencement of CSG operations.
- (V) In each plan to acquire renewable energy and RECs from CSGs, the investor owned QRU shall reserve, to the extent there is demand for such ownership, at least five percent of its renewable energy purchases from new CSGs for eligible low-income CSG subscribers.

 - (A) CSG subscriber organizations and investor owned QRUs may rely on certification by the Colorado Department of Human Services for acceptance in the Colorado Low-Income Energy Assistance Program (LEAP) as evidence of eligibility as an eligible low-income CSG subscriber in a CSG.
 - (B) Acquisition of energy and RECs from eligible low-income CSG subscribers to CSGs may be either through dedicated low-income CSGs or low-income set asides within other CSGs.
- (VI) For investments in a new CSG, the investor owned QRU shall be eligible for the incentives and be subject to the ownership limitations set forth in rule 3660; however such incentive payments shall be excluded from the retail rate impact under rule 3661.

(VII) The investor owned QRU may file an application with the Commission for approval to recover through rates a margin on renewable energy and RECs purchased from CSGs; however such incentive payments shall be excluded from the retail rate impact under rule 3661.

(VIII) Notwithstanding the exclusion from the retail rate impact in subparagraphs 3665(d)(VI) and (VII), the acquisition of renewable energy and RECs from CSGs shall be subject to the retail rate impact under rule 3661. QRU expenditures for unsubscribed energy and RECs generated by CSGs shall be included in the calculations of retail rate impact under that rule.

(e) Financing and operating CSGs.

(I) Contracts signed by QRUs with CSG owners shall be a matter of public record and shall be filed with the Commission by the QRU.

(II) CSG subscriber organizations shall issue public annual reports as of the end of the calendar or other fiscal year containing, at a minimum, the energy produced by the CSG; audited financial statements including a balance sheet, income statement, and sources and uses of funds statement; and the management and ownership of the CSG and the CSG subscriber organization, if different. Individual subscribers shall receive, in addition to the annual report of the CSG subscriber organization, a report of the energy, multiplier (e.g., aggregate retail rate), and net metering credits attributed to the CSG subscriber's account.

(III) CSG subscriber funds, collected by the CSG in advance of commercial operation of the CSG, shall be held in escrow. The escrow shall be maintained by its terms until such time as the CSG commences commercial operation as certified by QRU acceptance of energy from the CSG.

3666. Rural Renewable Projects.

(a) QRUs (whether investor owned, rural electric association owned, or municipally owned) may take advantage of REC multiplier for rural renewable projects described in paragraph 3654(g) subject to the following restrictions:

(I) Interconnection must be completed and commercial operation achieved by December 31, 2014.

(II) For investor owned QRUs, rural renewable projects for which this REC multiplier is claimed may not be counted toward the distributed generation requirements in rule 3655.

(III) Any entity that owns or develops a rural renewable project that will take advantage of the aforementioned compliance multiplier, must notify the Commission on a Commission-provided form within 30 days after signing a power purchase agreement with a QRU and also within 30 days after beginning commercial operations. Such forms will minimally require the megawatts of nameplate electric capacity from installed rural renewable projects or the capacity that is subject to power purchase agreements, as applicable.

(IV) For QRUs that are not investor owned QRUs, the compliance multiplier may be applied only to the aggregate first 100 MW of nameplate capacity projects statewide that report having achieved commercial operation to the Commission.

(A) The Commission will maintain a publicly available listing of projects that have submitted notifications in accordance with subparagraph 3666(a)(III) and shall provide notice to the first 100 MW of projects that are providing energy and RECs to non-investor owned QRUs that they may take advantage of the compliance multiplier.

36653667. Small Generation Interconnection Procedures.

The following small generator interconnection procedures (SGIP) shall apply to all small generation resources including eligible renewable energy resources connected to the utility. Each utility shall also provide, on ~~their~~ its web site, interconnection standards not included in these procedures. This rule largely tracks FERC Order 2006.

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[indicates omission of unaffected rules]

36663668. Environmental Impacts.

- (a) Eligible energy resources must meet all applicable federal, state, and local environmental permitting requirements.
- (b) For eligible energy resources larger than two MW that are not net-metered or any wind turbine structures extending over 50 feet in height, the QRU shall require project developers to include in the bid package written documentation that consultation occurred with appropriate governmental agencies (for example, the Colorado Division of Wildlife or the U.S. Fish and Wildlife Service) responsible for reviewing potential project development impacts to state and federally listed wildlife species, as well as species, habitats, and ecosystems of concern.
- (c) For eligible energy resources larger than two MW that are not net-metered or any wind turbine structures extending over 50 feet in height, the QRU renewable energy supply contract shall require project developers to certify the following as a condition precedent to achieving commercial operation:
 - (I) The developer has performed site specific wildlife surveys (referred to herein as the Environmental Surveys) which are conducted on the facility's site prior to construction;
 - (II) The developer, with good faith effort, used the results of the Environmental Surveys and available monitoring in developing the design, construction plans, and management plans of the facilities to avoid, minimize, and/or mitigate any adverse environmental impacts to state and federally listed species, to species of special concern, to sites shown to be local bird migration pathways, to critical habitat, to important ecosystems, and to areas where birds or other wildlife are highly concentrated and are considered at risk;

- (III) The results of the pre-construction Environmental Surveys shall be shared with the Colorado Division of Wildlife (CDOW) prior to project construction; and
- (IV) A summary report of these results shall be made available to CDOW at the time the project achieves commercial operation.

366~~97~~ – 3699. [Reserved]

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[indicates omission of unaffected rules]