

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

DOCKET NO. 10R-243E

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IN THE MATTER OF THE PROPOSED AMENDMENTS TO THE RULES IMPLEMENTING  
THE RENEWABLE ENERGY STANDARD PURSUANT TO STATUTORY CHANGES  
RESULTING FROM THE PASSAGE OF HOUSE BILL 10-1001.

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**ORDER ADOPTING RULES**

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**I. BY THE COMMISSION****A. Statement**

1. House Bill (HB) 10-1001, passed by the 2010 Colorado General Assembly and signed by Governor Ritter, substantially modifies the Renewable Energy Standard (RES) under § 40-2-124, C.R.S. The statute, as amended, increases from 20 percent of retail sales to 30 percent of retail sales the minimum amounts of renewable energy that investor owned qualifying electric utilities (QRUs) must generate or cause to be generated in 2020 and each year thereafter. The legislation also increases the amount of small scale renewable distributed generation that investor owned QRUs must acquire to comply with the RES.

2. HB 10-1001 further requires the Commission to establish the standard rebate offer (SRO) for the installation of on-site solar facilities. Since the passage of Amendment 37 by voters in November 2004, the SRO has stood at \$2.00 per watt. Under the new provisions in § 40-2-124, C.R.S., the Commission may now reduce the SRO below \$2.00 per watt if market conditions warrant a change. HB 10-1001 also allows the Commission to determine the appropriate funding levels for the acquisition of renewable distributed generation by the investor owned QRUs from residential customers, from non-residential customers, and from larger “wholesale” providers.

3. In addition, HB 10-1001 establishes § 40-2-129, C.R.S., that requires the Commission to consider employment effects and the long-term economic viability of Colorado communities in electric resource acquisitions.

4. On April 29, 2010, the Commission issued a notice of proposed rulemaking (NOPR) by Decision No. C10-0372 in order to change the RES Rules contained in 4 *Code of*

*Colorado Regulations* (CCR) 723-3-3650, *et seq.*, to be consistent with the new statutory provisions enacted by HB 10-1001. The Commission attached the proposed rules to the NOPR.

5. The Commission held a hearing on the proposed rules in the NOPR on June 1, 2010, at which time several interested persons provided oral comments. We also received written initial comments prior to the hearing and written reply comments after the hearing from numerous stakeholders.<sup>1</sup>

6. Shortly before the scheduled hearing in this proceeding, we became aware that the 2010 Colorado General Assembly had also passed House Bill (HB) 10-1342 concerning the establishment of community solar gardens. By Decision No. C10-0479, mailed on May 13, 2010, we solicited additional comments from interested persons concerning how the RES Rules should be modified to accommodate the community solar gardens and other new statutory obligations, including House Bill 10-1349 concerning net metering for the Colorado Division of Parks and Outdoor Recreation and House Bill 10-1418 concerning renewable energy resources that interconnect with cooperative electric associations or municipally owned utilities.

7. By Decision No. C10-0676, mailed on July 8, 2010, we decided not to issue a supplemental NOPR in this docket and elected instead to develop the rules necessitated by the passage of HB 10-1342 and other new RES-related provisions in a separate rulemaking. That rulemaking will commence on or before October 1, 2010. We also scheduled a

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<sup>1</sup> Comments were received from the Solar Alliance; Colorado Solar Energy Industries Association (CoSEIA); Public Service Company of Colorado (Public Service); Wal-Mart Stores, Inc., and Sam's West, Inc. (Wal-Mart); the Colorado Governor's Energy Office (GEO); the Colorado Office of Consumer Counsel (OCC); Western Resource Advocates (WRA); Black Hills/Colorado Electric Utility Company, LP, doing business as Black Hills Energy (Black Hills); City of Boulder; Interstate Renewable Energy Council (IREC); Colorado Independent Energy Association (CIEA); Colorado Energy Consumers (CEC); Mesa State College; Northern Power; PrairieStar Development Project; the Colorado Building and Construction Trades Council (CBCTC); New Energy Development, LLC; Northern Power Systems; and the Vote Solar Initiative (Vote Solar).

Commissioners' Deliberations Meeting to address the rule amendments necessitated by the passage of HB 10-1001.

8. Based upon our review of the oral and written comments provided by interested persons, we adopt the rules set forth in Attachment A to this Order.

## **B. Discussion**

### **1. Rule 3652 Definitions**

9. We proposed several new defined terms in the NOPR that specifically relate to the new statutory provisions in HB 10-1001, including "renewable distributed generation," "retail renewable distributed generation," and "wholesale renewable distributed generation." Given the introduction of these new terms, we proposed to strike the definitions of "off grid on-site solar system," "solar on-site renewable energy credit," and "solar renewable energy credit."

10. We further proposed to collapse the definition for "solar electric generation technologies" into the definition of "solar renewable energy system" and to modify the definition of "on-site solar system" consistent with the new definition of "retail renewable distributed generation." We also established the "Renewable Energy Standard Adjustment," or "RESA," as a defined term and proposed a definition for "retail electricity sales."

11. The definition of "retail electricity sales" set forth in the NOPR reads as follows:

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, plus the electric energy provided to retail end-use electric consumers in the QRU's service territory from retail renewable distributed generation.

12. Public Service, Black Hills, and WRA oppose the inclusion of retail distributed generation in the definition of retail electricity sales for at least three reasons. First, these interested persons point out that a QRU does not sell electricity produced by

distributed generation. Second, the inclusion of distributed generation runs counter to the plain language of § 40-2-124, C.R.S. Third, the inclusion of retail distributed generation in retail electricity sales would artificially increase the amount of eligible energy the QRU must acquire to meet the RES. Public Service also points out that the QRU may not have the information needed to properly quantify “sales” from retail renewable distributed generation.

13. Because the QRUs do not sell the electricity produced by retail renewable distributed generation and because they may not have sufficient information on the production and direct usage of electricity produced by retail renewable distributed generation, we will not adopt a definition for “retail electricity sales” that includes the electric energy provided to consumers from retail renewable distributed generation.

14. We will, however, adopt two additional changes to Rule 3652 based on the comments received from the stakeholders. First, along the lines suggested by Black Hills and Public Service, we will further revise the definition of “renewable energy credits” or “RECs” to specify that RECs acquired from on-site solar systems acquired prior to August 11, 2010 (the effective date of HB 10-1001) shall qualify as RECs from retail renewable distributed generation for purposes of demonstrating compliance with the RES. Second, we will clarify in the definition of “RECs” that renewable energy credits generated by an “off-grid on-site solar system” acquired prior to August 11, 2010 shall also qualify as RECs from retail renewable distributed generation.

## **2. Rule 3655 Renewable Distributed Generation**

15. The NOPR proposed an entirely new rule implementing the requirements for investor owned QRUs to acquire renewable distributed generation under HB 10-1001. For instance, § 40-2-124(1)(c)(I), C.R.S., establishes the specific amounts of renewable distributed

generation that the investor owned QRUs must acquire as percentages of their retail electricity sales. The proposed paragraph 3655(a) in the NOPR thus established those same minimum amounts. Likewise, § 40-2-124(1)(c)(II)(A), C.R.S., states that, of the total the amounts of renewable distributed generation that an investor owned QRU must acquire, “at least one-half shall be derived from retail distributed generation.” The proposed paragraph 3655(b) thus specified that exactly one-half of the overall requirements be satisfied with retail renewable distributed generation.

16. Section 40-2-124(1)(c)(II)(C), C.R.S., provides that the amounts of renewable distributed generation a QRU must acquire, for the 2015 compliance year and thereafter, may be changed by the Commission if the Commission finds, upon application by a QRU, that these percentage requirements are “no longer in the public interest.” Likewise, the proposed paragraph 3655(c) permitted the Commission, beginning with the 2015 RES compliance year, to alter the overall amount of renewable distributed generation that the investor owned QRUs must acquire.

17. Proposed paragraph 3655(c) in the NOPR also established a process by which the Commission would consider changes in the overall amounts of renewable distributed generation or changes in the split between the retail renewable distributed generation and the wholesale renewable distributed generation. Proposed paragraph 3655(d) further listed the specific information that the investor owned QRU would provide to the Commission in its RES compliance plan in order for the Commission to reach a decision altering the amounts of renewable distributed generation that must be acquired from the retail and wholesale segments.

**a. Retail Renewable Distributed Generation**

18. The stakeholders who offered comments in this proceeding generally object to the proposed language in paragraph 3655(b) that would effectively cap the level of retail renewable

distributed generation at one-half of the total amount of renewable distributed generation the investor owned QRUs must acquire. Opponents to the proposed rule suggest that the rule language instead reflect the exact statutory wording mandating that “at least one-half” of the total requirements be satisfied with retail renewable distributed generation.

19. In consideration of these comments, we will insert the words “at least” in the proposed paragraph 3655(b) to allow for the possibility that more than one-half of the total requirements for renewable distributed generation may be satisfied with retail renewable distributed generation.

**b. RES Percentages for Renewable Distributed Generation**

20. Public Service and Black Hills rejected the proposed mandatory filing requirements under paragraph 3655(d) in the NOPR, arguing that HB 10-1001 does not require the investor owned QRUs to justify that the RES requirements for renewable distributed generation set forth in the statute remain in the public interest. Public Service specifically argued that the investor owned QRUs have the discretion to file an application whenever they want to change the distributed generation requirements (for 2015 or later). Public Service and Black Hills also want the flexibility to support a change in the renewable distributed generation requirements with any information that supports the relief sought. GEO contended that proposed paragraph 3655(d) does not identify “a burden of proof” that QRUs must meet to demonstrate that changes to the distributed generation requirements of the RES are in the public interest. GEO thus suggested that the QRUs should address three factors in an application to change the renewable distributed generation amounts: (1) whether the change would improve employment and the long-term economic viability of Colorado communities; (2) whether alternative resources provide the same value to the QRU and its system as distributed generation; and (3) whether the

QRU has maximized the advancing of funds under paragraph 3660(c) (*i.e.*, maximized the “securitization” of the RESA). GEO specifically recommends that the Commission promulgate a requirement wherein 50 percent of the RESA funds to be collected by the investor owned QRUs between 2015 and 2020 would be “securitized” before a QRU may request a reduction in the distributed generation procurement requirements under HB 10-1001.

21. CoSEIA supported GEO’s recommendation that distributed generation procurement requirements not be reduced unless the QRU has maximized the “securitization” of RESA funds. The Solar Alliance similarly suggests that securitization be maximized before the utility may reduce the budgets allocated for the acquisition of retail renewable distributed generation. On the other hand, Public Service and Black Hills rejected the suggestion that the QRU should be required to document that it has maximized the “securitization” of RESA funds before recommending a reduction in distributed generation procurement requirements.

22. CEC and CIEA argued that the “public interest” provisions in Rule 3655(d) should entail a cost and rate impact comparison between the acquisition of renewable distributed generation and the acquisition of larger utility-scale renewable resources, *i.e.* those greater than 30 MW.

23. Based on the comments concerning proposed paragraph 3655(d), we adopt several modifications to the rules proposed in the NOPR. First, we acknowledge that, while § 40-2-24(1)(c)(II)(C), C.R.S, gives the Commission the authority to reduce the amounts of renewable distributed generation that must be acquired under the RES, it can only reach a finding that these requirements are no longer in the public interest upon the filing made by an investor owned QRU. If the net incremental costs of renewable distributed generation do not decline to affordable levels under the retail rate cap by 2015, the associated impacts on the investor owned

QRU's RESA accounts will provide the QRUs with a strong incentive to seek a reduction in the renewable distributed generation requirements.

24. We further find that the investor owned QRUs should have the flexibility to provide whatever information they find necessary to advocate that the renewable distributed generation requirements in the RES are no longer in the public interest, particularly since they will bear the burden of proof. Along those lines, we are confident that cost comparisons between different types of renewable energy resources available to meet the RES, as suggested by GEO, CEC, and CIEA, will be provided to the Commission when considering a QRU's request. We therefore strike the specific filing requirements contained in proposed Rule 3655(d).

25. With respect to the position that the investor owned QRUs must demonstrate that they have "maximized the securitization of RESA funds" before the Commission reduces the requirements for distributed generation acquisition under the RES, we decline to accept this as an absolute requirement. On one hand, the record in this proceeding does not provide a sufficient basis upon which we can establish a "maximum level of securitization" for meaningful application in the future. On the other hand, any future proceeding regarding an investor owned QRU's request that the Commission reduce the renewable distributed generation requirements in the RES will provide GEO and others the opportunity to make arguments regarding whether "securitization" has been appropriately employed by the QRUs to comply with the RES.

**c. MWh Goals for Retail Renewable Distributed Generation**

26. Concerning the acquisition of retail renewable distributed generation, § 40-2-124(1)(g)(I)(C), C.R.S., states:

As between residential and nonresidential retail distributed generation, the Commission shall direct the utility to allocate its expenditures according to the proportion of the utility's revenue derived from each of these customer groups;

except that the utility may acquire retail distributed generation at levels that differ from these group allocations based upon market response to the utility's programs.

27. To address this provision of HB 10-1001, the NOPR includes a new paragraph 3655(f) that reads:

Each year, in its final decision concerning the investor owned QRU's compliance plan, the Commission shall direct the investor owned QRU to allocate expenditures toward the acquisition of retail renewable distributed generation according to the proportion of RESA revenues collected from residential and non-residential retail customers. The investor owned QRU may acquire retail renewable distribution generation at levels that differ from the expected levels associated with the allocated expenditures based upon market response.

28. CoSEIA suggested that the Commission go beyond its obligation to direct the investor owned QRUs to allocate expenditures between residential and non-residential customers and establish explicit goals, in terms of MWh, for the acquisition of retail distributed generation from residential and non-residential customer groups. In general, CoSEIA contended that expenditure targets alone could result in "spending stops" with no accountability on the investor owned QRUs to meet "industry growth benchmarks." CoSEIA argued that MWh goals would instead allow for: incentives to be properly established through "reverse engineering;" proper "securitization" of RESA funds; the on-site solar industry to plan their businesses and lower costs; and broad and equitable customer participation in renewable distributed generation programs.

29. CoSEIA suggested that the Commission set forth MWh goals in annual RES compliance plans for a minimum of five years, such that these goals would demonstrate year-over-year growth. The Commission would base these MWh goals upon the overall requirements on the investor owned QRUs to acquire retail distributed generation under the RES and the

proportions of revenue derived from residential and non-residential customer groups. CoSEIA suggested that the Commission, in implementing acquisition strategies to reach these MWh goals, direct the QRUs to adjust its expenditures from their RESA accounts rather than changing the pre-established MWh goals.

30. Vote Solar similarly suggested that retail distributed generation suppliers be given a longer planning horizon to prepare for the new demand for on-site solar resulting from HB 10-1001. Vote Solar thus supported the MWh acquisition goals advocated by CoSEIA. Vote Solar also argued that the Commission should encourage the QRUs to “securitize” RESA accounts to the maximum extent allowable to meet such MWh goals. In its post-hearing reply comments, the Solar Alliance did not contest the establishment of MWh goals as suggested by CoSEIA.

31. In contrast, Public Service argued that CoSEIA’s suggestions for setting specific MWh goals for residential and nonresidential retail renewable distributed generation is contrary to HB 10-1001 and would be impossible to implement. Public Service warned that CoSEIA’s suggestion would result in a “start/stop” situation for the market, which CoSEIA wishes to prevent. Public Service urged the Commission to reject the establishment of MWh goals for the acquisition of retail renewable distributed generation and instead suggests that the Commission revise proposed paragraph 3655(f) to more closely match the statutory language in § 40-2-124(1)(g)(I)(C), C.R.S.

32. We agree with Public Service that it is difficult to imagine how firm MWh goals described above can be practically implemented, given the uncertainty surrounding the market response to the investor owned QRUs programs and the interplay between multiple provisions related to retail renewable distributed generation in § 40-2-124, C.R.S. However, we recognize there may be implicit MWh goals when developing program budgets and projecting future RESA

account balances. These implicit MWh goals, in combination with the expenditure targets that HB 10-1001 obligates us to consider, will offer the providers of retail distributed generation the ability to plan their businesses over the years addressed by the investor owned QRU's resource acquisition plans. We further note that such implicit MWh goals are consistent with the emphasis that the Colorado General Assembly placed on expenditure targets in § 40-2-124(1)(g)(I)(C), C.R.S., in recognition that market responses may differ from what is expected. Finally, we recognize that there may be unintended consequences in deviating from the exact statutory language. We therefore adopt Public Service's suggestion and to re-draft paragraph 3655(f) to more closely track § 40-2-124(1)(g)(I)(C), C.R.S.

**d. Other Changes to Rule 3655**

33. Finally, we address three suggestions offered by Black Hills with respect to Rule 3655. First, we decline to adopt Black Hills' suggestion to add clarifying language in paragraph 3655(f) that an investor owned QRU is not required to set up a reserve account based upon the initial allocation of expenditures between residential and non-residential customer groups. We clarify here instead that an investor owned QRU will not be required to set up reserve accounts for the expenditure allocations envisioned under paragraph 3655(f). In other words, the investor owned QRUs do not need to track such levels of expenditures individually for on-going accounting and reconciliation purposes.

34. Second, we will accept Black Hills' suggestion to modify paragraph 3655(c) to clarify when a changed RES requirements for the acquisition of renewable distributed generation could take effect (*i.e.*, after December 31, 2014). Third, we will add several cross references to Rule 3655 that specify which provisions in Rule 3654 will apply to renewable distributed generation, particularly with respect to RECs.

### **3. Rule 3657 QRU Compliance Plan**

#### **a. Quadrennial ERP/RES Compliance Plan Filings**

35. Public Service suggested the Commission integrate the RES compliance planning process within the quadrennial Electric Resource Planning (ERP) filings. Public Service desired to “harmonize” RES compliance planning with ERPs. For example, Public Service contended that parties in RES compliance plan proceedings tend to re-litigate issues from ERP dockets, potentially resulting in inconsistencies with the assumptions used for acquiring different types and sizes of new resources. Public Service suggested that combined ERP/RES filings would ensure that the same modeling assumptions used for making resource acquisition decisions for large resources (greater than 30 MW) are directly applied in calculating the retail rate impact under the RES rules and thus in the determination of the level of net incremental costs that are assigned to the RESA account. These calculations would also inform the decisions regarding the expenditures available for the acquisition of smaller renewable energy resources including retail distributed generation.

36. Public Service pointed out that there is no statutory requirement for annual RES compliance plans, only for annual RES compliance reports. Given that annual RES compliance reports would continue to be filed with the Commission, Public Service recommended that the Commission utilize these annual filings for “locking down” the net incremental costs of eligible energy resources acquired since the last approved ERP/RES compliance plan. Public Service explained that the QRUs would use the same modeling methodology approved in the latest ERP/RES compliance plan proceeding, but would update certain underlying assumptions, such as fuel costs, when calculating net incremental costs for “lock-down” during the interim period.

Along these lines, Public Service proposed language changes to accommodate “lock-downs” in rule 3662 Annual Compliance Report and rule 3663 Compliance Report Review.

37. Black Hills did not oppose quadrennial RES compliance plans but states that it does not want to have to seek a waiver in order to submit an interim RES compliance plan.

38. In its post-hearing reply comments, CoSEIA supported Public Service’s proposal. CoSEIA asked, however, for the flexibility for annual adjustments to RES compliance plans through a stakeholder process. CoSEIA explained, for instance, that market dynamics require considerations outside of a resource acquisition plan (*e.g.*, incentive levels and costs to customers).

39. The OCC stated that, while Public Service may be unhappy that parties seek to re-litigate issues it considers to have already been decided by the Commission in a previous ERP proceeding, paragraph 3661(e) contemplates changes to the methods and assumptions adopted in an ERP proceeding for a RES application. The OCC argued that it is in the public interest for the Commission to have the ability to annually update critical assumptions or inputs that can dramatically impact RESA budgets. The OCC also stated that the QRUs may face more risk of cost disallowances as a result of new issues if only annual compliance reports are reviewed annually. The OCC further stated that compliance plans have not reached the level of maturity in terms of “issues consensus” to deem them routine filings. Finally, the OCC suggested that new issues will arise from the new statutes passed last session (*e.g.*, HB 10-1342 concerning community solar gardens) which may require RES compliance applications on a more frequent basis.

40. GEO also expressed continued support for annual QRU compliance plan filings. Like the OCC, GEO suggested that new issues surrounding the acquisition of renewable

distributed generation and community solar gardens will require annual compliance plan proceedings in the near term.

41. We agree with Public Service that there is considerable interaction between ERP proceedings and RES compliance plan proceedings. We also conclude that the new provisions in § 40-2-124, C.R.S., concerning renewable distributed generation and RESA funding should be implemented within the context of a combined ERP/RES compliance plan proceeding. We will therefore require that the next ERP filings from the investor owned QRUs due in October 2011 encompass a multi-year RES compliance plan. We further find that a coordinated quadrennial ERP/RES compliance plan is appropriate beginning with the resource plans that the investor owned QRUs must file under the ERP Rules in October 2015, as set forth in Rule 3657.

42. The new provisions in § 40-2-124, C.R.S., stemming from both HB 10-1001 and HB 10-1342 (concerning the development of community solar gardens), as well as the timing of this rulemaking and the upcoming October 2011 ERP filings, also lead us to conclude that a transition from the existing annual RES compliance plan process to a new quadrennial ERP/RES compliance planning process is necessary. We thus adopt the following schedule of filings between the effective date of these rules and the October 31, 2015 filing of a joint ERP/RES compliance plan:

- The Commission will require QRUs to file a combined ERP/RES compliance plan on or before October 31, 2011. We expect that this filing will address acquisitions of large renewable resources (*i.e.*, those greater than 30 MW) over a six to ten year resource acquisition period, consistent with the ERP rules. With respect to the acquisition of renewable distributed generation, we expect this filing will focus primarily on the years 2013 to 2015, since a final “Phase I” decision pursuant to our ERP process would likely not be issued until sometime in 2012. We expect to comprehensively address in these proceedings the issues such as the borrowing against future RESA collections (*i.e.*, “securitization”), the level of the SRO, and the expenditure targets for retail distributed generation.

- Given that the rules in Attachment A will not likely take effect until the final quarter of 2010, and given our desire that the investor owned QRUs file joint ERP/RES compliance plan filings in accordance with the ERP filing schedule, we will entertain requests from the investor owned QRUs to waive the requirement for an annual RES compliance plan filing for the 2011 compliance year.
- Although we anticipate that the joint ERP/RES compliance plan proceedings beginning in October 2011 will serve as the primary venues for addressing the acquisition of large and small renewable energy resources over multiple years, we do not want to delay the implementation of HB 10-1001 until 2013. Therefore, we will require that the investor owned QRUs file their last annual RES compliance plans for the 2012 compliance year on or before May 1, 2011, provided that final rules from this rulemaking are in effect on that date. We expect that the 2012 RES compliance plan proceedings will focus exclusively on: spending targets for distributed generation in 2012; the advancement of funds, if any, by the QRU to its RESA account for renewable distributed generation acquisitions in 2012; and changes in the SRO for 2012. The results of this docket would then feed into the combined 2011 ERP/RES compliance plan proceeding, as described above, so that the impacts of the 2012 RES compliance plan can be understood with respect to other planned resource acquisitions in the following RES compliance years.
- The final component of this transition will be an interim RES compliance plan that we will require to be filed in October 2013. The principal purpose of this RES compliance plan proceeding will be to address the need for any market-responsive changes to the RES-related components of the combined 2011 ERP/RES proceeding and to address any proposed changes in the renewable distributed generation requirements under the RES for the period 2015 to 2017 under rule 3655.

43. We find that the approach outlined above will reduce the number of RES dockets before the Commission between now and 2015. This transition to quadrennial ERP/RES compliance plan proceedings will also serve to address changing market conditions and the new statutory requirements from.

**b. Lock Down of Net Incremental Costs**

44. The Commission established a process for “locking down” the annual ongoing net incremental costs of new eligible energy resources acquired by the investor owned QRUs in Docket No. 08R-424E. A “lock down” basically establishes the charges against the RESA account over a number of years associated with specific eligible resources, so that the QRU can

enjoy a degree of certainty regarding future RESA balances and the availability of funds for the purchase of additional eligible energy resources. Pursuant to subparagraph 3661(h)(V) in the NOPR, a “lock down” is accomplished in annual RES compliance plan proceedings and on-going annual net incremental costs of eligible energy resources are fixed for five years and then reset based on new resource planning model inputs and assumptions according to the QRU’s most recent ERP proceeding.

45. Because we will move to quadrennial RES compliance plan filings in this rulemaking, there may be no opportunities for the investor owned QRUs to establish “locked down” net incremental costs during interim periods. In light of this potential outcome, Public Service proposes rule changes that would allow for “lock downs” to be accomplished in the annual RES compliance reports required under § 40-2-124(1)(h), C.R.S. These annual report filings would accommodate new contracts for eligible energy resources that are signed over time as well as new utility-owned eligible energy resources that may be developed by the investor owned QRUs between ERP/RES compliance plan filings.

46. We note that the RES Rules were designed to emphasize the review and approval of compliance plans, so that subsequent compliance reporting under Rule 3662 and compliance reviews under Rule 3663 could be streamlined with a reduced likelihood that RES compliance hearings would be required. By incorporating the RES planning process within the ERP process, the methods and assumptions used for resource planning will be developed at the same time the Commission will review the RESA account balances and the retail rate impact. We hope that this arrangement will reduce the controversies surrounding the inputs to “lock down” calculations made between quadrennial RES compliance plan filings. In addition, we will replace the five-year lock down approach adopted in Docket No. 08R-424E with a new approach, such that

net incremental costs are unlocked and reset upon each quadrennial RES compliance plan proceeding, unless otherwise established by the Commission. We find that this new approach for “lock downs” will preserve the compromise we adopted in Docket No. 08R-424E between Public Service’s proposal to fix the net incremental costs of eligible energy resources for their entire useful or contract lives and Staff’s proposal to update net incremental costs each year based on more current data and inputs. As indicated in Attachment A, we therefore adopt a form of Public Service’s suggested changes to Rules 3661, 3662, and 3663 to allow for “lock downs” to be completed in RES compliance reports.

47. In light of the transition plan outlined above, we will also adopt a rule provision that will “lock down” the net incremental costs for eligible energy resources through the 2015 ERP/RES compliance plan proceeding, when they will be reset in accordance with our new approach, unless such net incremental costs have been previously locked down for longer periods pursuant to a Commission order.

**c. Other Changes to Rule 3657**

48. Turning to other comments concerning RES compliance plans, we adopt the OCC’s recommendations to modify paragraph 3657(a) to require the investor owned QRUs to provide information concerning details on their RESA accounts, the “locked down” levels of net incremental costs, and collections from net metering RESA surcharges, as discussed below. We find that these additional filing requirements are appropriate given the new statutory provisions in HB 10-1001 and the other new rules we adopt by this Order.

49. We also accept the suggestion from CEC and CIEA to modify subparagraph 3657(a)(I)(G) to recognize that a proposal to advance of RESA funds will be made at the discretion of the investor owned QRU.

#### 4. Rule 3658 Standard Rebate Offer

50. Section 40-2-124(1)(e)(I.5), C.R.S., states that:

The amount of the standard rebate offer shall be two dollars per watt; except that the Commission may set the rebate at a lower amount if the Commission determines, based upon a qualifying retail utility's renewable resource plan or application, that market changes support the change.

51. The NOPR included a series of new paragraphs under Rule 3658 to address this provision of HB 10-1001. Proposed paragraph 3658(c), for instance, set forth a requirement that the investor owned QRU propose either to retain or to reduce the SRO in each RES compliance plan filing. That new paragraph also listed four pieces of information that the investor owned QRU would need to provide the Commission in support of its proposal to keep the SRO at its current level or to reduce it to a lower level.

52. Proposed paragraph 3658(d) then described a Commission policy for determining a new level of the SRO, as follows:

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.

53. In conjunction with the proposed paragraph 3658(d), the NOPR introduced a new proposed subparagraph 3658(e)(II) to recognize that the investor owned QRU had the discretion under § 40-2-124(1)(g)(III), C.R.S., to set the standard offer prices it pays for RECs from on-site solar systems. The intent of the proposed paragraph 3658(d) was to require that the investor owned QRU file an application within the Commission within ten days of a change in such REC prices if that price change was not anticipated in a Commission-approved RES compliance plan.

The purpose of this new filing requirement was to allow for the Commission to consider changes in the SRO under HB 10-1001 commensurate with unanticipated changes in the overall level of customer incentives.

54. Both Public Service and Black Hills objected to proposed paragraph 3658(c), arguing that HB 10-1001 does not require the investor owned QRU to prove in each RES compliance plan filing why the SRO should be retained or amended. They also object to the listing of specific information that the investor owned QRU must file in its RES compliance plan filing to support a proposal to retain or to reduce the SRO.

55. Public Service suggested that the Commission approve, upon a QRU application, “an automatic and programmatic” means for reducing the SRO as market conditions warrant (*i.e.*, according to a pre-established schedule of reductions). This approach would be modeled after Public Service’s “tiered pricing scheme” for its standard offer purchases of RECs from on-site solar systems.

56. Both Public Service and Black Hills objected to having to file an application within 10 days of a price change for its standard offers to purchase RECs from on-site solar systems. Public Service also explains that it would prefer that the SRO “trend to zero” before the QRU’s standard offer to purchase RECs from on-site solar systems reach zero.

57. GEO, the OCC, the Solar Alliance, and CoSEIA generally supported Public Service’s suggestion that the SRO be reduced along the lines of a tiered pricing scheme. These interested persons contended that scheduled reductions in the SRO will provide more certainty to the marketplace than non-scheduled changes.

58. GEO suggested that the Commission should limit the maximum amount by which the SRO could be reduced per year, offering 15 percent as a recommended cap.

However, Public Service, Black Hills, and the OCC argued that GEO's recommendation to limit reductions in SRO to no more than 15 percent per year is contrary to § 40-2-124, C.R.S., or is otherwise bad public policy.

59. Public Service also requested that the Commission reject the REC pricing proposals advanced by GEO, where "market sensitivity" would be accomplished through changes in REC prices rather than in changes in the SRO. Finally, CoSEIA and Vote Solar suggest that the "securitization" of the RESA should be "maximized" before the Commission reduces the SRO.

60. Based on the comments of Public Service and Black Hills, we will adopt paragraph 3658(d) as proposed in the NOPR. We find that this provision will implement the general policy in establishing overall reasonable levels of customer incentives, and we will not adopt proposed subparagraph 3658(e)(II). Furthermore, we will adopt a less elaborate process for considering reductions to the SRO in paragraph 3658(c). We find that this modified approach, as set forth in Attachment A, will satisfy the requirements of HB 10-1001 and will result in a workable and market-sensitive system for setting the SRO at appropriate levels.

61. Because we intend to address at the same time the interplay between requests from the QRUs to advance funds to their RESA accounts pursuant to § 40-2-124(1)(g)(I)(B), C.R.S., the proposed expenditure targets for acquiring retail renewable distributed generation under paragraph 3655(f), and proposals to change the SRO under paragraph 3658(c), we find it unnecessary either to adopt any rule that requires the investor owned QRU to demonstrate that "securitization" of its RESA account has been maximized before we consider changes in SRO or to cap annual reductions in the SRO.

## 5. Rule 3664 Net Metering

62. Section 40-2-124(1)(g)(IV)(B), C.R.S., states that:

The Commission may ensure that customers who installed distributed generation continue to contribute, in a nondiscriminatory fashion, their fair share to their utility's renewable energy program fund or equivalent renewable energy support mechanism even if such contribution results in a charge that exceeds two percent of such customers' annual electric bills.

63. In accordance with this new provision from HB 10-1001, the NOPR proposed paragraph 3664(h) that would require the investor owned QRUs to implement a RESA surcharge for net metered customers, such that net metered customers would pay total RESA charges at the same typical levels as "non-net-metered" customers.

64. Public Service and Black Hills supported the concept of a RESA surcharge for net metered customers as proposed in the NOPR. Public Service generally agreed with the form of proposed rule 3664(h) but suggested some changes to the rule language to accommodate its billing capabilities and to introduce two tiers of surcharges based on the size of the distributed generation system used for net metering.

65. Most other stakeholders strongly opposed proposed paragraph 3664(h). They argued that because HB 10-1001 gives the Commission the discretion whether to impose a RESA surcharge, the Commission should not adopt a rule that would establish and impose a specific RESA surcharge. GEO, for instance, argued that the investor owned QRUs should be allowed to opt out of charging the RESA surcharge as proposed in the NOPR. GEO further opined that it may cost the QRU more to administer a RESA surcharge than the associated collections.

66. Commenters in opposition to proposed paragraph 3664(h) suggested that the Commission either strike the new proposed paragraph 3664(h) or take no action until GEO has

completed its research concerning the costs and benefits of distributed generation in Colorado pursuant to Docket No. 09AL-299E. WRA and IREC suggested that credits to net metered customers (instead of a RESA surcharge) may prove to be a fairer result due to the benefits that net metered customers provide to the QRU's system. Along those lines, WRA suggested an addition to proposed paragraph 3661(a) such that: "[a] retail customer who installs renewable distributed generation may also receive a credit for the benefit that the renewable distributed generation brings to the utility's system as a whole." WRA further argued that it would be difficult to make a RESA surcharge nondiscriminatory. WRA pointed out, for example, that the Commission does not have the authority to impose a surcharge on other customers who reduce their usage, say, through energy efficiency. Vote Solar implied in its written comments that the proposed method for determining the surcharge is neither methodical nor defensible.

67. Public Service and Black Hills argued that GEO's research into the costs and benefits of distributed generation is simply not relevant to the question surrounding a net metered customer's "fair share" of contributions toward a RESA account. Black Hills further contends that net metered customers not only fail to pay their fair share toward the RESA account but also fail to pay their fair share of the costs of the distribution systems generally.

68. We agree with Public Service and Black Hills that the question of whether distributed generation provides net benefits or imposes net costs to the investor owned QRU system need not factor into our determination whether net metered customers are contributing their fair share to the QRU's RESA accounts. The RESA accounts are used to fund a growing level of production from eligible energy in an overall portfolio of system resources. Net metered customers appropriately share in the cost responsibilities associated with developing this portfolio so that the investor owned QRUs can meet the RES.

69. We will therefore exercise our discretion under § 40-2-24(1)(g)(IV)(B), C.R.S., and adopt a RESA surcharge for net metered customers in the RES Rules. We agree with Public Service that two proxy levels of usage are appropriate for calculating the RESA surcharge for those net metered customers whose renewable distributed generation facilities do not have production meters. Such proxy levels of usage will better match system sizes and total usage levels while accommodating the investor owned QRUs' billing systems.

70. We do not believe it is necessary to consider the results of the study that GEO will soon publish regarding distributed generation in Colorado pursuant to Docket No. 09AL-299E when establishing a RESA surcharge under Rule 3664. However, we affirm this study and future similar studies may be relevant in the determination of the proper rates for electric service paid by net metered customers. As such, we may examine this topic further in future rulemaking proceedings and in general electric rate cases.

#### **6. Rule 3665 Small Generation Interconnection Procedures**

71. Although there is some support among the stakeholders for various modifications to the existing small generation interconnection procedures under Rule 3665, we decline to make changes to this rule at this time. Consistent with Public Service's suggestion, we will instead encourage interested stakeholders to engage in a series of workshops and meetings that could lead to a proposal to initiate a new and separate rulemaking to update our interconnection rules. We envision that this new rulemaking could be initiated within the next several months and would be separate from the other future rulemaking we will launch to address community solar gardens.

## 7. Other Rule Changes

72. The stakeholders participating in this Docket provided comments on many of the other rule changes contemplated in the NOPR. We will adopt several of these suggested changes as follows.

73. First, we will insert a “grandfathering clause” into paragraph 3654(e) so that the 1.25 multiplier for RECs acquired from on-site solar systems prior to the effective date of HB 10-1001 may continued to be applied, consistent with Black Hills’ comments.

74. Second, we will adopt some of the suggestions made by CBCTC and Public Service regarding the new rule provisions associated with § 40-2-129, C.R.S. Specifically, we will further modify paragraph 3656(c) by inserting the concept of “best value employment metrics.”

75. Third, we will adopt a variation of the changes suggested by Public Service to paragraphs 3659(j) and (k) concerning the Western Renewable Energy Generation Information System (WREGIS). These changes will eliminate redundancy and accommodate the tracking of RECs from small and large renewable energy resources on the investor owned QRUs’ systems.

76. Fourth, we will adopt a variation of the changes to paragraph 3662(a) suggested by CoSEIA, regarding the annual reporting on the funds that the investor owned QRUs have advanced to their RESA accounts (“securitized funds”) and the annual reporting on acquired retail renewable distributed generation from residential and non-residential customer groups.

77. Finally, we will adopt the proposed changes to paragraph 3660(c) to implement the new provisions in HB 10-1001 found at § 40-2-124(1)(g)(I)(B), C.R.S., concerning the interest rate to be applied to RESA account deferred balances.

78. We will not adopt, based on the record in this proceeding, any of the other suggested changes to the proposed rules in the NOPR that have not been discussed above.

### **8. Vote Solar Motion**

79. Vote Solar filed a motion for leave to submit post-hearing written comments on July 16, 2010. We find good cause to grant the motion and we have considered Vote Solar's comments in reaching our findings in this rulemaking.

## **II. ORDER**

### **A. The Commission Orders That:**

1. The motion filed by the Vote Solar Initiative on July 16, 2010 seeking permission to late-file post-hearing comments is granted.

2. The Commission adopts the rules attached to this Order as Attachment A, consistent with the above discussion.

3. The rules shall be effective 20 days after publication in the Colorado Register by the Office of the Secretary of State.

4. The opinion of the Attorney General of the State of Colorado shall be obtained regarding the constitutionality and legality of the rules.

5. A copy of the rules adopted by the Order shall be filed with the Office of the Secretary of State for publication in the Colorado Register. The rules shall be submitted to the appropriate committee of the Colorado General Assembly if the General Assembly is in session at the time this Order becomes effective, or for an opinion as to whether the adopted rules conform with § 24-4-103, C.R.S.

6. The 20-day time period provided by § 40-6-114(1), C.R.S., to file an application for rehearing, reargument, or reconsideration shall begin on the first day after the effective date of this Order.

7. This Order is effective upon its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' DELIBERATION MEETING  
August 5, 2010.**

(SEAL)



ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Doug Dean".

Doug Dean,  
Director

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

RONALD J. BINZ

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JAMES K. TARPEY

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MATT BAKER

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Commissioners

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# **COLORADO DEPARTMENT OF REGULATORY AGENCIES**

## **Public Utilities Commission**

### **4 CODE OF COLORADO REGULATIONS (CCR) 723-3**

#### **PART 3**

#### **RULES REGULATING ELECTRIC UTILITIES**

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## **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, 40-2-124, [40-2-129](#), 40-3-102, 40-3-103, 40-3-104.3, 40-3-111, 40-3-114, 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), (~~ed~~) through (~~ji~~) and (~~mi~~); 3659(a)(I) through (a)(V), (b), (~~d~~) through (~~ki~~), 3660(~~il~~), 3661(b), (c), (g), and (~~jl~~), 3662(a)(I), (a)(II), (a)(IV) through (a)(X), (a)(XIII), (a)(XV), (b), (d) and (e), and 3665.
  - (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(h) concerning the filing of least-cost 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 3614(a) concerning ~~least-cost 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), (~~ed~~) through (~~ji~~) and (~~mi~~); 3659(a)(I) through (a)(V), (b) ~~(d)~~ through (~~ki~~).
- (e) The following rules in this Part 3 shall apply to municipally owned utilities which are not qualifying retail utilities:
- (I) Rules 3650(d).

\* \* \*

[indicates omission of unaffected rules]

## RENEWABLE ENERGY STANDARD

### 3650. Applicability.

- (a) Rules 3650 to 3665 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), (~~ed~~) through (~~ji~~), and (~~mi~~), 3659(a)(I) through (a)(V), (b) ~~(d)~~ through (~~ki~~), 3660(~~il~~), 3661(b), (c), (g), and (~~ji~~), 3662(a)(I), (a)(II), (a)(IV) through (a)(X), (a)(XIII), (a)(XV), (b), (d) and (e), and 3665 shall apply to cooperative electric associations in the state of Colorado.
- (c) Rules 3651, 3652, 3653, 3654(b), (c), (~~ed~~) through (~~ji~~) and (~~mi~~), 3659(a)(I) through (a)(V), (b) ~~(d)~~ through (~~ki~~) 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 Bill 10-1001.

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 – ~~3665~~3666. 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 and: (a) that is owned by individual residents of a community, a local nonprofit organization, a cooperative, a local government entity, or a tribal council; (b) whose generating capacity does not exceed thirty megawatts; and (c) for which there is a resolution of support adopted by the local governing body of each local jurisdiction in which the project is to be located.
- (d) "Compliance plan" means the annual plan a QRU is required to file with the Commission pursuant to rule 3657.
- (e) "Compliance year" means a calendar year for which the renewable energy standard is applicable.
- (f) "Eligible energy" means renewable energy and recycled energy.
- (g) "Eligible energy resources" are renewable energy resources or facilities that generate recycled energy.
- ~~(h) "Off-grid on-site solar system" means an on-site solar system 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., that is not connected to, and operates completely independently from, the distribution system or transmission system facilities of any electric utility.~~
- ~~(ih) "On-site solar system" means a solar renewable energy system that is retail renewable distributed generation energy system 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. For the purposes of this definition, the non-residential end-use electric customer, prior to the installation of the solar renewable energy system, 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 solar renewable energy system, 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. An on-site solar system shall be sized to supply no more than one hundred twenty percent of the average annual consumption of electricity by the consumer at that site. The 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.~~
- (ji) "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.

- (kj) “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.
- (lk) “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.
- (ml) “Renewable distributed generation” means retail renewable distributed generation and wholesale renewable distributed generation.
- (m) “Renewable energy” means energy generated from renewable energy resources including renewable distributed generation.
- (n) “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 ~~include, but are not limited to, S-RECs and SO-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.
- (o) “Renewable energy credit contract” means a contract for the sale of renewable energy credits without the associated energy.
- (p) “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.
- (q) “Renewable energy standard” means the electric resource standard for eligible ~~renewable~~-energy resources specified in § 40-2-124, C.R.S.
- (r) “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.
- (rs) “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.

- (t) “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.
- (u) “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.
- (sv) “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.
- ~~(t) “Solar electric generation technologies” means any technology that uses solar radiation energy to generate electricity.~~
- ~~(u) “Solar on-site renewable energy credit” or “SO-REC” means a REC created by an on-site solar system.~~
- ~~(v) “Solar renewable energy credit” or “S-REC” means a REC created by a solar renewable energy system. For the purposes of these rules, S-RECs include, but are not limited to, SO-RECs.~~
- (w) “Solar renewable energy system” means a system that uses a solar ~~electric generation technology~~radiation energy to generate electricity.
- (x) “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.
- (y) “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:
- (l) 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) ~~Ten-Twelve~~ percent of its retail electricity sales in Colorado for each of the compliance years 2011 through 2014;
  - (IV) ~~Fifteen-Twenty~~ percent of its retail electricity sales in Colorado for each of the compliance years 2015 through 2019; and
  - (V) ~~Twenty-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 ~~a~~ 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) Of the eligible energy amounts specified in paragraph 3654(a), each investor owned QRU shall derive at least four percent from solar electric generation technologies. At least one-half of this four percent shall be derived from on-site solar systems located at customers' facilities~~
- (~~ed~~) 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.
- (~~fe~~) 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.
- (~~gf~~) 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.
- (~~hg~~) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy ~~may take advantage of~~shall be subject to only one of the compliance multipliers in rules 3654(~~ed~~), (~~fe~~) or (~~gf~~).
- (~~ih~~) 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.
- (j) For purposes of compliance with this renewable energy standard, a QRU may substitute the equivalent RECs, ~~S-RECs, or SO-RECs~~ for eligible energy.
- (k) 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.
- (h) 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.
- (m) 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.
- (am) 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.
- (en) 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.
- (po) 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(d). 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.

**36553656. 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 SO-RECs from on-site solar systems renewable distributed generation in accordance with a process set forth in a Commission-approved compliance plan.

(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 trading 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).

(be) 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 facilities no greater than 30 MW 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.

(ef) 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.

(eg) 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.

(eh) 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.

(fi) 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, ~~economic development benefits~~, 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.
- (g) 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.
  - (h) 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.
  - (i) 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.

**~~3656. 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.~~

**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.
- (b) Every year on or before July 1, each investor owned QRU shall file with the Commission, by application, its proposed plan detailing how the QRU intends to comply with these rules during the next compliance year. Each annual 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) 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.
- (C) 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.
- (~~BD~~) Estimate of its retail electricity sales over a minimum of ten years;
- (~~CE~~) 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;
- (~~DE~~) 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;
- (~~EG~~) 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; on-site solar systems; solar renewable energy systems that are not on-site solar systems; and non-solar eligible energy resources with nameplate ratings of more than 30 megawatts to be acquired pursuant to the Commission's Electric Resource Planning Rules;
- (~~FH~~) 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 and expected market changes under paragraph 3658(c) and Standard rebate offer and the QRU's estimate of the eligible energy that will be acquired under the standard rebate offer;
- (~~GI~~) Plan to 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; track how the QRU is responding to customers participating in the standard rebate offer

~~program. The QRU shall track from the start of the application process to when the photovoltaic system commences generation.~~

~~(H) Plan to acquire the additional eligible energy and RECs, including the QRU's use of competitive acquisitions to obtain the additional SO RECs it needs to meet the renewable energy standard;~~

~~(I) The proposed~~ Proposed request for proposals including any standard contracts the investor owned QRU plans to use as part of a competitive acquisition process; and

~~(J) 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.~~

(II) The acquisition process for eligible energy resources, pursuant to rule ~~3655~~3656;

~~(III) The establishment of the initial level and adjustments to the standard rebate offer for solar electric generation resources, pursuant to rule 3658;~~

~~(IV) The treatment, tracking, counting and trading of RECs, pursuant to rule 3659;~~

~~(V) The establishment of a cost recovery mechanism, pursuant to rule 3660;~~

~~(VI) Rules, regulations, and tariffs for the net metering for renewable energy resources, pursuant to rule 3664; and~~

(VII) 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.

~~(bc) The Commission shall either approve the investor owned QRU's compliance plan or order modifications to the compliance plan. Investor owned QRU actions consistent with under an approved compliance plan will be presumed prudent shall carry a rebuttable presumption of prudence.~~

~~(cd) 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) ~~of \$2.00 per watt 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 as set forth under paragraph 3652(i)~~ shall be 100 kW times the SRO. At the investor owned QRU's option, the ~~standard rebate offer~~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 ~~SO~~-RECs produced by the on-site solar system. Any ~~SO~~-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.~~
- (be) Investor owned QRUs may establish one or more standard offers to purchase ~~renewable energy credits~~-RECs from on-site solar systems that meet the definition of paragraph 3652(ih) 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~~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 ~~standard offer~~-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.~~
- (ef) ~~The SRO and the standard rebate offers to purchase RECs from on-site solar systems of the investor owned QRUs shall be set forth at least annually and~~ shall meet the following requirements:
- (I) The investor owned QRU need not offer a ~~rebate~~-SRO for ~~or purchase RECs from~~ an on-site solar system smaller than 500 watts.
- (II) The ~~rebate~~-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 ~~SO~~-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 ~~SO~~-REC payment, pursuant to subparagraph 3658(~~ef~~)(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(~~ef~~)(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(~~ab~~).
- (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 ~~SO~~-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 ~~SO~~-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 ~~3655(d)(III)~~, 3656(f)(III) the rebate shall be prorated to reflect the different term.
  - (C) Irrespective of the term of the ~~SO~~-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 ~~SO~~-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~~(ef)~~(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 ~~SO~~-RECs contracted to be transferred from the customer to the investor owned QRU. Any customer that receives the rebate payment and one-time ~~SO~~-REC payment under this program shall not be entitled to any other compensation for the ~~SO~~-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 ~~SO~~-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(e)(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 ~~SO~~-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(e)(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.

- (eg) The investor owned QRU shall modify the standard contracts for its ~~standard offer SRO~~ programs to enable governmental entities to participate in such programs.
- (eh) 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 ~~SO~~-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 ~~eligible-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(ih);
  - (VII) RECs borrowed forward from future compliance years, pursuant to paragraph 3654(kj).
- (b) RECs representing electricity generated at renewable energy resources shall be counted for compliance purposes consistent with the compliance multipliers in paragraphs 3654(ed), (fe), and (gf).

- (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 does not exceed the retail rate impact established in rule-paragraph 3661(a).
- (d) ~~Subject to the maximum retail rate impact in rule 3661, the QRU shall have the discretion to determine, in a nondiscriminatory manner, the price it will pay for SO-RECs under § 40-2-124(1)(e), C.R.S.~~
- ~~(e) 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.~~
- ~~(fe) A renewable energy credit REC shall expire at the end of the fifth calendar year following the calendar year during which it was generated.~~
- ~~(g) Renewable energy credits that are generated on or after January 1, 2004 may be counted for compliance with this renewable energy standard.~~
- (hf) 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.
- (ig) 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.
- (jh) 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.
- (ki) 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 ~~SO~~-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.
- ~~(l) An investor owned QRU:~~

- ~~(I) — Shall develop an auditable process to account for RECs using a central database. In the absence of a central third-party database, the QRU shall maintain its own REC internal database and shall make an extract of the REC information available on the utility's website.~~
- ~~(II) — Shall designate within its database any REC sold to a wholesaler if the REC has been assigned to that wholesaler.~~
- ~~(III) — Shall apply for the inclusion of any losses or gains from the purchase or sale of RECs through an appropriate adjustment clause mechanism.~~
- ~~(IV) — Shall hire an independent auditor to verify the accuracy of the QRU internal database which tracks REC. The independent verification shall occur after two years then every three years thereafter.~~
- ~~(m) — The investor owned QRU shall record REC information from eligible energy resources in a central database. The database shall include, but not be limited to, a list of all eligible energy resources the QRU intends to use for compliance with the renewable energy standard, including their type, location, owner, operator, start of operation, actual REC generation, ownership, transfer and retirement. A summary database shall be provided to the Commission Staff and be publicly viewable via the Commission's website. Owners of eligible energy resources with nameplate ratings of 100kW or below and larger eligible energy resources, at their option, shall have their name and address encoded for privacy. Systems that are encoded for privacy shall have a unique identifying number assigned, and will continue to have the zip code reported.~~
- ~~(n) — In conjunction with the QRU compliance plans specified in rule 3657, a QRU may make a request that the Commission allow the use of a central third-party database to account for RECs. If a QRU proposes to use a central third-party database for the accounting of RECs, the QRU must show that the central third-party database can be readily audited by the Commission Staff to verify that the renewable energy standard is met and that the alternative system is cost effective. 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 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.~~

- (em) 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), C.R.S., and that are therefore not subject to the retail rate impact established in rule 3661.
- (pn) 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, ~~SO-RECs, and S-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 ~~forward-looking rider used by the QRU under paragraph 3660(b)~~ RESA. The investor owned QRU may seek approval in an annual compliance plan filing under ~~subparagraph rule 3657 (a)(I)(D)~~ 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) ~~An investor owned QRU may use a forward-looking cost recovery mechanism to provide funding for implementing the renewable energy standard.~~ In its compliance plans and reports, the investor owned QRU must demonstrate that the funding mechanism proposed RESA satisfies will not exceed the retail rate impact test established in paragraph 3661(a).
- (c) ~~So long as the funding mechanism RESA does not exceed the retail rate impact under paragraph 3661(a) test 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 QRU the investor owned QRU shall be entitled may:~~
- (I) ~~to e~~Collect and bank funds in the RESA account for acquiring eligible energy in future periods ~~in accordance with either an approved resource plan under rule 3613 or an approved compliance plan under rule 3657.~~
- (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 with a forward-looking cost recovery mechanism shall separately identify the forward-looking cost recovery mechanism RESA on its customers' bills.~~

- ~~(e)~~ ~~(f)~~ Interest shall accrue on the deferred balance (positive or negative) of the RESA account ~~associated with the forward-looking rider. The interest rate shall be at the average of the Commission's customer deposit interest rate and the Commission-approved weighted average cost of capital at the time of the rider 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.~~
- (ef) If the investor owned QRU incurs costs in acquiring eligible energy to meet the renewable energy standard ~~that exceed the maximum retail rate impact~~, 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). ~~These carried forward amounts shall not increase the amounts that a QRU may charge customers under the retail rate impact rule.~~
- (eg) 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 least-cost 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 included in the calculation of the retail rate impact rule pursuant to rule 3661 charged against the RESA account.
- (eh) 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~~(e)~~(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 ~~36553656~~, 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 ~~36553656~~, 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~~(e)(h)~~(I) and ~~(e)(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~~(e)(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~~(e)(h)~~(I) or ~~(e)(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~~(e)~~(h) shall prevent the Commission from waiving, repealing, or revising any Commission rule in a manner otherwise consistent with applicable law.
- (fi) 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.
- (gj) 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.
- (hk) 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.
- (il) 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.
- (d) The administrative costs of a QRU to implement these rules ~~is~~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 ~~methodologies-methods~~ and assumptions it used in its most recently approved electric resource plan under ~~rule 3613~~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, 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 ~~standard rebate offer~~ 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 ~~a each~~ each compliance plan filed under rule 3657 ~~for that compliance year~~. These costs shall then be locked down ~~for the following four until the Commission issues a final decision regarding the investor owned QRU's next annual compliance plan filings (for the second through fifth years) 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. In the sixth year, the costs shall be unlocked and reset for that year's compliance plan and the following four compliance plans to reflect changes in methodologies and assumptions in the investor owned QRU's most recently approved resource plan under rule 3613. 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 ~~each component of 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 ~~each component of 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 ~~non-solar~~ RECs, ~~S-RECs, and SO-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(kj), in previous compliance ~~years that was~~ 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(kj), 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(ih)(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(ih)(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(ih)(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 ~~each component of~~ 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 ~~standard rebate offer~~ 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 ~~(a)~~ and ~~(d)~~ 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.
- (b) In the annual compliance report, the QRU must explain whether it achieved compliance with ~~each component of~~ 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 ~~for each of the RES components~~ 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 ~~for the solar, on-site solar and non-solar components 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) ~~the 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); no action should be taken by the Commission, whether any
    - (B) ~~changes~~ Changes are needed to the compliance report; ~~or whether~~
    - (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~~The QRU complied with ~~the components of its~~ ~~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 ~~state whether~~
- (D) a-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 ~~each component of~~ 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 ~~solar, on-site solar and/or non-solar~~ 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 ~~solar, on-site solar and/or non-solar~~ 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 ~~the solar, on-site solar or non-solar components of~~ 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 ~~each of the solar, on-site solar and non-solar components of~~ 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 ~~the solar, on-site solar and non-solar components of 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 ~~components of 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 ~~solar, on-site solar and non-solar components of its~~ 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 ~~any of the solar, on-site solar and non-solar components of 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 ~~for each component for which there was noncompliance~~ the cost that would have been incurred by the QRU to fully comply with ~~such component 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 ~~standard-rebate-offer~~SRO.
- (II) The cost of such administrative penalties shall not be recovered from retail customers through the QRU's rates.

**3664. Net Metering.**

- (a) All investor owned QRUs shall allow the customer's retail electricity consumption to be offset by the electricity generated from ~~eligible energy resources on the customer's side of the meter that are interconnected with the QRU~~retail renewable distributed generation, provided that the generating capacity of the customer's facility meets the following two criteria:
  - (I) The ~~generator-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 ~~generator-retail renewable distributed generation~~ does not exceed the customer's service entrance capacity.
- (b) If a customer ~~of an investor owned QRU with~~ retail renewable distributed generation an eligible energy resource generates renewable energy pursuant to paragraph subsection (a) of rule 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 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 ~~facility that generates renewable energy from an eligible energy resource~~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 ~~eligible energy resources~~ 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 ~~an eligible energy resource~~ retail renewable distributed generation. Nothing in this rule shall prohibit an investor owned QRU from requesting changes in rates at any time.
- (h) 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 5 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 5 kW up to 10 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.

**3665. Small Generation Interconnection Procedures.**

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[indicates omission of unaffected rules]

- (e) Provisions that apply to all interconnection requests.

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[indicates omission of unaffected rules]

- (IX) Coordination with affected systems. The utility shall coordinate the conduct of any studies required to determine the impact of the interconnection request on affected systems with affected system operators and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. The utility will include such affected system operators in all meetings held with the IC as required by these procedures. The IC will cooperate with the utility in all matters related to the conduct of studies and the determination of modifications to affected systems. A utility which may be an affected system shall cooperate with the utility with ~~whom~~which interconnection has been requested in all matters related to the conduct of studies and the determination of modifications to affected systems.

\* \* \*

[indicates omission of unaffected rules]

**36563666. 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.

**36663667. – 3699. [Reserved]**

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[indicates omission of unaffected rules]