Decision No. C10-0372

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 10R-243E

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.

NOTICE OF PROPOSED RULEMAKING

Mailed Date: April 29, 2010
Adopted Date: April 14, 2010

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I. BY THE COMMISSION

A. Statement

1. The Colorado Public Utilities Commission (Commission) gives notice of a proposed rulemaking regarding its rules pertaining to the of the renewable energy standard (RES) as required pursuant to § 40-2-124, C.R.S. The intent of this limited rulemaking is to revise and to clarify the existing RES rules contained in 4 *Code of Colorado Regulations* (CCR) 723-3-3650, *et seq*., as a result of the passage by the 2010 Colorado General Assembly and the signing by Governor Ritter of House Bill (HB) 10-1001.

2. HB 10-1001, among other things, modifies § 40-2-124(1), C.R.S., to increase the compliance percentages of the RES for investor owned Qualifying Retail Utilities (QRUs) to reach a goal of 30 percent of their energy sales to be satisfied with electricity generated by eligible energy resources by 2020. The bill further requires that a portion of the renewable energy that the investor owned QRUs acquires to meet the RES is produced by "distributed renewable electric generation," or relatively small-scale renewable energy resources many of which would be installed "on-site" at customer homes and businesses.

3. In addition, HB 10-1001 permits the Commission to set the standard rebate offer (SRO) for on-site solar systems, a particular type of renewable distributed generation, to levels below $2.00 per watt, depending on changes in the market for such small-scale solar technologies.

4. The bill further provides for the advancement of funds by investor owned QRUs, to be repaid through future collections from customers, for the purchase of more renewable energy resources sooner than later. The investor owned QRUs would then be repaid the funds

they advance plus interest calculated at the investor owned QRU's after-tax weighted average cost of capital.

5. The bill also allows the Commission to establish a charge to customers who install renewable distributed generation so that they contribute "their fair share" toward the investor owned QRU's renewable energy programs. This charge may be established at a level that would cause such customers to pay more than two percent of their annual electricity bills toward the investor owned QRU's renewable energy programs.

6. With respect to resource acquisition, HB 10-1001 adds § 40-2-129, C.R.S., which section requires the Commission to consider, on a qualitative basis, factors that affect employment and the long-term economic viability of Colorado communities when evaluating electric resource acquisitions.

7. In addition, the Commission recently adopted modified rules to implement the RES in Docket No. 08R-424E. The new RES rules promulgated in that proceeding took effect on March 30, 2010 and incorporate not only the legislative changes from the 2009 Colorado General Assembly but also changes based on a comprehensive review of all of our RES rules. Because the Commission just concluded such a comprehensive rulemaking, we are limiting this proceeding to address only the necessary changes resulting from HB 10-1001.[1]

B. Discussion

8. HB 10-1001 requires the Commission to make several modifications to the rules set forth in 4 CCR 723-3-3650, *et seq*. Our proposed rule changes are set forth in Attachment A to this Decision. The primary purpose of these proposed rules is to solicit feedback from

[1] We also intend to correct a few grammatical errors and to modify certain rule provisions that have become obsolete due to the passage of time.

interested persons. The Commission will adopt an appropriate set of final rules based on these comments after the scheduled hearing in this proceeding.

a) Because some of the proposed changes to our RES rules require the renumbering of certain existing rules, cross-references to rules that apply to QRUs that are cooperative electric associations and municipally owned utilities may be affected. However, all of the substantive proposed rule changes proposed here apply only to investor owned QRUs and none of the proposed rule changes in Attachment A modify the rules that apply to cooperative electric associations and municipally owned utilities.

1. Rule 3651 Overview and Purpose

9. We propose additional language to acknowledge that the 2010 Colorado General Assembly further modified § 40-2-124, C.R.S.

2. Rule 3652 Definitions

10. We propose to define the following terms in the RES Rules as a result of the new provisions in HB 10-1001: "renewable distributed generation," "retail renewable distributed generation," and "wholesale renewable distributed generation." Although HB 10-1001 uses "distributed generation" as the short-hand reference for these resources, we would include for clarity the word "renewable" within all of these terms to recognize that certain types of distributed generation available in the marketplace are not renewable energy resources. The proposed meanings of these terms would nonetheless conform to the definitions set forth in HB 10-1001.

11. As a result of the introduction of the new term "retail renewable distributed generation" and the new provisions in HB 10-1001 that govern the acquisition of these resources,

we propose to strike the definitions of "off grid on-site solar system," "solar on-site renewable energy credit," and "solar renewable energy credit." Accordingly, references elsewhere in our rules to an "S-REC" or a "SO-REC" would either be eliminated or modified.

12. We also propose to collapse the definition for "solar electric generation technologies" into the definition of "solar renewable energy system" and modify the definition of "on-site solar system" consistent with the new definition of "retail renewable distributed generation."

13. Because both of the investor owned QRUs now have a Renewable Energy Standard Adjustment (RESA), we would introduce that term for purposes of convenience in the new proposed rules that stem from HB 10-1001.

14. Finally, we propose to establish "retail electricity sales" as a defined term, because the term would now be used in two rules, namely rule 3654, titled "Renewable Energy Standard," and a new rule 3655, titled "Renewable Distributed Generation."

3. Rule 3654 Renewable Energy Standard

15. We would set forth the increased RES compliance percentages for investor owned QRUs in paragraph 3654(a) and add a reference in that paragraph to a new rule 3655 that addresses the requirements for investor owned QRUs to acquire renewable distributed generation.

16. Because the requirements on the investor owned QRUs to acquire renewable distributed generation replace the existing requirements to acquire solar resources, we would eliminate paragraph 3654(d).

17. We also propose to revise renumbered paragraph 3654(e) to eliminate the 1.25 multiplier for retail renewable distributed generation as required by HB 10-1001.

Likewise, with respect to renumbered paragraph 3654(g) that addresses the compliance multipliers in our RES rules, we would change the terms "may take advantage of" to "shall be subject to" consistent with the new language in the statute.

4. Rule 3655 Renewable Distributed Generation

18. Rule 3654 sets forth the RES for investor owned QRUs as well as for QRUs that are either cooperative electric associations or municipally owned utilities. However, the requirements in HB 10-1001 concerning the acquisition of renewable distributed generation apply only to investor owned QRUs. We therefore propose to introduce an entirely new rule to address these renewable distributed generation requirements rather than incorporating the new statutory provisions within rule 3654.

19. As a result of the insertion of this new rule 3655, titled "Renewable Distributed Generation," we propose to renumber existing rule 3655, titled "Resource Acquisition," to rule 3656, and then renumber existing rule 3656, titled "Environmental Impacts," to rule 3666. No substantive changes are proposed to the renumbered rule 3666.

20. The proposed paragraph 3655(a) establishes the minimum amounts of renewable distributed generation that the investor owned QRUs must acquire to comply with HB 10-1001. Our proposed paragraph 3655(b) then splits this overall distributed generation requirement between retail renewable distributed generation and wholesale renewable distributed generation.

21. The proposed paragraph 3655(c) permits the Commission, beginning in 2015, to alter the overall amount of renewable distributed generation that the investor owned QRU must acquire. This paragraph would also permit the Commission to alter the split between the retail renewable distributed generation and the wholesale renewable distributed generation that the investor owned QRU must acquire. To that end, paragraph 3655(d) sets forth the information

that the investor owned QRU would provide to the Commission in its RES compliance plan in order for the Commission to alter the amount of renewable distributed generation that must be acquired from the retail and wholesale segments.

22. Paragraph 3655(e) would provide that investor owned QRUs shall use renewable energy credits, or RECs, associated with retail and wholesale renewable distributed generation to demonstrate compliance with the requirements under rule 3655. Furthermore, the provisions governing RECs under rule 3659 would apply generally to all RECs, unless otherwise specified.

23. Finally, paragraph 3655(f) would state that the Commission will establish the funding levels that the investor owned QRU will devote towards the acquisition of retail renewable distributed generation serving residential and non-residential customers.

5. Rule 3656 Resource Acquisition

24. We propose new paragraphs 3656(b) and (c) to acknowledge that § 40-2-129, C.R.S., requires the Commission to consider employment effects and the long-term economic viability of Colorado communities with respect to electric resource acquisitions. Likewise, paragraph 3656(h) would be modified to incorporate these concepts.

25. Consistent with the Commission's decisions in Docket No. 08R-424E, expedited approvals for renewable energy supply contracts pursuant to paragraph 3656(d) apply only to renewable distributed generation.

6. Rule 3657 QRU Compliance Plan

26. HB 10-1001 places new responsibilities on the Commission to establish the SRO, to establish spending targets between residential and non-residential retail renewable distributed generation, and to consider the "advancing of funds" from future RESA collections from year to

year. Accordingly, we propose several new filing requirements for the investor owned QRU's annual compliance plan.

27. Subparagraph 3657(a)(I)(A) would require a presentation of expected RESA balances over the 10-year RES planning period, subparagraph 3657(a)(I)(B) would require a presentation of expected retail sales over the 10-year RES planning period, and subparagraph 3657(a)(I)(C) would require a presentation of RES requirements and distributed generation requirements.

28. Subparagraph 3657(a)(I)(D) would require a presentation of expected RESA collections from residential and non-residential customers, subparagraph 3657(a)(I)(E) would require a proposal for the acquisition of retail renewable distributed generation from the residential and non-residential segments as well as from wholesale renewable distributed generation providers, and subparagraph 3657(a)(I)(F) would require a proposal from the investor owned QRU to change the SRO.

29. In light of the changes regarding renewable distributed generation, the provisions in the existing rule 3657 concerning the acquisition of RECs from on-site solar systems would be deleted.

30. Furthermore, the existing provisions regarding tracking measures for an SRO program's application process would be eliminated, since both of the investor owned QRUs now have well-established SRO programs. However, we propose additional language in subparagraph 3657(a)(V) to clarify that application forms, standard agreements, and general procedures for participation in the utility's SRO programs are to be submitted with a compliance plan, as these materials relate directly to the interconnection of renewable resources with the utility's systems.

7. Rule 3658 Standard Rebate Offer

31. Because HB 10-1001 places a new responsibility on the Commission to set the level of the SRO below $2.00 per watt if market conditions support such a change, we propose new provisions within rule 3658. Specifically, paragraph 3658(d) would set forth the general standard the Commission would adopt in establishing the SRO, such that the overall incentive available to the customer, including the investor owned QRU's standard offers to purchase RECs, other incentives, and tax breaks, is reasonable. Subparagraph 3658(e)(II) would further support this concept by requiring the investor owned QRU to file an application with the Commission to modify the SRO, if the investor owned QRU proposes changes its standard offers to purchase RECs to levels not addressed in the QRU's approved RES compliance plan.

8. Rule 3659 Renewable Energy Credits

32. The primary changes we envision for this rule stem from the provisions in HB 10-1001 that require all renewable distributed generation greater than 1 MW to be registered with "a renewable energy generation information tracking system designated by the Commission." We propose to designate the Western Renewable Energy Generation Information System (WREGIS) to serve that purpose and would require registration with WREGIS for all renewable resources greater than 1 MW that are located within the Western Electricity Coordinating Council (WECC) region. Since all systems greater than 1 MW would be registered with WREGIS and would therefore be required to record their RECs there, we would similarly require the investor-owned utilities to register with WREGIS and record their RECs there as well.

33. The proposed rule changes concerning WREGIS would not eliminate, however, the ability for the investor owned QRU to use its own "central database" to record RECs from

renewable distributed generation without a production meter or from renewable distributed generation less than 1 MW that may have a production meter but is not registered in WREGIS.

34. Since Commission Staff has ready access to WREGIS as the holder of Colorado's administrator account, and because any supplemental REC database for renewable distributed generation maintained by the investor owned QRU would be available to Commission Staff via its audit powers, we propose to eliminate the requirements for a summary database.

9. Rule 3660 Cost Recovery and Incentives

35. Both of the investor owned QRUs each have a Renewable Energy Standard Adjustment, or RESA. We therefore propose to update rule 3660 to reflect this fact.

36. Aside from the new references to the RESA and the RESA account, the rule would be modified to include the provisions from HB 10-1001 that set the interest rate on RESA account balances at the utility's after tax weighted average cost of capital.

10. Rule 3661 Retail Rate Impact

37. HB 10-1001 provides the Commission the ability to establish rates for retail customers of investor owned QRUs who install renewable distributed generation so that they contribute "their fair share" toward the costs of the investor owned QRU's renewable energy programs. The statute recognizes that such rates may cause the customer's contribution towards the investor owned QRU's renewable energy programs to exceed the two percent cap on the retail rate impact. Therefore, under paragraph 3661(a), we propose new language that acknowledges that customers with renewable distributed energy may pay more than two percent cap of their annual electricity bills in support of the investor owned QRU's renewable energy programs.

38. We intend to monitor RESA account balances whenever the investor owned QRU advances funds to its RESA account to purchase more renewable energy in anticipation of being paid back through future RESA collections. Therefore, we would require that RESA account balances be projected over the entire 10-year RES planning period under paragraph 3661(f).

11. Rule 3662 Annual Compliance Report

39. Most of our proposed changes to this section involve references to the new requirements on investor owned QRUs to acquire renewable distributed energy resources.[2]

40. We also propose an addition to subparagraph 3662(a)(XIV) that requires the investor owned QRU to present the total funds spent on eligible energy and RECs, including RESA and other funds, such as collection made through the investor owned QRU's purchased energy cost adjustment mechanism.

12. Rule 3664 Net Metering

41. The changes we contemplate for this rule primarily involve the use of the new term "retail renewable distributed generation."

42. Consistent with our discussion regarding the exception in HB 10-1001 to the retail rate impact for customers of investor owned QRUs who install renewable distributed generation, we propose a new paragraph 3664(h) that would require the investor owned QRUs to charge retail customers taking net metered service a "RESA surcharge." This surcharge would ensure that such customers contribute the same level of funds to the RESA account as customers that do not take net metered service but who use the same amount of electricity in total (*i.e.*, the

[2] The changes we propose to rule 3663 concerning the compliance report review also involve references to the new requirements on investor owned QRUs to acquire renewable distributed energy resources.

electricity provided by the utility plus the electricity provided by the retail renewable distributed generation system).

43. We recognize, however, that there may be insufficient metering data for customers with retail distributed generation that is not production metered in order for the investor owned QRU to bill these customers a RESA surcharge based on the actual amounts of electricity they have consumed. In those instances, we propose that the RESA surcharge be based on an assumed level of monthly usage of 500 kWh.

13. Other Potential Rule Changes

44. The Commission recognizes that HB 10-1001 substantially increases the amount of retail renewable distributed generation that the investor owned QRUs must acquire. We are therefore obliged to ensure that the entire process that customers follow to install retail renewable distributed generation, from SRO applications to the final connection to the investor owned QRU's system, is as simple and predictable as possible. We likewise expect that such simplicity and predictability will help to minimize the transaction costs associated with the customer's participation in the investor owned QRU's renewable energy programs.

45. Many of the provisions in the Commission's rules that govern the interconnection of renewable distributed generation are found in rule 3665, titled "Small Generation Interconnection Procedures." This rule was part of the "Consensus Rules" submitted by participants in Docket No. 05R-112E that followed the voters' passage of Amendment 37. We suspect, however, that the marketplace for retail renewable distributed generation has evolved since that initial RES rulemaking, and a fresh reexamination of rule 3665 may now be in order given Colorado's experience in implementing the RES since 2005.

46. Rule 3657, titled "QRU Compliance Plan," has always required annual filings by the investor owned QRUs. The Commission found such annual filings still to be necessary in the most recent RES rulemaking proceeding, Docket No. 08R-424E, based on the rapid evolution of the renewable energy market in Colorado, the persistent degree of controversy in RES compliance plan proceedings, and the potential need for the investor owned QRUs to implement changes in their resource acquisition strategies to comply with modified laws and Commission rules. However, this annual filing requirement may have the effect of compromising the predictability of the investor owned QRU's resource acquisition plans and SRO programs.

47. In order to help the Commission determine the extent to which the Commission's RES Rules may need to be further modified in light of the passage of HB 10-1001 and how such rule changes would best be implemented, we pose the following questions:

a) Does the passage of HB 10-1001 require the updating of rule 3665 governing the interconnection of retail renewable distributed generation, particularly in ways that increase the simplicity and predictability of the interconnection process and that reduce transaction costs? What specific changes should be made to this rule for retail renewable distributed generation in the following size categories: systems no greater than 10 kW; systems greater than 10 kW but no greater than 2 MW; and systems greater than 2 MW?

b) Do the provisions governing annual compliance plan filings under rule 3657 need to be modified as a result of HB 10-1001 so that plans can address both the immediate issues surrounding the next compliance year and more forward-looking acquisition strategies over multiple years to foster greater predictability?

c) If the Commission were to implement these proposed rule changes in this proceeding, would it be possible for new rules to take effect around the same time when HB 10-1001 takes effect? Alternatively, should such matters be the subject of a separate rulemaking due to the complexity of these issues?

48. Responses to these questions may be presented to the Commission in comments pursuant to the procedural schedule we establish below. We shall consider these responses in determining the proper course of action to take either in this proceeding or in a separate rulemaking proceeding to address such topics.

C. Conclusion

49. The statutory authority for the rules proposed here is found at §§ 24-4-101, *et seq.*, 40-1-101, *et seq.*, 40-2-108, 40-3-102, 40-3-103, 40-4-101, and 40-4-108, C.R.S.

50. The Commission will conduct a hearing on the proposed rules and related issues *en banc* on June 1, 2010. Interested persons may submit written comments on the rules and present these orally at hearing, unless the Commission deems oral presentations unnecessary. The Commission encourages interested persons to submit written comments before the hearing scheduled in this matter. In the event interested persons wish to file comments before the hearing, the Commission requests that such comments be filed no later than May 18, 2010.

II. ORDER

A. The Commission Orders That:

1. This Notice of Proposed Rulemaking, and Attachment A attached hereto, shall be filed with the Colorado Secretary of State for publication in the May 10, 2010 edition of *The Colorado Register*.

2. A hearing on the proposed rules and related matters shall be held before the Commission *en banc* as follows:

DATE	June 1, 2010
TIME:	9:00 a.m.
PLACE:	Commission Hearing Room 1560 Broadway, Suite 250 Denver, Colorado

At the time set for hearing in this matter, interested persons may submit written comments and may present these orally unless the Commission deems oral comments unnecessary.

3. Interested persons may file written comments in this matter before hearing. The Commission requests that such pre-filed comments be submitted no later than May 18, 2010. All submissions, whether oral or written, will be considered by the Commission.

4. This Order is effective upon its Mailed Date.

B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING April 14, 2010.

(S E A L)

ATTEST: A TRUE COPY

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

RONALD J. BINZ

MATT BAKER

Commissioners

COMMISSIONER JAMES K. TARPEY
ABSENT.

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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

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), (~~e~~d) through (~~j~~i) and (~~m~~l); 3659(a)(I) through (a)(V), (b)~~,~~ (d) through (~~k~~j), 3660(~~i~~l), 3661(b), (c), (g), and (~~j~~i), 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 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), (~~e~~d) through (jj) and (~~m~~l); 3659(a)(I) through (a)(V), (b), (d) through (~~k~~j).

(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), (~~e~~d) through (jj), and (~~m~~l), 3659(a)(I) through (a)(V), (b), (d) through (~~k~~j), 3660(~~i~~l), 3661(b), (c), (g),and (jj), 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), (~~e~~d) through (jj) and (~~m~~l), 3659(a)(I) through (a)(V), (b), (d) through (~~k~~j) 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.

(I) 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.~~

(~~i~~h) "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~~.

(~~j~~i) "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.

(~~k~~j) "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.

(~~l~~k) "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.

(~~m~~l) "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.

(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.

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

(~~r~~t) "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.

(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.

(~~s~~v) "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:

(I) The eligible energy resources shall be limited to those identified in subsection § 40-2-124(1)(a);

(II) The percentage requirements shall be equal to or greater in the same years than those identified in subsection § 40-2-124(1)(c)(V) and counted in the manner allowed by rule 3654; and

(III) The utility must have an optional pricing program in effect that allows retail customers the option to support through utility rates emerging renewable energy technologies.

(b) The statement to be submitted by a municipally owned QRU is for information purposes only and is not subject to approval by the Commission. Upon filing of the certification statement, the municipally owned QRU shall have no further obligations under these rules.

(c) Nothing in this section prohibits a municipally owned electric utility from buying and selling RECs.

3654. Renewable Energy Standard.

(a) Each investor owned QRU shall generate or cause to be generated (through purchase or by providing rebates or other form of incentive) eligible energy, including the renewable distributed generation required under paragraphs 3655(a) and 3655(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~~

(~~e~~d) For purposes of compliance with the renewable energy standard specified in rules 3654(b) and (c), for cooperative electric association QRUs and municipal QRUs, each kilowatt-hour of eligible energy generated from solar electric generation technology shall be counted as 3.0 kilowatt-hours of eligible energy, provided that the solar electric generation technology commenced producing electricity prior to July 1, 2015. For solar electric generation technology that commenced producing electricity on or after July 1, 2015, each kilowatt-hour of eligible energy generated from solar electric generation technology shall be counted as 1.0 kilowatt-hours of eligible energy for compliance purposes.

(~~f~~e) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy generated in Colorado, other than retail renewable distributed generation, shall be counted as 1.25 kilowatt-hours of eligible energy.

(~~g~~f) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy generated from a community-based project shall be counted as 1.5 kilowatt-hours of eligible energy.

(~~h~~g) 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(~~e~~d), (~~f~~e) or (~~g~~f).

(~~i~~h) 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.

(~~i~~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~~j) 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.

(~~l~~k) 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~~l) 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.

(~~n~~m) 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.

(~~o~~n) 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.

(~~p~~o) The QRU may generate, or cause to be generated, eligible energy without regard to economic dispatch procedures.

3655. Renewable Distributed Generation.

[Existing Rule 3655 Resource Acquisition moved to Rule 3656 Resource Acquisition]

(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), 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 3655(b) for the compliance year 2015 and each compliance year thereafter upon finding, pursuant to paragraph 3655(d), 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) Beginning with the compliance plan filed by the investor owned QRU for the 2015 compliance year under rule 3657, the investor owned QRU shall propose either to retain the percentages set forth in paragraph 3655(a) and 3655(b) or to amend the percentages set forth in paragraph 3655(a) and 3655(b) as no longer in the public interest. The investor owned QRU shall base its proposal on the following information:

(I) Projected equipment and installation costs for retail renewable distributed generation for residential and non-residential facilities for the compliance year and the following four compliance years;

(II) Projected costs to the investor owned QRU for the acquisition of RECs generated by new retail renewable distributed generation for the compliance year and the following four compliance years;

(III) Projected costs to the investor owned QRU for the acquisition of RECs generated by new wholesale renewable distributed generation for the compliance year and the following four compliance years;

(IV) Studies, reports, and analyses addressing market conditions in the compliance year and expected market changes in the following four compliance years;

(V) Studies, reports, and analyses addressing the value of renewable distributed generation to the utility and the utility's system; and,

(VI) Projected financial impacts of renewable distributed generation on the investor owned QRU and the investor owned QRU's retail customers.

(e) Renewable energy credits associated with retail renewable distributed energy and wholesale renewable distributed energy will be used to comply with the renewable distributed energy requirements as set forth in this rule 3655.

(f) 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.

3656. Resource Acquisition.

[Existing Rule 3656 Environmental Impacts Moved to Rule 3666 Environmental Impacts]

(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 Resource Planning Rules shall apply to the acquisition of eligible energy resources by investor owned QRUs. Notwithstanding the exemptions in the 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.

(c) In the event that an investor owned QRU plans to acquire eligible energy resources either through competitive bidding or through the development of new eligible energy resources that the investor owned QRU shall own, the investor owned QRU shall provide the Commission with the following information regarding selected bids or new facilities that the investor owned QRU will own:

(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.

~~(b)~~(d) 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.

(~~c~~e) 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.

(~~d~~f) 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.

(~~e~~g) 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.

(~~f~~h) 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, 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~~i) 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~~j) 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~~k) 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.**~~

[Existing Rule 3656 Environmental Impacts Moved to Rule 3666 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) 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 plan shall include:

(I) The investor owned QRU's:

(A) Determination of the retail rate impact and a presentation of projected RESA account balances pursuant to rule 3661;

(B) Estimate of its retail electricity sales for the compliance year and the subsequent nine compliance years;

(C) 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 ~~s~~under rule 3654 and the requirements for renewable distributed generation under rule 3655;

(D) 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;

(E) 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 Resource Planning Rules;

(F) Proposal either to retain or to reduce the SRO based on market conditions and expected market changes under paragraph 3658(c) and the standard offers the investor owned QRU intends to establish in the compliance year to purchase RECs from on-site solar systems that are no larger than 500 kW ~~Standard rebate offer and the QRU's estimate of the eligible energy that will be acquired under the standard rebate offer~~;

(G) Plan to advance funds from year to year to augment the amounts collected from ~~reail~~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~~H) ~~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~~I) 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;

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

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

(V~~I~~I) 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.

(b) 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.

(c) 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 under paragraph 3658(c).

(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) With each compliance plan filed by the investor owned QRU under rule 3657, the investor owned QRU shall propose that the Commission either to retain or to reduce the SRO. The investor owned QRU shall base its proposal on the following information:

(I) The range of prevailing and expected costs of on-site solar systems less than 1 MW, including equipment and installation costs;

(II) The level of standard offers established by the investor owned QRU to purchase RECs from on-site solar systems;

(III) Other subsidies likely available to SRO program participants, such as rebates from governmental entities; and

(IV) Tax benefits to customers or third-party developers of on-site solar systems.

(d) 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.

(~~b~~e) 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(~~i~~h) so long as the on-site solar system is 500 kW or less in size. Subject to the retail rate impact in rule 3661~~,~~.:

(I) ~~the~~ 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. However, the investor owned QRU shall file an application with the Commission containing the information set forth in paragraph 3658(c) within ten days of a change in the price it will pay for RECs from on-site solar systems, if such price change was not set forth in an approved compliance plan for the compliance year in which the price change occurs.

(~~c~~f) 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(~~c~~f)(VIII), shall be paid to the applicant.

(IV) With the exception of batteries, all on-site solar systems eligible for SRO rebates shall be covered by a minimum five-year warranty. Contracts will require customers to maintain the on-site solar system so that it remains operational for the term of the contract.

(V) On-site solar systems must consist of equipment that is commercially available and factory new when installed on the original customer's premises to be eligible for the SRO rebate. Rebuilt, used, or refurbished equipment is not eligible to receive the rebate unless the equipment is transferred by a commercial tenant from another premise as permitted by subparagraph 3658(~~c~~f)(VII)(C).

(VI) Customers may contract to expand their on-site solar systems within program parameters and obtain a rebate for the expanded capacity up to the cap set forth in paragraph 3658(~~a~~b).

(VII) In order to receive the SRO rebate payment:

(A) A residential customer must enter into an agreement with the investor owned QRU, with a minimum term of 20 years, that transfers the ~~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(~~e~~f)(VII)(C), and except for solar facilities that are owned by entities other than the on-site consumer of the solar energy, for on-site solar systems, up to and including ten kW, that become operational on or after December 1, 2004, the investor owned QRU shall offer to make a one-time payment, in addition to the standard rebate payment, for the ~~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~~f)(X)(D) as compared with an optimally oriented fixed, i.e. non-tracking, system at the customer's location, but only if the calculated system output differs from the optimally oriented system output by more than ten percent.

(XI) The level of ~~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~~f)(VII)(C), the on-site solar system installed must remain in place on the customer's premises for the duration of its contract life. However, all customer equipment must have electrical connections in accordance with industry practice for permanently installed equipment, and it must be secured to a permanent surface (*e.g.*, foundation, roof, etc.). Any indication of portability, including, but not limited to, wheels, carrying handles, dolly, trailer or platform, will render any on-site solar system ineligible for participation and payments under the SRO program.

(XIII) On-site solar systems installed on an apartment building must either be owned and operated by the owner of the building or the owner of the facility must provide documentation of the right to install and maintain the solar panels on the apartment building premises for 20 years. Each on-site solar system must be dedicated to a specific meter and the load at the meter must meet the size limits for net metering of on-site solar systems.

(XIV) On-site solar systems installed on condominiums must be owned by the condominium owner, or by a third party on behalf of the condominium owner, and metered to that owner's unit. The owner must provide documentation that the owner has the legal right to

install and maintain the solar panels at the site for the term of the 20-year agreement. If the on-site solar system serves a general common element common area, the contract will be with the condominium owners' association. If the on-site solar system serves a limited common element common area, the contract will be with the condominium unit owner or owners.

(~~d~~g) The investor owned QRU shall modify the standard contracts for its ~~standard offer~~ SRO programs to enable governmental entities to participate in such programs.

(~~e~~h) Sales of electricity may be made by an owner or operator of an on-site solar system to the end-use electric consumer located at the site of the on-site solar system. If the on-site solar system is not owned by the electric consumer, the investor owned QRU shall pay for the ~~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(~~i~~h);

(VII) RECs borrowed forward from future compliance years, pursuant to paragraph 3654(~~k~~j).

(b) RECs representing electricity generated at renewable energy resources shall be counted for compliance purposes consistent with the compliance multipliers in paragraphs 3654(~~e~~d), (~~f~~e), and (~~g~~f).

(c) The Commission shall not restrict the investor owned QRU's ownership of RECs if the investor owned QRU complies with both the renewable energy standard established in rule 3654 and the requirements for renewable distributed generation established in rule 3655 and if the investor owned QRU complies with ~~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.

(~~f~~e) 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.~~

(~~h~~f) RECs shall be used for a single purpose only, and shall expire or be retired upon use for that purpose. All RECs utilized by the QRU to comply with the renewable energy standard:

(I) May not be sold or otherwise exchanged with any other party, or in any other state or jurisdiction;

(II) May not be included within a blended energy product certified to include a fixed percentage of renewable energy in any other state or jurisdiction;

(III) May be counted simultaneously toward compliance with a federal renewable portfolio standard and with the renewable energy standard.

(~~i~~g) RECs that are generated with fuel cell energy using hydrogen derived from an eligible energy resource are eligible for compliance purposes only to the extent that the energy used to generate the hydrogen did not create renewable energy credits.

(~~j~~h) If a renewable energy system uses a renewable energy resource in combination with a nonrenewable energy source to generate electricity, only the RECs associated with the proportion of the total electric output of the renewable energy system that results from the use of renewable energy resources shall be eligible to count toward compliance with the renewable energy standard.

(~~k~~i) If an on-site solar systems of ten kW or below has received a one-time REC payment from a QRU under rule 3658, the QRU shall be entitled to count the anticipated ~~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~~j) ~~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, with the exception of retail renewable distributed generation facilities less than one megawatt.

(k) All investor owned QRUs shall register in WREGIS and record their RECs in WREGIS. The investor owned QRU shall recover the costs for registering and participating in WREGIS through its RESA.

(l) To the extent that the investor owned QRU acquires RECs from renewable distributed generation that cannot be 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.

(~~o~~m) An investor owned QRU may own and use for compliance with the renewable energy standard RECs generated by renewable energy resources that the Commission has designated as new energy technologies or demonstration projects under § 40-2-123(1), C.R.S., and that are therefore not subject to the retail rate impact established in rule 3661.

(~~p~~n) The investor owned QRU shall have the discretion to sell or trade RECs at any time as long as the investor owned QRU obtains and retires sufficient levels of RECs~~, 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 Resource Planning Rules or an approved compliance plan under rule 3657, ~~the QRU~~ the investor owned QRU ~~shall be entitled~~ may:

(I) ~~to c~~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) ~~(I)~~ 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.

(~~e~~f) 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.~~

(~~d~~g) The investor owned QRU shall be entitled to earn an extra profit on the QRU's ownership investment in a specific eligible energy resource if that eligible energy resource provides net economic benefits to customers. For these investments, the QRU shall be entitled to a return equal to the QRU's most recent authorized rate of return on rate base plus a bonus limited to 50 percent of the of the net economic benefit as long as the QRU is in compliance with these rules implementing the renewable energy standard. If the QRU's investment in a specific eligible renewable energy resource does not provide a net economic benefit to customers, the QRU shall be entitled to a return equal to the QRU's most recent authorized rate of return on rate base.

(I) For the purposes of this rule 3660, net economic benefit shall mean that the specific eligible energy resource in which the QRU has made an ownership investment results in an average retail rate impact less than the rate impact that would have resulted from the acquisition of the alternative eligible energy resource meeting the same component of the renewable energy standard that would have been selected absent the QRU's investment. The QRU shall set forth its calculation of the proposed net economic benefit either at the time of a compliance plan filing, an annual compliance report filing, a QRU rate filing or by application. The Commission shall determine the level of the net economic benefit and the level of the bonus after review of the utility's filing. The Commission may set the matter for hearing if appropriate under the Commission's Rules of Practice and Procedure.

(II) To the extent that a QRU uses computer modeling in its analysis of net economic benefit, the QRU shall use the same methodologies and assumptions it used in its most recently approved ~~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.

(~~e~~h) An investor-owned QRU may propose to develop and own, in whole or in part, a new eligible energy resource by filing an application with the Commission. The Commission may set the matter for hearing, if appropriate, under the Commission's Rules of Practice and Procedure. For the purpose of this paragraph 3660~~(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 ~~3655~~3656, up to twenty-five percent of the total new eligible energy resources that the QRU acquires from entering into power purchase agreements and from developing and owning resources after March 27, 2007 if the Commission determines that the QRU-owned new eligible energy resource can be constructed at a reasonable cost compared to the cost of similar eligible energy resources available in the market.

(II) A QRU shall be allowed to develop and own as utility rate-based property, without being required to comply with the competitive bidding requirements in rule ~~3655~~3656, up to fifty percent of the total new eligible energy resources that the QRU acquires from entering into power purchase agreements and from developing and owning resources after March 27, 2007 if the Commission determines that the QRU-owned new eligible energy resource can be constructed at a reasonable cost compared to the cost of similar eligible energy resources available in the market and that the proposed new eligible energy resource would provide significant economic development, employment, energy security, or other benefits to the state of Colorado.

(III) The QRU shall be allowed to develop and own as utility rate-based property more than the percentages of total new eligible energy resources set forth in rules 3660~~(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.

(~~f~~i) When an investor owned QRU applies for a certificate of public convenience and necessity, the Commission shall consider rate recovery mechanisms that provide for earlier and timely recovery of costs prudently and reasonably incurred by the QRU in developing, constructing, and operating the eligible energy resource, including: (a) rate adjustment clauses until the costs of the eligible energy resource can be included in the utility's base rates; and (b) a current return on the utility's capital expenditures during construction at the utility's most recent authorized weighted average cost of capital, including its cost of debt and its most recent~~ly~~ authorized rate of return on equity, during the construction, startup, and operation phases of the eligible energy resource.

(~~g~~j) The utility is entitled to recover through rates, its prudently incurred expenditures. While not the exclusive method for establishing prudence, if the Commission approves a renewable energy supply contract or a renewable energy credit contract, the expenditures of the investor owned QRU under the contract shall be deemed to be prudent expenditures.

(~~h~~k) If the investor owned QRU recovers fuel and purchased energy expense through an incentive adjustment clause, the QRU shall not receive a benefit from the incentive adjustment clause for the energy generated from QRU-owned eligible renewable energy resources, but the QRU shall be entitled to recover all the fuel and purchased energy costs associated with the eligible energy resource.

(~~i~~l) Each wholesale energy provider shall offer to its wholesale customers that are cooperative electric associations the opportunity to purchase their load ratio share of the wholesale energy provider's electricity from eligible energy resources. If a wholesale customer agrees to pay the full costs associated with the acquisition of eligible energy resources and associated renewable energy credits by its wholesale provider by providing notice of its intent to pay the full costs within sixty days after the wholesale provider extends the offer, the wholesale customer shall be entitled to receive the appropriate credit toward the renewable energy standard as well as any associated renewable energy credits. To the extent that the full costs are not recovered from wholesale customers, a qualifying retail utility shall be entitled to recover those costs from retail customers.

3661. Retail Rate Impact.

(a) The net retail rate impact of actions taken by an investor owned QRU to comply with the renewable energy standard shall not exceed two percent of the total electric bill annually for each customer of that QRU. However, a retail customer who installs renewable distributed generation may pay a RESA charge under paragraph 3664(h) that exceeds two percent of that customer's annual electric bill to ensure that all retail customers make reasonable and non-discriminatory contributions toward the investor owned QRUs renewable energy programs.

(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 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 compliance plan filed under rule 3657 for that compliance year. These costs shall then be locked down for the following four annual compliance plan filings (for the second through fifth years), 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~~the Commission's Resource Planning Rules.

(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;

(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(~~k~~j), 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(~~k~~j), from future compliance years to achieve compliance with each component of the renewable energy standard in the compliance year;

(VI) The total amount and source of eligible energy and RECs the QRU is carrying back from the year following the compliance year under subparagraph 3654(~~i~~h)(I) to achieve compliance with each component of the renewable energy standard in the compliance year;

(VII) The total amount of eligible energy and RECs the QRU has carried forward from prior calendar years under subparagraph 3654(~~i~~h)(III) to apply in the compliance year for each component of the renewable energy standard.

(VIII) The total amount of eligible energy and RECs the QRU has acquired in the compliance year that the QRU proposes to carry forward under subparagraph 3654(~~i~~h)(III) to future years for each component of the renewable energy standard;

(IX) The total amount of eligible energy and RECs the QRU has counted toward compliance with ~~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.

(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 the QRU has met the renewable energy standard and the requirements for renewable distributed generation and no action should be taken by the Commission, whether any changes are needed to the compliance report, or whether 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 the QRU complied with ~~the components of~~ its renewable energy standard and whether it satisfied its requirements for renewable distributed generation during the most recently completed compliance year and state whether 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.

(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 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 to the level it would have been had the customer's consumption been 500 kWh per month as billed at the investor owned QRU's applicable rates.

3665. Small Generation Interconnection Procedures.

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

(a) Definitions. The following definitions apply only to rule 3665.

(I) "Business day" means Monday through Friday, excluding Federal Holidays.

(II) "Distribution system" means the utility's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby

generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

(III) “Distribution upgrades” means the additions, modifications, and upgrades to the utility's distribution system at or beyond the point of interconnection to facilitate interconnection of the small generating facility and render the service necessary to effect the interconnection customer's operation of on-site generation. Distribution upgrades do not include interconnection facilities.

(IV) “Highly seasonal circuit” means a circuit with a ratio of annual peak load to off-season peak load greater than six.

(V) “Interconnection customer” or “IC” means any entity, including the utility, any affiliates or subsidiaries of either, that proposes to interconnect its small generating facility with the utility's system.

(VI) “Interconnection facilities” means the utility's interconnection facilities and the interconnection customer's interconnection facilities. Collectively, interconnection facilities include all facilities and equipment between the small generating facility and the point of interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the small generating facility to the utility's system. Interconnection facilities are sole use facilities and shall not include distribution upgrades.

(VII) “Interconnection request” means the interconnection customer's request, in accordance with any applicable utility tariff, to interconnect a new small generating facility, or to increase the capacity of, or make a material modification to the operating characteristics of, an existing small generating facility that is interconnected with the utility’s system.

(VIII) “Minimum daytime loading” means the lowest daily peak in the year on the line section.

(IX) “Party” or “Parties” means the utility, interconnection customer, or any combination of the above.

(X) “Point of interconnection” means the point where the Interconnection facilities connect with the utility's system.

(XI) “Small generating facility” means the interconnection customer's device for the production of electricity identified in the interconnection request, but shall not include the interconnection facilities not owned by the interconnection customer.

(XII) “Study process” means the procedure for evaluating an interconnection request that includes the Level 3 scoping meeting, feasibility study, system impact study, and facilities study.

(XIII) “System” means the facilities owned, controlled, or operated by the utility that are used to provide electric service under the tariff.

(XIV) “Upgrades” means the required additions and modifications to the utility's system at or beyond the point of interconnection. Upgrades do not include interconnection facilities.

(b) General overview.

(I) Applicability.

(A) A request to interconnect a certified small generating facility no larger than two MW shall be evaluated under the Level 2 Process. A request to interconnect a certified inverter-based small generating facility no larger than ten kW shall be evaluated under the Level 1 Process. A request to interconnect a small generating facility larger than two MW but no larger than ten MW or a small generating facility that does not pass the Level 1 or Level 2 Process, shall be evaluated under the Level 3 Process.

(B) Defined terms used herein shall have the meanings specified in the paragraph (a) of this rule.

(C) Prior to submitting its interconnection request, the interconnection customer may ask the utility interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The utility shall respond within 15 business days.

(D) Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Commission expects all utilities, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

(E) References in these procedures to interconnection agreement are to the Small Generator Interconnection Agreement (SGIA).

(II) Pre-application. The utility shall designate an employee or office from which information on the application process and on an affected system can be obtained through informal requests from the interconnection customer presenting a proposed project for a specific site. The name, telephone number, and e-mail address of such contact employee or office shall be made available on the utility's Internet web site. Electric system information for specific locations, feeders, or small areas shall be provided to the interconnection customer upon request and may include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the utility's system, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The utility shall comply with reasonable requests for such information unless such information is proprietary or confidential and cannot be provided pursuant to a confidentiality agreement.

(III) Interconnection request. The interconnection customer shall submit its interconnection request to the utility, together with the processing fee or deposit specified in the interconnection request. The interconnection request shall be date- and time-stamped upon receipt. The original date- and time-stamp applied to the interconnection request at the time of its original submission shall be accepted as the qualifying date- and time-stamp for the purposes of any timetable in these procedures. The interconnection customer shall be notified of receipt by the utility within three business days of receiving the interconnection request which notification may be to an e-mail address or fax number provided by IC. The utility shall notify the interconnection customer within ten business days of the receipt of the interconnection request as to whether the interconnection request is complete or incomplete. If the interconnection request is incomplete, the utility shall provide, along with the notice that the interconnection request is incomplete, a written list detailing all information that must be provided to complete the interconnection request. The interconnection customer will have ten business days after receipt of the notice to submit the listed information or to request an extension of time to provide such information. If the IC does not provide the listed information or a request for an extension of time within the deadline, the interconnection request will be deemed withdrawn. An interconnection request will be deemed complete upon submission of the listed information to the utility.

(IV) Modification of the interconnection request. Any modification to machine data or equipment configuration or to the interconnection site of the small generating facility not agreed to in writing by the utility and the IC may be deemed a withdrawal of the interconnection request and may require submission of a new interconnection request, unless proper notification of each party by the other and a reasonable time to cure the problems created by the changes are undertaken.

(V) Site control. Documentation of site control must be submitted with the interconnection request. Site control may be demonstrated through:

(A) Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the small generating facility;

(B) An option to purchase or acquire a leasehold site for such purpose; or

(C) An exclusivity or other business relationship between the IC and the entity having the right to sell, lease, or grant the IC the right to possess or occupy a site for such purpose.

(VI) Queue position. The utility shall place interconnection requests in a first come, first served order per feeder and per substation based upon the date- and time-stamp of the interconnection request. The order of each interconnection request will be used to determine the cost responsibility for the upgrades necessary to accommodate the interconnection. At the utility's option, interconnection requests may be studied serially or in clusters for the purpose of the system impact study.

(VII) Assignment/Transfer of ownership of the facility. Interconnection agreements shall survive transfer of ownership of the generating facility to a new owner when the new owner agrees in writing to comply with the terms of the agreement and so notifies the utility.

(c) Level 2 - fast track process.

(I) Applicability. The fast track process is available to an IC proposing to interconnect its small generating facility with the utility's system if the small generating facility is no larger than two MW and if the IC's proposed small generating facility meets the codes, standards, and certification requirements of Attachments 3 and 4 of these procedures.

(II) Initial review. Within 15 business days after the utility notifies the interconnection customer it has received a complete interconnection request, the utility shall perform an initial review using the screens set forth below, shall notify the interconnection customer of the results, and include with the notification copies of the analysis and data underlying the utility's determinations under the screens.

(A) Screens.

(i) The proposed small generating facility's point of interconnection must be on a portion of the utility's distribution system that is subject to the tariff.

(ii) For interconnection of a proposed small generating facility to a radial distribution circuit, the aggregated generation, including the proposed small generating facility, on the line section shall not exceed 15 percent of the line section's annual peak load as most recently measured at the substation or calculated for the line section. For highly seasonal circuits only, the aggregate generation, including the proposed small generation facility, on the line section shall not exceed 15 percent of two times the minimum daytime loading. A line section is that portion of a utility's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line. A fuse is not an automatic sectionalizing device.

(iii) The proposed small generating facility, in aggregation with other generation on the distribution circuit, shall not contribute more than ten percent to the distribution circuit's maximum fault current at the point on the distribution feeder voltage (primary) level nearest the proposed point of change of ownership.

(iv) The proposed small generating facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 percent of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 percent of the short circuit interrupting capability.

(v) The proposed small generating facility shall have a starting voltage dip less than five percent and meet the flicker requirements of IEEE 519, 1992 version. To meet this screen, the proposed generating facility must conform to the following two tests:

(1) For starting voltage dip, the utility has two options for determining whether starting voltage dip is acceptable. The option to be used is at the utility's discretion.

(a) Option 1: The utility may determine that the proposed generating facility's starting in-rush current is equal to or less than the continuous ampere rating of the Interconnection Customer's service equipment.

(b) Option 2: The utility may determine the impedances of the service distribution transformer (if present) and the secondary conductors to the Interconnection Customer's service equipment and perform a voltage dip calculation. Alternatively, the utility may use tables or nomographs to determine the voltage dip. Voltage dips caused by starting the proposed generation facility must be less than five percent when measured at the primary side (high side) of a dedicated distribution transformer serving the proposed generating facility, for primary interconnections. The five percent voltage dip limit applies to the distribution transformer low side if the low side is shared with other customers and to the high side if the transformer is dedicated to the Interconnection Customer.

(2) The second test is conformance with the relationship between voltage fluctuation and starting frequency presented in the table for flicker requirements in IEEE 519, 1992 version.

(vi) Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the IC, including line configuration and the transformer connection to limit the potential for creating over-voltages on the utility's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	**Type of Interconnection to Primary Distribution Line**	**Result/Criteria**
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

(vii) If the proposed small generating facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed small generating facility, shall not exceed 20 kW.

(viii) If the proposed small generating facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer.

(ix) No construction of facilities by the utility on its own system shall be required to accommodate the small generating facility.

(x) Interconnections to distribution networks.

(1) For interconnection of a proposed small generating facility to the load side of spot network protectors serving more than a single customer, the proposed small generating facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of five percent of a spot network's maximum load or 300 kW. For spot networks serving a single customer, the small generator facility must use inverter-based equipment package and either meet the requirements above or shall use a protection

scheme or operate the generator so as not to exceed on-site load or otherwise prevent nuisance operation of the spot network protectors.

(2) For interconnection of a proposed small generating facility to the load side of area network protectors, the proposed small generating facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of ten percent of an area network's minimum load or 500 kW.

(3) Notwithstanding sub-sections (1) or (2) above, each utility may incorporate into its interconnection standards, any change in interconnection guidelines related to networks pursuant to standards developed under IEEE 1547 for interconnections to networks. To the extent the new IEEE standards conflict with these existing guidelines, the new standards shall apply. In addition, and with the consent of the utility, a small generator facility may be interconnected to a spot or area network provided the facility uses a protection scheme that will prevent any power export from the customer's site including inadvertent export under fault conditions or otherwise prevent nuisance operation of the network protectors.

(B) If the proposed interconnection passes the screens, the interconnection request shall be approved and the utility will provide the IC an executable interconnection agreement within five business days after the determination.

(C) If the proposed interconnection fails the screens, but the utility determines that the small generating facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the utility shall provide the IC an executable interconnection agreement within five business days after the determination.

(D) If the proposed interconnection fails the screens, but the utility does not or cannot determine from the initial review that the small generating facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the IC is willing to consider minor modifications or further study, the utility shall provide the IC with the opportunity to attend a customer options meeting.

(E) Customer options meeting. If the utility determines the interconnection request cannot be approved without minor modifications at minimal cost; or a supplemental study or other additional studies or actions; or at significant cost to address safety, reliability, or power quality problems, within the five business day period after the determination, the utility shall notify the IC and provide copies of the data and analyses underlying its conclusion. Within ten business days of the utility's determination, the utility shall offer to convene a customer options meeting with the utility to review possible IC facility modifications or the screen

analysis and related results, to determine what further steps are needed to permit the small generating facility to be connected safely and reliably. At the time of notification of the utility's determination, or at the customer options meeting, the utility shall:

(i) Offer to perform facility modifications or minor modifications to the utility's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the utility's electric system; or

(ii) Offer to perform a supplemental review if the utility concludes that the supplemental review might determine that the small generating facility could continue to qualify for interconnection pursuant to the fast track process, and provide a non-binding good faith estimate of the costs and time of such review; or

(iii) Obtain the interconnection customer's agreement to continue evaluating the interconnection request under the Level 3 Study Process.

(III) Supplemental Review. If the interconnection customer agrees to a supplemental review, the interconnection customer shall agree in writing within 15 business days of the offer, and submit a deposit for the estimated costs provided in subsection (c)(III)(A)(ii) of this rule. The IC shall be responsible for the utility's actual costs for conducting the supplemental review. The IC must pay any review costs that exceed the deposit within 20 business days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the utility will return such excess within 20 business days of the invoice without interest.

(A) Within ten business days following receipt of the deposit for a supplemental review, the utility will determine if the Small Generating Facility can be interconnected safely and reliably.

(i) If so, the utility shall forward an executable interconnection agreement to the IC within five business days.

(ii) If so, and IC facility modifications are required to allow the small generating facility to be interconnected consistent with safety, reliability, and power quality standards under these procedures, the utility shall forward an executable interconnection agreement to the IC within five business days after confirmation that the interconnection customer has agreed to make the necessary changes at the interconnection customer's cost.

(iii) If so, and minor modifications to the utility's electric system are required to allow the small generating facility to be interconnected consistent with safety, reliability, and power quality standards under the Level 2 Fast Track Process, the utility shall forward an executable interconnection agreement to the IC within ten business days that requires the IC to pay the costs of such system modifications prior to interconnection.

(iv) If not, the interconnection request will continue to be evaluated under the Level 3 Study Process.

(d) Level 3 - Study Process.

(I) Applicability. The study process shall be used by an interconnection customer proposing to interconnect its small generating facility with the utility's system if the small generating facility (1) is larger than two MW but no larger than ten MW, (2) is not certified, or (3) is certified but did not pass the Fast Track Process or the ten kW Inverter Process.

(II) Scoping meeting.

(A) A scoping meeting will be held within ten business days after the interconnection request is deemed complete, or as otherwise mutually agreed to by the parties. The utility and the interconnection customer will bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting.

(B) The purpose of the scoping meeting is to discuss the interconnection request. The parties shall further discuss whether the utility should perform a feasibility study or proceed directly to a system impact study, or a facilities study, or an interconnection agreement. If the parties agree that a feasibility study should be performed, the utility shall provide the IC, as soon as possible, but not later than five business days after the scoping meeting, a feasibility study agreement including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

(C) The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an IC who has requested a feasibility study must return the executed feasibility study agreement within 15 business days. If the parties agree not to perform a feasibility study, the utility shall provide the IC, no later than five business days after the scoping meeting, a system impact study agreement including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

(D) Feasibility studies, scoping studies, and facility studies may be combined for simpler projects by mutual agreement of the utility and the parties.

(III) Feasibility study.

(A) The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the small generating facility.

(B) A deposit of the lesser of 50 percent of the good faith estimated feasibility study costs or earnest money of $1,000 may be required from the interconnection customer.

(C) The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement.

(D) If the feasibility study shows no potential for adverse system impacts, the utility shall send the Interconnection Customer a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study.

(E) If the feasibility study shows the potential for adverse system impacts, the review process shall proceed to the appropriate system impact study(s).

(IV) System impact study.

(A) A system impact study shall identify and detail the electric system impacts that would result if the proposed small generating facility were interconnected without project modifications or electric system modifications, focusing on the adverse system impacts identified in the feasibility study, or to study potential impacts, including but not limited to those identified in the scoping meeting. A system impact study shall evaluate the impact of the proposed interconnection on the reliability of the electric system.

(B) If no transmission system impact study is required, but potential electric power distribution system adverse system impacts are identified in the scoping meeting or shown in the feasibility study, a distribution system impact study must be performed. The utility shall send the IC a distribution system impact study agreement within 15 business days of transmittal of the feasibility study report, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or following the scoping meeting if no feasibility study is to be performed.

(C) In instances where the feasibility study or the distribution system impact study shows potential for transmission system adverse system impacts, within five business days following transmittal of the feasibility study report, the utility shall send the IC a transmission system impact study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, if such a study is required.

(D) If a transmission system impact study is not required, but electric power distribution system adverse system impacts are shown by the feasibility study to be possible and no distribution system impact study has been conducted, the utility shall send the IC a distribution system impact study agreement.

(E) If the feasibility study shows no potential for transmission system or distribution system adverse system impacts, the utility shall send the IC either a facilities study agreement, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the study, or an executable interconnection agreement, as applicable.

(F) In order to remain under consideration for interconnection, the IC must return executed system impact study agreements, if applicable, within 30 business days.

(G) A deposit of the good faith estimated costs for each system impact study may be required from the IC.

(H) The scope of and cost responsibilities for a system impact study are described in the system impact study agreement.

(I) Where transmission systems and distribution systems have separate owners, such as is the case with transmission-dependent utilities (TDUs) – whether investor-owned or not – the IC may apply to the nearest utility (Transmission Owner, Regional Transmission Operator, or Independent utility) providing transmission service to the TDU to request project coordination. Affected systems shall participate in the study and provide all information necessary to prepare the study.

(V) Facilities study.

(A) Once the required system impact study(s) is completed, a system impact study report shall be prepared and transmitted to the IC along with a facilities study agreement within five business days, including an outline of the scope of the study and a non-binding good faith estimate of the cost to perform the facilities study. In the case where one or both impact studies are determined to be unnecessary, a notice of the fact shall be transmitted to the IC within the same timeframe.

(B) In order to remain under consideration for interconnection, or, as appropriate, in the utility's interconnection queue, the IC must return the executed facilities study agreement or a request for an extension of time within 30 business days.

(C) The facilities study shall specify and estimate the cost of the equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusions of the system impact study(s).

(D) Design for any required interconnection facilities and/or upgrades shall be performed under the facilities study agreement. The utility may contract with consultants to perform activities required under the facilities study agreement. The IC and the utility may agree to allow the IC to separately arrange for the design of some of the interconnection facilities. In such cases, facilities design will be reviewed and/or modified prior to acceptance by the utility, under the provisions of the facilities study agreement. If the parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the utility shall make sufficient information available to the IC in accordance with confidentiality and critical infrastructure requirements to permit the IC to obtain an independent design and cost estimate for any necessary facilities.

(E) A deposit of the good faith estimated costs for the facilities study may be required from the IC.

(F) The scope of and cost responsibilities for the facilities study are described in a facilities study agreement.

(G) Upon completion of the facilities study, and with the agreement of the IC to pay for interconnection facilities and upgrades identified in the facilities study, the utility shall provide the IC an executable interconnection agreement within five business days.

(e) Provisions that apply to all interconnection requests.

(I) Reasonable efforts. The utility shall make reasonable efforts to meet all time frames provided in these procedures unless the utility and the IC agree to a different schedule. If the utility cannot meet a deadline provided herein, it shall notify the IC explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.

(II) Disputes.

(A) The parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

(B) In the event of a dispute, either party shall provide the other party with a written notice of dispute. Such notice shall describe in detail the nature of the dispute. If the dispute has not been resolved within five business days after receipt of the notice, either party may contact a mutually agreed upon third party dispute resolution service for assistance in resolving the dispute.

(C) The dispute resolution service will assist the parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the parties in resolving their dispute.

(D) Each party agrees to conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

(E) If neither party elects to seek assistance from the dispute resolution service, or if the attempted dispute resolution fails, then either party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of the agreements between the parties or it may seek resolution at the Commission.

(III) Interconnection metering. Except as otherwise required by rule 3664, any metering necessitated by the use of the small generating facility shall be installed at the IC's expense in accordance with Commission requirements or the utility's specifications.

(IV) Commissioning tests. Commissioning tests of the IC's installed equipment shall be performed pursuant to applicable codes and standards, including IEEE1547.1 2005 "IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems". The utility must be given at least five business days written notice, or as otherwise mutually agreed to by the parties, of the tests and may be present to witness the commissioning tests. The utility shall be compensated by the IC for its expense in witnessing level 2 and Level 3 commissioning tests. The utility shall provide to the IC an operational approval letter within three business days after notification that the commissioning test has been successfully completed. Such letter may be provided via electronic mail.

(V) Confidentiality.

(A) Confidential information shall mean any confidential and/or proprietary information provided by one party to the other party that is clearly marked or otherwise designated "Confidential." All design, operating specifications, and metering data provided by the IC shall be deemed confidential information regardless of whether it is clearly marked or otherwise designated as such.

(B) Confidential information does not include information previously in the public domain, required to be publicly submitted or divulged by governmental authorities (after notice to the other party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce an agreement between the parties. Each party receiving confidential information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the party providing that information, except to fulfill obligations under agreements between the parties, or to fulfill legal or regulatory requirements.

(i) Each party shall employ at least the same standard of care to protect confidential information obtained from the other party as it employs to protect its own confidential information.

(ii) Each party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of confidential information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

(C) Notwithstanding anything in this article to the contrary, if the Commission, during the course of an investigation or otherwise, requests information from one of the parties that is otherwise required to be maintained in confidence, the party shall provide the requested information to the Commission, within the time provided for in the request for information. In providing the information to the Commission, the party may request that the information be treated as confidential and non-public by the Commission and that the information be withheld from public disclosure. Parties are prohibited from notifying the other party prior to the release of the confidential information to the Commission. The party shall notify the other party when it is notified by the Commission that a request to release confidential information has been received by the Commission, at which time either of the parties may respond before such information would be made public.

(VI) Comparability. The utility shall receive, process, and analyze all interconnection requests in a timely manner as set forth in this document. The utility shall use the same reasonable efforts in processing and analyzing interconnection requests from all interconnection customers, whether the small generating facility is owned or operated by the utility, its subsidiaries or affiliates, or others.

(VII) Record retention. The utility shall maintain for three years records, subject to audit, of all interconnection requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the interconnection requests.

(VIII) Interconnection agreement. After receiving an interconnection agreement from the utility, the IC shall have 30 business days or another mutually agreeable time-frame to sign and return the interconnection agreement, or request that the utility file an unexecuted interconnection agreement with the Commission. If the IC does not sign the interconnection agreement, or ask that it be filed unexecuted by the utility within 30 business days, the interconnection request shall be deemed withdrawn. After the interconnection agreement is signed by the parties, the interconnection of the small generating facility shall proceed under the provisions of the interconnection agreement.

(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.

(X) Capacity of the small generating facility.

(A) If the interconnection request is for an increase in capacity for an existing small generating facility, the interconnection request shall be evaluated on the basis of the new total capacity of the small generating facility.

(B) If the interconnection request is for a small generating facility that includes multiple energy production devices at a site for which the interconnection customer seeks a single point of interconnection, the interconnection request shall be evaluated on the basis of the aggregate capacity of the multiple devices.

(C) The interconnection request shall be evaluated using the maximum rated capacity of the small generating facility.

(XI) Insurance.

(A) For systems of ten kW or less, the customer, at its own expense, shall secure and maintain in effect during the term of the agreement liability insurance with a combined single limit for bodily injury and property damage of not less than $300,000 for each occurrence. For systems above ten kW and up to 500 kW, customer, at its own expense, shall secure and maintain in effect during the term of the agreement liability insurance with a combined single limit for bodily injury and property damage of not less than $1,000,000 for each occurrence. For systems above 500 kW and up to two MW, customer, at its own expense, shall secure and maintain in effect during the term of the agreement liability insurance with a combined single limit for bodily injury and property damage of not less than $2,000,000 for each occurrence. Insurance coverage for systems greater than two MW shall be determined on a case-by-case basis by the utility and shall reflect the size of the installation and the potential for system damage.

(B) For systems over 500 kW, the utility shall be named as an additional insured by endorsement to the insurance policy and the policy shall provide that written notice be given to the utility at least 30 days prior to any cancellation or reduction of any coverage. Such liability insurance shall provide, by endorsement to the policy, that the utility shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for the payment of premium of such insurance. For all solar systems, the liability insurance shall not exclude coverage for any incident related to the subject generator or its operation.

(C) Certificates of Insurance evidencing the requisite coverage and provision(s) shall be furnished to utility prior to the date of interconnection of the generation system. Utilities shall be permitted to periodically obtain proof of current insurance coverage form the generating customer in order to verify proper liability insurance coverage. Customer will not be allowed to commence or continue interconnected operations unless evidence is provided that satisfactory insurance coverage is in effect at all times.

(f) Level 1 ten kW inverter process. The procedure for evaluating an interconnection request for a certified inverter-based small generating facility no larger than ten kW. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions.

(I) The interconnection customer (customer) completes the interconnection request (Application) and submits it to the utility.

(II) The utility acknowledges to the customer receipt of the application within three business days of receipt.

(III) The utility evaluates the application for completeness and notifies the customer within ten business days of receipt that the application is or is not complete and, if not, advises what material is missing.

(IV) Within 15 days the utility shall conduct an initial review, which shall include the following screening criteria:

(A) For interconnection of a proposed small generating facility to a radial distribution circuit, the aggregated generation, including the proposed small generating facility, on the line section shall not exceed 15 percent of the line section annual peak load as most recently measured at the substation or calculated for the line section. For highly seasonal circuits only, the aggregate generation, including the proposed small generation facility, on the line section shall not exceed 15 percent of two times the minimum daytime loading. A line section is that portion of a utility's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line. A fuse is not an automatic sectionalizing device.

(B) If the proposed small generating facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed small generating facility, shall not exceed 20 kW.

(C) If the proposed small generating facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 percent of the nameplate rating of the service transformer.

(D) No construction of facilities by the utility on its own system shall be required to accommodate the small generating facility.

(E) Provided all the criteria in paragraph (g) of this rule are met, unless the utility determines and demonstrates that the small generating facility cannot be interconnected safely and reliably, the utility approves and executes the application and returns it to the customer.

(F) After installation, the customer returns the certificate of completion to the utility. Prior to parallel operation, the utility may inspect the small generating facility for compliance with standards, which may include a witness test, and may schedule appropriate metering replacement, if necessary.

(G) The utility notifies the customer in writing or by fax or e-mail that interconnection of the small generating facility is authorized within five business days. If the witness test is not satisfactory, the utility has the right to disconnect the small generating facility. The customer has no right to operate in parallel until a witness test has been performed, or previously waived on the application. The utility is obligated to complete this witness test within ten business days of the receipt of the certificate of completion.

(H) Contact information. The customer must provide the contact information for the legal applicant (i.e., the interconnection customer). If another entity is responsible for interfacing with the utility, that contact information must be provided on the application.

(g) Level 1 10 kW Inverter Process. The following constitutes an application for interconnecting a certified inverter-based small generating facility no larger than ten KW. Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW

This Application is considered complete when it provides all applicable and correct information required below. Additional information to evaluate the application may be required.

Processing fee:

A fee of _____ must accompany this application.

Interconnection customer

Name:

Contact Person:

Address:

City: State: Zip:

Telephone (Day): (Evening):

Fax: E-Mail Address:

Engineering firm (If applicable):

Contact Person:

Address:

City: State: Zip:

Telephone:

Fax: E-Mail Address:

Contact (if different from Interconnection customer):

Name:

Address:

City: State: Zip:

Telephone (Day): (Evening):

Fax: E-Mail Address:

Owner of the facility (include percent ownership by any electric utility):

Small generating facility information:

Location (if different from above):

Electric service company:

Account number:

Small generator ten kW inverter process:

Inverter manufacturer: _____Model

Nameplate rating: (kW) (kVA) (AC Volts)

Single phase _____ Three phase_____

System design capacity: _____ (kW) _____ (kVA)

Prime mover: Photovoltaic Reciprocating Engine Fuel Cell Turbine Other

Energy source: Solar Wind Hydro Diesel Natural Gas Fuel Oil Other (describe)

Is the equipment UL1741 Listed? Yes ____ No ____

If Yes, attach manufacturer's cut-sheet showing UL1741 listing.

Estimated installation date: _____ Estimated in-service date: _____

The ten kW inverter process is available only for inverter-based small generating facilities no larger than ten kW that meet the codes, standards, and certification requirements of paragraphs (h) and (i) of this rule, or the QRU has reviewed the design or tested the proposed small generating facility and is satisfied that it is safe to operate.

List components of the small generating facility equipment package that are currently certified:

Equipment type certifying entity:

1.

2.

3.

4.

5.

Interconnection customer signature: _____

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return the Certificate of Completion when the Small Generating Facility has been installed.

Signed: _____

Title: Date:

Contingent approval to interconnect the small generating facility.

(For company use only)

Interconnection of the small generating facility is approved contingent upon the terms and conditions for interconnecting an inverter-based small generating facility no larger than ten kW and return of the certificate of completion.

Company signature: _____

Title: Date:

Application ID number: _____

Company waives inspection/witness test? Yes ____ No ____

(h) Certification codes and standards.

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2005), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

(i) Certification of small generator equipment packages.

(I) Small generating facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in paragraph (h), (2) it has been labeled and is publicly listed by such NRTL at the time of

the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.

(II) The interconnection customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.

(III) Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.

(IV) If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.

(V) Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.

(VI) An equipment package does not include equipment provided by the utility.

(j) Terms and conditions for Level 1 interconnections -- small generating facility no larger than ten kW.

(I) Construction of the facility. The interconnection customer may proceed to construct the small generating facility when the utility approves the interconnection request (the application) and returns it to the IC.

(II) Interconnection and operation. The IC may operate small generating facility and interconnect with the utility's electric system once all of the following have occurred:

(A) Upon completing construction, the interconnection customer will cause the small generating facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and

(B) The customer returns the certificate of completion to the utility, and

(C) The utility has completed its inspection of the small generating facility. All inspections must be conducted by the utility, at its own expense, within ten business days after receipt of the certificate of completion and shall take place at

a time agreeable to the parties. The utility shall provide a written statement that the small generating facility has passed inspection or shall notify the customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place.

(D) The utility has the right to disconnect the small generating facility in the event of improper installation or failure to return the certificate of completion.

(III) Safe operations and maintenance. The interconnection customer shall be fully responsible to operate, maintain, and repair the small generating facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

(IV) Access. The utility shall have access to the disconnect switch and metering equipment of the small generating facility at all times. The utility shall provide reasonable notice to the customer when possible prior to using its right of access.

(V) Disconnection. The utility may temporarily disconnect the small generating facility upon the following conditions:

(A) For scheduled outages per notice requirements in the utility's tariff or Commission rules.

(B) For unscheduled outages or emergency conditions pursuant to the utility's tariff or Commission rules.

(C) If the small generating facility does not operate in the manner consistent with these terms and conditions.

(D) The utility shall inform the interconnection customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

(VI) Indemnification. The parties shall at all times indemnify, defend, and save the other party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other party's action or inactions of its obligations under this agreement on behalf of the indemnifying party, except in cases of gross negligence or intentional wrongdoing by the indemnified party.

(VII) Insurance. The interconnection customer, at its own expense, shall secure and maintain in effect during the term of this agreement, liability insurance with a combined single limit for bodily injury and property damage of not less than $300,000 each occurrence. Such liability insurance shall not exclude coverage for any incident related to the subject generator or its operation. The utility shall be named as an additional insured under the liability policy unless the system is a solar system installed on a premise using the residential tariff and has a design capacity of ten kW or less. The policy shall include that written notice be given to the utility at least 30 days prior to any cancellation or reduction of any coverage. A copy of the liability insurance certificate must be received by the

utility prior to plant operation. Certificates of insurance evidencing the requisite coverage and provision(s) shall be furnished to utility prior to date of interconnection of the generation system. Utilities shall be permitted to periodically obtain proof of current insurance coverage from the generating customer in order to verify proper liability insurance coverage. The interconnection customer will not be allowed to commence or continue interconnected operations unless evidence is provided that satisfactory insurance coverage is in effect at all times.

(VIII) Limitation of liability. Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under subparagraph (i)(VI) of this rule.

(IX) Termination. The agreement to operate in parallel may be terminated under the following conditions:

(A) By the Customer by providing written notice to the utility.

(B) By the utility if the small generating facility fails to operate for any consecutive 12 month period or the customer fails to remedy a violation of these terms and conditions.

(C) Permanent disconnection. In the event this agreement is terminated, the utility shall have the right to disconnect its facilities or direct the customer to disconnect its small generating facility.

(D) Survival rights. This agreement shall continue in effect after termination to the extent necessary to allow or require either party to fulfill rights or obligations that arose under the agreement.

(X) Assignment/Transfer of ownership of the facility. This agreement shall survive the transfer of ownership of the small generating facility to a new owner when the new owner agrees in writing to comply with the terms of this agreement and so notifies the utility.

3666. Environmental Impacts. *[Formerly rule 3656]*

(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.

~~3666~~3667. – 3699. [Reserved]

* * *

[indicates omission of unaffected rules]