Decision No. C09-0990

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 08R-424E

IN THE MATTER OF PROPOSED AMENDMENTS TO THE RULES OF THE COLORADO PUBLIC UTILITIES COMMISSION RELATING TO THE RENEWABLE ENERGY STANDARD.

DECISION ON EXCEPTIONS AND ADOPTING RULES ASSOCIATED WITH THE NOTICES OF PROPOSED RULEMAKING ISSUED UNDER DECISION NOS. C08-1001 AND C09-0817

Mailed Date: September 9, 2009
Adopted Date: September 2, 2009

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I. STATEMENT

A. Introduction

1. The Commission initiated this proceeding on September 23, 2008 by issuing a Notice of Proposed Rulemaking (NOPR) regarding the Renewable Energy Standard (RES). By Decision No. C08-1001, we stated that the basis and purpose of the rulemaking proceeding would be to re-revaluate the applicability of our small generator interconnection procedures to cooperative electric utilities as required by House Bill (HB) 08-1160. We also sought to modify and clarify the complete body of our RES rules to address issues made evident by the Commission's experience with the RES to date.

2. The Commission's RES rules are set forth at 4 *Code of Colorado Regulations* (CCR) 723-3-3650 through 3665. The statutory authority for the proposed rules is found primarily in § 40-2-124, C.R.S.

3. We assigned this proceeding to an Administrative Law Judge (ALJ) and scheduled two sets of hearings by Decision Nos. C08-1001 and C08-1159-I. The first set of hearings took place on December 8 and 9, 2008, and the second set of hearings took place on January 29 and 30, 2009.

4. Numerous interested persons offered written comments into the record of this proceeding.[1] Many commenters offered oral comments in addition to their written comments at the two sets of hearings.

5. ALJ Ken F. Kirkpatrick issued his Recommended Decision Adopting Rules on April 20, 2009 (Decision No. R09-0413 or Recommended Decision). The ALJ explains that the tenor of his decision is "one of fine-tuning the existing program" based on the conclusion that the qualifying retail utilities (QRUs) are doing a successful job of implementing the RES.

B. Exceptions to Decision No. R09-0413

6. Several interested persons filed exceptions to Decision No. R09-0413 despite the absence of sweeping changes to the RES rules. Exceptions, responses to those exceptions, and comments were filed by: Public Service Company of Colorado (Public Service); Black Hills/Colorado Electric Utility Company, LP, doing business as Black Hills Energy (Black Hills);

[1] A complete list of commenters is included in Decision No. R09-0413 issued on April 20, 2009.

Colorado Office of Consumer Counsel (OCC); the Solar Alliance; Colorado Solar Energy Industries Association (CoSEIA); Interstate Renewable Energy Council (IREC); Colorado Rural Electric Association (CREA) and Tri-State Generation and Transmission Association, Inc. (Tri-State); Colorado Harvesting Energy Network (CHEN) and Rocky Mountain Farmers Union (RFU); Colorado Renewables Conservation Collaborative[2]; SunRun, Inc.; and Western Resource Advocates (WRA).

7. By Decision No. C09-0464, we stayed Decision No. R09-0413 on our own motion to allow for a full review of the recommendations made by the ALJ and by interested persons during the exceptions process.

C. Administrative Notice of Materials from Docket No. 08A-532E and Additional Hearing

8. Section XI of Decision No. R09-0413 addresses the development of the retail rate impact under rule 3661. Paragraphs 145 through 159 specifically speak to proposed changes to paragraph 3661(h) concerning the “time fence” for new eligible energy resources and the “lock down” of the on-going annual net incremental costs of those resources.

9. The “time fence” represents the date after which an eligible energy resource is considered in the calculation of the retail rate impact under paragraph 3661(h). The ALJ defines the time fence in his proposed subparagraph 3661(h)(III) as the date the Commission’s initial RES rules took effect, or July 2, 2006. The ALJ also modifies subparagraph 3661(h)(IV) to provide the investor owned QRUs an option to seek Commission approval of “locked down” annual on-going incremental costs of new eligible energy resources. This “lock down” approach

[2] The Colorado Renewables Conservation Collaborative comprises Interwest Energy Alliance, Audubon Colorado; Colorado Natural Heritage Program; The Nature Conservancy; Playa Lakes Joint Venture; and Rocky Mountain Bird Observatory.

would serve to establish known levels of the net incremental costs of the new eligible energy resources the investor owned QRU has already acquired that would count against the retail rate impact each year into the future.

10. By Decision No. C09-0557, we incorporated into the record of this proceeding the relevant sections of testimony, hearing transcripts, and statements of position (SOPs) concerning the "time fence" and the "lock down" issues from Docket No. 08A-532E.[3] We took this action to help us complete our review of Decision No. R09-0413 as well as our full review of the RES rules that we adopt by this decision. We further reopened the comment period in this rulemaking proceeding for the limited purpose of further developing the record on the "time fence" and "lock down" issues. Additional materials from Docket No. 08A-532E were incorporated into the record of this proceeding by Decision Nos. C09-0675 and C09-0722.

11. Supplemental comments concerning the "time fence" and "lock down" issues were submitted by Public Service and CoSEIA. The Commission conducted a third hearing on July 16, 2009 devoted to those comments and the other written materials from Docket No. 08A-532E of which we have taken administrative notice.

D. Supplemental Notice of Proposed Rulemaking Related to SB09-051 and Fourth Hearing

12. Public Service recommends in its exceptions to Decision No. R09-0413 that the Commission incorporate into the RES rules, on a permanent basis in this rulemaking proceeding, certain changes required by Senate Bill (SB) 09-051. SB09-051 was signed by Governor Ritter on April 22, 2009 and took effect September 1, 2009. Public Service provides a copy of

[3] Docket No. 08A-532E concerned Public Service's 2009 Renewable Energy Standard Compliance Plan. In that plan, Public Service sought to "lock down" the annual on-going incremental costs of its contract with the SunE Alamosa facility and of the on-site solar resources that it had acquired through December 31, 2008.

SB09-051 with its exceptions and proposes additional rule changes that it believes are necessary to incorporate the amendments to law effected by that statute.

13. SB09-051 modifies § 40-2-124, C.R.S., to require the Commission to encourage investor owned QRUs to design solar programs that allow consumers of all income levels to obtain the benefits of on-site solar electricity and to extend participation to customers in market segments that have not been responding to investor owned QRU standard offer programs. In general, SB09-051 defines on-site solar facilities as facilities that are sized to supply no more than one hundred twenty percent of the average annual consumption of electricity by the consumer at that site. The statute further allows investor owned QRUs to establish one or more standard offers for renewable energy credits generated by on-site solar facilities (SO-RECs) as long as the generation is 500 kW or less in size. SB09-051 further allows for customers with on-site solar systems to make a one-time election to carry forward excess electricity as a credit from month to month indefinitely until the customer terminates service with its investor owned QRU. The new statute additionally permits third-party owners or operators of on-site solar systems to serve retail customers.

14. In response to Public Service's exceptions and to other comments related to SB09-051, we issued a NOPR to provide the statutorily required opportunity to interested persons to comment on the changes to our RES rules necessitated by SB09-051. By Decision No. C09-0817, our Supplemental NOPR, the Commission established a written comment period regarding SB09-051 and scheduled a hearing.

15. Written comments were filed in response to our Supplemental NOPR by OCC, IREC, WRA, Black Hills, and Public Service. A fourth hearing was held as scheduled on September 1, 2009.

16. Because the timeline of this rulemaking would not allow for permanent rules to be developed in order to implement the provisions of SB09-051 by September 1, 2009, the Commission adopted rules on an emergency basis by Decision No. C09-0930 issued on August 26, 2009 in Docket No. 09R-618E. The emergency rules in Decision No. C09-0930 are now replaced by the permanent rules we adopt by this decision.

II. RULE 3661 RETAIL RATE IMPACT

A. Time Fence and Lock Down of Net Incremental Costs

17. The statutory foundation of the retail rate impact is found in § 40-2-124(1)(g)(I), C.R.S. Paragraph 3661(h) of our RES rules sets forth the general method for calculating the retail rate impact to be used by investor owned QRUs. Our approach entails the comparison of the costs and benefits of a resource plan that includes eligible energy resources (a "RES plan") to the costs and benefits of a resource plan that replaces those eligible energy resources with new non-eligible energy resources (a "No RES plan"). As explained above, the "time fence" identifies those eligible energy resources that are included in the RES plan.

18. The Solar Alliance opposes, in its exceptions, the "time fence" of July 2, 2006 that the ALJ proposes under paragraph 3661(h). The Solar Alliance argues that Amendment 37 (A37) and its enabling statutes do not contain a "time fence" and that hydro and wind resources in existence prior to A37 should be considered in the determination of the retail rate impact. Public Service responds in opposition to the Solar Alliance and in support of the ALJ's proposed rules by stating that the rules and the statute must be prospective, that the retail rate impact is intended for the new eligible resources acquired after A37, and that the application of a "time fence" results in the greatest "headroom" in the account associated with its Renewable Energy Standard Adjustment (RESA) rate rider.

19. We agree with Public Service regarding the prospective nature of the retail rate impact and reject the Solar Alliance's suggestion to remove the "time fence" from subparagraph 3661(h)(III). The Commission has addressed the "time fence" several times in earlier proceedings, and accordingly, we find that the ALJ's proposed application of July 2, 2006 as the "time fence" to be appropriate for the retail rate impact calculation under rule 3661.

20. With respect to the "lock down" of on-going annual net incremental costs for the calculation of the retail rate impact, the ALJ modifies subparagraph 3661(h)(IV) and describes on pages 51 through 53 of Decision No. R09-0413 a proposed process for establishing such locked down costs. The ALJ's recommended approach entails the Commission considering proposals from investor owned QRUs to lock down on-going annual net incremental costs on a case-by-case basis for terms that may be less than the full contract or full useful life of an eligible energy resource. Since the credits and debits associated with eligible energy resources would be "locked down" for some period, the investor owned QRU's budget for acquiring additional eligible energy resources in the future would be more certain. In the event that the Commission were concerned about the investor owned QRU's ability to stay under the two percent cap on the retail rate impact based on unknown changes in the drivers of net incremental costs (such as natural gas and carbon costs), it could establish a process to update the "locked down" values at some point in the future.

21. Public Service states in its exceptions that with respect to the "lock down" issue: "The rules proposed by the ALJ leave open this issue to be decided in utility-specific compliance plans and we take no issue with this resolution. Of course we continue to urge the Commission to adopt the lock down proposal that we submitted in Docket No. 08A-532E." Under that proposal, an investor owned QRU would seek to lock down the on-going annual net incremental

costs for the entire life of a contract or for the entire useful life of an eligible energy resource. For larger resources, the lock down would be established at the time that the resource is acquired, presumably when the Commission approved the energy supply contract or issued a CPCN for the new resource. For on-site solar installations and other small resources, the lock down would be part of a RES compliance plan proceeding.

22. Because the ALJ's proposed approach for locking down on-going annual net incremental costs did not go as far as Public Service's proposal, Public Service proposes in its exceptions a "safety net" provision to append to subparagraph 3661(h)(IV). The purpose of this clause is to ensure that the investor owned QRU would be entitled to full cost recovery for eligible energy resources already built or under contract, even if a subsequent recalculation of the incremental costs of these resources depleted the RESA account to the point where the two percent cap on the retail rate impact may be exceeded. Public Service notes that Staff of the Colorado Public Utilities Commission (Staff) agreed with this concept in Docket No. 08A-532E. In its response to Public Service's exceptions, however, OCC disagrees with the incorporation of the safety net clause, arguing that it would violate the retail rate impact. OCC prefers the full lock down of costs as pursued by Public Service in Docket No. 08A-532E that would not require a safety net.

23. WRA strongly opposes the approach to locking down net incremental costs in the ALJ's Recommended Decision. WRA complains that ALJ's method will be a moving target, hampering the investor owned QRU's ability to plan within its RESA budget and therefore preventing the development of renewable resources to the maximum practicable extent as required by statute. WRA also complains that a re-computation of on-going annual net incremental costs in the future would be "a nightmare" and that it would be unfair to renewable

resources to subject them to hindsight in developing No RES plans under paragraph 3661(h). WRA proposes rule changes in its exceptions that essentially locks down the No RES plan for use in the future.

24. Public Service explains in its response to WRA's exceptions that it supports WRA's arguments generally but disagrees with the specific mechanics of WRA's proposed rule changes for locking down the No RES plan. Public Service puts forward its own proposed rule changes that correspond to its position in Docket No. 08A-532E.

25. Public Service further reiterates its basic position on the lock down of on-going annual net incremental costs in supplemental comments filed in response to Decision No. C09-0557.[4] CoSEIA expresses support for Public Service's proposal for the "lock down" in its supplemental comments.

26. In Docket No. 08A-532E, Staff strongly opposed Public Service's proposed approach for locking down annual on-going net incremental costs. Staff argued that § 40-2-124(1)(g)(I), C.R.S., requires Public Service not only to plan that it can stay within the retail rate impact when acquiring new renewable resources but to actually stay within the limit over time. Staff expressed concerns that a "lock down" could mask the actual costs of renewable resources, because prevailing net incremental costs may deviate from the locked down values.

27. Staff developed in Docket No. 08A-532E a counter proposal to Public Service's "lock down." Staff's alternative approach would entail a recalculation of the RES and No RES plans after each compliance year, in which the projected costs of fuel and carbon would be replaced with actual costs. The results of this analysis would then be used to determine the

[4] Public Service expresses a preference for locking down net incremental costs in terms of "dollars per megawatt hour" so that future calculations of net incremental costs that are charged against the RESA are calibrated with the actual production of the associated eligible energy resources.

incremental costs to be assessed to the RESA. Staff's approach would also entail the updating of the investor owned QRU's projections of the net incremental costs of all eligible resources acquired after the time fence in order to re-estimate the QRU's RESA budget for additional acquisitions of eligible energy resources in the future.

28. According to Staff, the investor owned QRU should be kept "whole, regardless of changes in the price of fuel or CO2 costs." However, the investor owned QRU "may need to adjust plans going forward to assure that rate payers never pay in excess of the 2 percent more than they would have paid for conventional generation." Staff further suggested in Docket No. 08A-532E that, if the Commission were inclined to adopt Public Service's proposal to lock down on-going annual incremental costs under paragraph 3661(h), we should require Public Service to report on the recalculated results of the RES and No RES plan comparison after each compliance year in order to address potential deviations between projected and actual rate impacts in the future.

29. We agree with the general notion supported by the many of commenters in this proceeding and in Docket No. 08A-532E that the retail rate impact serves primarily as a guide for prospective acquisitions of eligible energy resources. We disagree with Staff that a retrospective look at the RES versus No RES calculations is required to ensure an investor owned QRU's compliance with the retail rate impact.

30. We find that the ALJ's proposed process for locking down certain annual on-going net incremental costs strikes a reasonable balance between the frequent updates in net incremental costs as supported by Staff and the long-term lock down of costs advocated by Public Service and WRA. We modify the ALJ's proposed process, however, by eliminating indefinite nature of the lock down and by establishing a five-year period for "lock downs" for all

eligible energy resources. By eliminating the ALJ's proposed call for the Commission to determine lock downs on a case-by-case basis, we establish a uniform and replicable approach for addressing on-going annual net incremental costs in the investor owned QRU's RES compliance plan proceedings. The five-year term to the locked down amounts would also allow for regular updates to the available budgets for the acquisition of additional eligible energy resources based on more current projections of fuel, carbon, and other costs that serve as inputs to the determination of annual on-going net incremental costs. With this change, we find it unnecessary to adopt Staff's recommendation that the investor owned QRU report annually on the results of a recalculated RES plan versus No RES plan for a recently completed RES compliance year based on fuel or carbon costs actually incurred.

31. We note that paragraph 3661(h), as modified by Decision No. R09-0413, offers a high degree of flexibility to the investor owned QRUs in developing methods for comparing the costs and benefits of the RES plan with the costs and benefits of the No RES plan. It is therefore up to the investor owned QRUs to propose in future annual RES compliance plans how they intended to update annual on-going net incremental costs after the "lock down" expires every five years.

32. As a result of our finding in support of the ALJ's basic approach for locking down annual on-going net incremental costs of eligible resources, we recognize the possibility that circumstances may change such that already acquired eligible energy resources may cause the retail rate impact calculation over the ten year RES planning period to appear to be out of line with the cap in § 40-2-124, C.R.S. We therefore accept Public Service's proposed "safety net" addition to subparagraph 3661(h)(IV). With respect to OCC's concerns about potential violations of the retail rate cap at a given point in time in the future, we again stress our finding

that the retail rate impact is primarily intended to guide future acquisitions. It would be contrary to the intent of §§ 40-2-123 and 40-2-124, C.R.S., that the retail rate impact cause the unwinding of existing contracts or the abandonment of existing eligible energy resources in the event that the relative costs of the RES plan to the No RES plan change dramatically (and likely only temporarily) from the expectations at the time of resource acquisition.

B. Time Span of Costs and Benefits

33. The ALJ modifies paragraph 3661(f) to define a ten-year "RES planning period" for the application of the calculation of the retail rate impact under paragraph 3661(h). As explained in paragraphs 126 through 144 of the Recommended Decision, the ALJ also simplifies the language describing the RES plan and No RES plan analysis in paragraph 3661(h). The ALJ notes that, while the savings from the redispatching of existing non-eligible resources in the presence of new eligible energy resources has been cited as a reason why an investor owned QRU may elect to use sophisticated system portfolio modeling in calculating the retail rate impact, his simplifications to paragraph 3661(h) are not intended to prevent such savings from factoring into the determination of the cost and benefits of the RES and No RES plans.

34. Public Service suggests in its exceptions that a reference to the ten-year RES planning period should be added to subparagraph 3661(h)(IV) in light of the modification the ALJ made to the retail rate impact calculation in paragraph 3661(f). We agree with this change, because it will allow the Commission to monitor the "banking" of RESA funds associated for the procurement of additional eligible energy resources in future years beyond the upcoming RES compliance year.

35. Public Service also suggests in its exceptions that we further modify subparagraph 3661(h)(II) to acknowledge the ALJ's support for the incorporation of the savings from existing

non-renewable resources in the calculation of the retail rate impact. Specifically, Public Service recommends that the second instance of the word "new" be eliminated from the following extract from subparagraph 3661(h)(II): "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."

36. Although we continue to support the notion that savings from the redispatch of existing non-eligible energy resources is appropriate in the calculation of the retail rate impact, we decline to accept Public Service's suggested change to subparagraph 3661(h)(II). Section 40-2-124(1)(g)(I), C.R.S., states that the retail rate impact is to be determined based on the "net of *new* alternative sources of electricity supply from noneligible energy resources at the time of the determination [emphasis added]." We further note that the words "new nonrenewable resources reasonably available" has been present in subparagraph 3661(h) since its initial adoption.

C. Section 123 Resources

37. The ALJ adds a new provision to paragraph 3661(h) stating that eligible energy resources acquired as new energy technologies or demonstration projects under § 40-2-123, C.R.S., are not subject the retail rate impact.[5] This new provision is echoed in paragraph 3659(o).

38. OCC opposes, in its exceptions, the changes to subparagraph 3661(h)(III) and paragraph 3659(o) concerning the ALJ's proposed treatment of "Section 123" resources. OCC argues, as it did in its earlier comments, that such provisions provide "cost free" renewable energy credits (RECs) for use in compliance with the RES and therefore dilute the retail rate

[5] An exclusion from the retail rate impact is achieved by treating a resource as "sunk" such that it appears in both the RES and No RES plans.

impact. OCC restates its position that RECs counted for compliance with the RES should be charged against the RESA and that RECs not counted for RES compliance should not be charged against the RESA. OCC worries about a cash windfall that will accrue to investor owned QRUs from the sale of RECs generated by "Section 123" resources that are not subject to the retail rate impact. OCC then restates its preference that the sales of "merchant RECs" that are not accounted for in the RESA be credited on behalf of ratepayers to accounts such as Public Service's Electric Commodity Adjustment (ECA).

39. In response to OCC's position, Public Service argues in favor of the ALJ's proposed rules. Public Service explains that, with respect to RES compliance for resources that are both "Section 123" and "Section 124," there is no exception in § 40-2-124, C.R.S., and therefore the RECs from Section 123 resources should be available for compliance with the RES.

40. We agree with Public Service's analysis that RECs from eligible energy resources acquired as new energy technologies or demonstration projects under "Section 123" can be used to comply with the RES under "Section 124." We also note that in Decision No. C08-0559 we found that: "the Commission does have the authority to approve an eligible energy resource under § 40-2-123(1), C.R.S., if its incremental costs would exceed the 2 percent retail rate cap, but only if that eligible energy resource is also a new clean energy, or energy efficiency technology, or a demonstration project. We believe that this interpretation gives meaning to every word of §§ 40-2-123(1) and 40-2-124(1)(g)(I), C.R.S., and best effectuates the legislative intent of both statutes." Consistent with that previous decision, we reject OCC's exceptions and retain the new rules added by the ALJ in his Recommended Decision.

D. Alternative Calculation Method

41. The ALJ eliminates existing paragraph 3661(i) that has applied only to Black Hills for the purpose of determining of the retail rate impact. The ALJ explains in the Recommended Decision that the simplified paragraph 3661(h) can now be implemented by Black Hills, since it no longer prescribes the use of sophisticated portfolio modeling. The ALJ also notes that paragraph 3661(i) addresses only solar resources, whereas OCC has highlighted in its comments that Black Hills has announced plans to acquire wind resources in the future. Black Hills also supports the banking of RESA funds for the acquisition of additional eligible resources in the future. However, paragraph 3661(i) fails to describe the collection and expenditure of RESA funds in the future, since it requires only a single-year determination of the retail rate impact.

42. Black Hills pleads for the return of paragraph 3661(i) in its exceptions to Decision No. R09-0413. Black Hills explains it will continue to acquire wind RECs through its purchase agreement with Public Service, and therefore paragraph 3661(i) will remain appropriate to Black Hills' circumstances for 2010 and 2011. Black Hills further explains that paragraph 3661(h) will be costly and inefficient to apply when only solar resources need to be tested in the retail rate impact calculation.

43. We decline to restore paragraph 3661(i) of our existing RES rules and support the ALJ in this matter. We find that the modified paragraph 3661(h) is flexible enough to allow Black Hills to calculate the retail rate impact in a manner that is appropriate for its circumstances and that such an approach need not be identical to the computational methods used by Public Service in its RES compliance plans. Furthermore, we find existing paragraph 3661(i) to be deficient for situations where an investor owned QRU intends to bank RESA funds for future use

and where eligible energy resources other than solar resources are planned to be acquired during the RES planning period. We do not reject at this time, however, the possibility that waivers from certain subparagraphs of rule 3661 may be appropriate.

III. RULE 3658 STANDARD REBATE OFFER

A. Standard Offer for SO-RECs

44. Public Service suggests in its exceptions that we add an introductory provision to rule 3658 clarifying that all components of the rule apply only to investor owned QRUs. OCC responds that this change is unnecessary given that other rules address the applicability, or lack thereof, of certain RES rules to QRUs that are cooperatives or municipal utilities. We address these suggestions by specifying "investor owned QRU" in all instances under rule 3658.

45. In the emergency rules we adopted by Decision No. C09-0930 related to SB09-051, we replaced the existing paragraph 3658(b) with a paragraph based on the language in the new statute concerning the investor owned QRU's recently granted ability to make standard offers for SO-RECs generated by systems up to and including 500 kW.[6]

46. We also added language in our emergency rules that express the Commission's obligation under SB09-051 to encourage investor owned QRUs to design standard rebate offer (SRO) programs that allow for consumers of all income levels to participate and that extend participation to consumers in market segments that have not responded to such programs in the past. Although OCC and WRA suggest that we adopt more of the exact language included in the

[6] In our proposed rules attached to the Supplemental NOPR, we placed this same rule language under rule 3655. OCC and WRA, in their comments responding to our Supplemental NOPR, suggested that the rule language would fit better under rule 3658. Black Hills agrees with the placement of this rule language under rule 3658 and explains in reply comments that such placement will satisfy some of its concerns, as expressed in its earlier comments, regarding other provisions under rule 3658.

statute, we find that our new rule adequately captures the intent of this particular modification to § 40-2-124, C.R.S.[7]

47. Public Service suggests in its exceptions the following addition to paragraph 3658(a): "The SRO shall be contingent upon the transfer to the QRU of the SO-RECs produced by the on-site solar system. The offers to purchase SO-RECs shall comply with the provisions of rule 3655 and this rule 3658." WRA states in its supplemental comments on SB09-051 issues that such language is redundant and unnecessary. We find, however, that Public Service's response to WRA is correct in that the receipt of a SRO paid by a QRU entitles the QRU to the SO-RECs produced by the on-site solar system benefitting from the rebate. Therefore we adopt Public Service's suggested rule language.

48. At the hearing on September 1, 2009, Public Service also suggested that we modify paragraph 3658(a) to clarify that the total of SROs paid to a customer for on-site solar installations at a single "site" as defined by SB09-051 should be capped at a maximum of 100 kW times the SRO (which is $2 per watt and therefore corresponds to $200,000). We agree and modify the rule accordingly.

49. The ALJ adopted a new rule under rule 3658 stating that: "The SRO program shall be available to all retail electricity customers." In light of the additional language we have added to paragraph 3658(b) as a result of SB09-051, we find that the ALJ's proposed addition is now unnecessary. This change further addresses the exceptions of Public Service and Black Hills on the ALJ's proposed rule, as well as the concurring comments from OCC, in which they argue that the ALJ's propose rule is redundant and unneeded.

[7] Public Service suggested alternative language in its exceptions to Decision No. R09-0413. Public Service notes its acceptance of the language we adopt here in its comments made in response to our Supplemental NOPR.

B. Commercial Leased Facilities

50. The ALJ found in Decision No. R09-0413 that rule 3658 should be modified to encourage the expansion of on-site solar systems to leased commercial premises. The primary rule change in the Recommended Decision relating to commercial leased facilities is the introduction of a subparagraph to rule 3658 that allows for commercial customers in leased facilities to participate in an investor owned QRU's SRO program, provided that certain requirements are satisfied. Among such requirements is the provision that SO-RECs generated by on-site solar systems at commercial leased facilities must be determined by metered output.

51. We adopted emergency rules based on the ALJ's proposed rules concerning commercial tenants in light of SB09-051's mandate that we encourage investor owned QRU's to expand their SRO programs to customer segments that have not been responding to the standard offers in the past. Our emergency rules are found at subparagraphs 3658(c)(VII)(B) through (D), 3658(c)(VIII), and 3658(c)(IX).

52. We now adopt these same provisions on a permanent basis, as modified by the discussion below. By adopting these emergency rules largely intact, we address many of the exceptions raised to the ALJ's proposed rules concerning commercial tenants.

53. In its exceptions to Decision No. R09-0413, Public Service suggests modifications to the ALJ's rules concerning commercial leased facilities: (1) acknowledging the provision in SB09-051 that allow for terms for certain SO-REC purchase contracts to be different than 20 years; (2) clarifying that payment for SO-RECs from commercial leased facilities shall be made on a metered basis; and (3) requiring relocated on-site solar systems to remain in the investor owned QRU's service area. We find that these concerns were adequately addressed in the emergency rules that we adopt here on a permanent basis.

54. Black Hills recommends in its exceptions that the Commission apply a 100 kW size limit for on-site solar systems installed at commercial leased facilities, pointing to an unmodified definition of "standard rebate offer" under rule 3652. CoSEIA responds to Black Hills' exceptions with modified rules it believes should satisfy Black Hills' concerns. The Solar Alliance responds to Black Hills' exceptions by arguing that Black Hills proposed "cap" on on-site solar systems provides no benefits other than consistency between the $2 per watt SRO and other provisions of rule 3658. We find that all of these concerns are adequately addressed in the emergency rules that we adopt here on a permanent basis to incorporate the provisions of SB09-051.

55. In its comments filed in response to our Supplemental NOPR, Black Hills further suggests that we add an additional provision related to on-site solar systems on commercial leased facilities that are moved in order to clarify that the customer moving the on-site solar system bears the cost of relocation of the existing production meter or the costs of a new production meter at the new location. Black Hills also suggests modifications to subparagraph 3658(b)(IX) concerning production meters to address the 500 kW cap on standard offers for SO-RECs. We find that the former suggestion concerning the size of on-site solar systems was incorporated into our emergency rules and is accepted for our permanent rules; we find that the latter suggestion, concerning the 500 kW cap, is unneeded in light of the other changes we make to rule 3658.

56. WRA, in comments filed in response to our Supplemental NOPR and expressed orally at the September 1, 2009 hearing, questions the need for a distinction between residential and commercial leased facilities. WRA similarly questions the need for production metering to pay for SO-RECs from systems at commercial leased facilities. Public Service replies that it

supports the distinctions made by the ALJ between residential and commercial installations and notes that if a commercial tenant wants the flexibility to move its system during the term of its SO-REC sales contract with the investor owned QRU, payments for the SO-RECs must be done on a metered basis. We find that our emergency rules, which are based on the ALJ's proposed rules, make proper distinctions between residential and commercial tenant customers, and we thus decline to modify the rule as suggested by WRA. We further note our rules addressing SRO program requirements for specific types of customers are not intended to limit SRO programs to only those types of customers mentioned in the rules. We instead expect the investor owned QRUs to design SRO programs for all types of customers in accordance with the generally applicable provisions under rule 3658 and not to limit their programs to only residential and commercial tenant customers, for example.

57. WRA further complains in its oral and written comments that the requirement for QRU approval of the location of an on-site solar system that a commercial tenant moves during the term of its SO-REC contract is arbitrary. WRA, with CoSEIA's support, suggests that rule language that specifies certain requirements concerning the relocated installation would be preferable to a general requirement of QRU approval. Public Service responds that it is reasonable that the QRU approve the location of an on-site solar system that is moved during the term of its purchase contract for the SO-RECs, so long as such permission is not unreasonably conditioned, delayed, or withheld. We find that the emergency rule is appropriately worded and needs no change. We note that the new provisions under rule 3655 will likely require the investor owned QRUs to describe their goals for acquiring SO-RECs from their various SRO programs. We expect that such goals will encourage the investor owned QRUs to accommodate

installations by commercial tenants, and therefore we do not expect that the QRUs will unreasonably withhold approvals of commercial tenant installations under this rule.

58. Public Service suggested at the September 1, 2009 hearing that we clarify in the permanent rules that our emergency rule concerning commercial tenants, subparagraph 3658(c)(VII)(C), so that it is clear that the provisions apply only to commercial customers. We agree with this recommendation.

59. Public Service also suggested at the September 1, 2009 hearing that we adopt an additional rule that would allow the investor owned QRUs to enter into SO-REC purchase contracts with terms shorter than 20 years regardless of the size of the on-site solar installation serving the commercial tenant customer. Public Service explains that this change would allow for the terms of SO-REC purchase contracts to match up with the term of the customer's lease. While we find appeal in Public Service's suggestion, we find that § 40-2-124(f)(V), C.R.S., allows for SO-REC purchase contracts with terms shorter than 20 years only for systems sized between 100 kW and one megawatt. This particular exclusion in the statute, which would otherwise require all SO-REC purchase contracts to have a minimum term of 20 years, is recognized by the emergency rules that we are adopting here on a permanent basis. Therefore we decline to adopt Public Service's suggestion.

C. Apartments and Condominiums

60. The ALJ proposes rules to make it easier for condominiums and apartments to participate in the investor owned QRU's SRO programs. The ALJ notes in Decision No. R09-0413, however, that while he adopts Public Service's suggested rules concerning apartments and condominiums, other interested persons should carefully review his proposed rules and communicate their thoughts to the Commission.

61. In its exceptions to Decision No. R09-0413, Black Hills suggests a 100 kW cap on apartment and condominium installations consistent with the definition of "standard rebate offers" in our existing rules. Public Service responds that it disagrees with the 100 kW cap in light of SB09-051, and the Solar Alliance disputes the merits of Black Hills' proposed cap. We reject Black Hills' suggest as being inconsistent with both SB09-051 and our modified definition for "on-site solar systems" and "standard rebate offers" under rule 3652, as described below.

62. Black Hills also offers, in its exceptions, suggestions regarding the proper definitions of common areas in condominium buildings and the proper names of owners of such common areas. Public Service notes that it agrees with these changes.

63. IREC argues that third-party owners or operators of on-site solar systems should be able to serve condominiums and provides proposed rule language. The Solar Alliance agrees that third-party providers should be able to service condominiums.

64. We adopted rules similar to those recommended by the ALJ for apartments and condominiums on an emergency basis in order to implement the directive from SB09-051 that we encourage the investor owned QRUs to expand their SRO programs to new customer segments. Our emergency rule was crafted with the just-described exceptions and comments in mind. Therefore, by adopting our emergency rules on a permanent basis, we find that we properly address Black Hills' concerns about condominium common areas as well as IREC's and the Solar Alliance's concerns about the ability for third-party on-site solar providers to serve condominiums.

65. At the September 1, 2009 hearing, Public Service suggested that we modify the emergency rule addressing condominiums by striking the last sentence of that new rule. Public

Service suggests that the emergency rule goes too far in placing requirements on the new owners of condominiums. We agree and strike the last sentence of that rule.

D. Governmental Entities

66. The ALJ adopts a new paragraph under rule 3658 to address concerns that governmental entities are having difficulty participating in SRO programs due to contract terms that are unacceptable or unlawful from the governmental entity's perspective. Public Service complains in its exceptions that the ALJ's proposed rule goes too far and that it should be modified to protect the QRU and its ratepayers. We agree with Public Service on that point, but we disagree with Public Service's proposed alternative language. We therefore craft a new rule to replace the ALJ's proposed rule that instructs the investor owned QRUs to modify their standard contracts to enable governmental entities to participate in their standard offer programs.[8]

E. Third-Party Owners and Operators

67. In our emergency rules, we adopted a new paragraph under rule 3658 to incorporate the language of SB09-051 that allows for third-party owners or operators to serve on-site solar customers. A similar provision appeared in the rules attached to our Supplemental NOPR that was crafted using the language proposed by Public Service in its exceptions. However, Black Hills complained that Public Service's proposed language was improperly broad and suggested modifications in its comments made in response to the Supplemental NOPR. We agree with Black Hills and adopt our emergency rule on a permanent basis.[9]

[8] The Commission requests the investor owned QRUs to update the Commission on their success, or lack thereof, in entering into standard contracts with governmental entities as part of the utility's compliance plan filing for the 2011 RES compliance year.

[9] Black Hills' proposed language was used to craft our emergency rule.

68. WRA suggests in oral and written comments that production metering is not necessarily required for systems owned by third-party owners and operators under SB09-051. Public Service counters that WRA is mistaken concerning its interpretation of this requirement. More importantly, Public Service stated at the September 1, 2009 hearing that it has no intention to pay for SO-RECs generated by an on-site solar system owned or operated by a third party on any basis other than a metered basis. Given that SB09-051 prevents the Commission from requiring an investor owned utility from paying for SO-RECs from systems owned or operated by third-parties on any basis other than a metered basis, we decline to change the rule as suggested by WRA.

F. Other Changes—Rules 3651, 3655, 3652, and 3664

69. We modify rule 3651 in the ALJ's Recommended Decision to recognize the incorporation, on a permanent basis, of the provisions of SB09-051 into our RES rules.

70. We adopt for our permanent rules subparagraph 3652(i), the definition of "on-site solar system" from our emergency rules. This definition derives from the statutory changes resulting from SB09-051. Although the exact wording we approve for the rule deviates slightly from the language proposed by Public Service in its exceptions, we note that Public Service expresses support for our language in its comments concerning SB09-051.

71. We similarly adopt for our permanent rules the subparagraph from our emergency rules that defines "standard rebate offer." We find that this definition addresses Public Service's exceptions on the matter. We also find that Black Hills' interpretation of the former definition of "standard rebate offer" as expressed in its exceptions, where the on-site solar equipment receiving a rebate is capped at 100 kW, is contrary to the new provisions of § 40-20-124, C.R.S.,

as a result of SB09-051. Likewise, we reject Black Hills exceptions on the other instances where it suggests the application of this 100 kW cap under rule 3658.

72. We modify the paragraph of rule 3655 that addresses renewable energy contracts and the particular provision that discusses the term of such contracts for SO-RECs to acknowledge that SB09-051 provides for contracts for systems between 100 kW and 1 MW to have a different term than 20 year if mutually agreed to by the parties. This rule is identical to the rule we adopted on an emergency basis. Public Service had suggested similar rule language in its exceptions, using "shorter" instead of "different." We agree with WRA and OCC, however, that the statute specifies "different" rather than "shorter" contract terms. We similarly modify subparagraph 3658(c)(VII)(B) in accordance with this change to rule 3655.

73. WRA, in its exceptions to Decision No. R09-0413, complains that subparagraph 3664(a)(II) appears to serve as an inappropriate "demand cap" on net metered installations. IREC explains in response that WRA has mistakenly interpreted "service entrance capacity" to be an arbitrary cap on net metered installations. Black Hills recommends in its comments filed in response to our Supplemental NOPR that "service entrance capacity" should be a defined term under rule 3652 to complement the new net metering size limitations established by SB09-051 and that are incorporated in our modified rule 3664(b). In its reply to Black Hills' comments, Public Service suggests a change to the definition so that it can apply to underground connections. We agree with IREC, Black Hills, and Public Service and reject WRA's exception. This finding is further consistent with our emergency rules.

74. At the September 1, 2009 hearing, CoSEIA suggested that we modify paragraph 3664(a) concerning net metering to exempt systems 10 kW and under from the requirement that they provide no more than 120 percent of the customer's annual electricity usage. Public Service

countered that the new size threshold for on-site solar systems from SB09-051 is the appropriate screen, even for small systems, to ensure that net metered systems are properly sized. We agree with Public Service and decline to adopt CoSEIA's suggestion.

75. However, we modify paragraph 3664(a) to incorporate the definition of "site" that SB09-051 sets forth in conjunction with an on-site solar system. We find that this additional language will clarify the screen established here for net metered systems.

76. We also adopt on a permanent basis the emergency rule we issued as subparagraph 3664(b) concerning the rollover of kWh credits for net metered systems. We find that this rule language addresses the comments of Black Hills concerning the need for the investor owned QRU to know if an annual cash out is required. We find that it also addresses the comments of Public Service that a customer can make the one-time election for rollovers upon the installation of the net metered system.

77. CoSEIA also recommended at the September 1, 2009 hearing that we modify paragraph 3664(f) by adding a provision from SB09-051 that requires third-party owner and operators of on-site solar systems to pay the cost of installing production meters. We agree and craft a new rule.

IV. RULE 3665 SMALL GENERATION INTERCONNECTION PROCEDURES

A. Utility External Disconnect Switches

78. The ALJ declined in Decision No. R09-0413 to adopt a new rule that would prohibit the installation of a utility external disconnect switch (UEDS) for small on-site solar systems. The ALJ explains that, given the lack of unanimity on the safety issues surrounding the need for such switches and the thin record on the actual performance of internal protections, an

appropriate resolution is for the Commission to allow QRUs to waive a requirement for UEDS installations at their discretion.

79. In their exceptions, CoSEIA, IREC, and SunRun suggest that the Commission reverse the ALJ's decision and adopt a new rule that would prohibit QRUs from requiring UEDS installations at the customer's expense. These representatives of the on-site solar community restate their arguments from their earlier comments that UEDS installations are not needed when UL and IEEE certified inverters are in place for systems of 10 kW and less.

80. Black Hills states in its exceptions that it supports the ALJ regarding no new rule on UEDS installations. However, Black Hills takes issue with footnote 26 in the Recommended Decision, stating that it is factually incorrect concerning the National Electric Code.

81. We remove footnote 26 from the Recommended Decision to address Black Hills' concerns regarding the National Electric Code. With respect to the positions of CoSEIA, IREC, and SunRun, we reject their recommendations and support the ALJ's decision not to adopt at this time a new rule prohibiting UEDS installations at the customer's expense. We note that Public Service and some rural electric cooperatives appear to have agreed with the notion that UEDS are not needed for certain small system installations. We encourage other QRUs to follow this trend, which we find to be in the right direction with respect to the growing number of small system on-site solar installations in Colorado.

B. Rural System Screens

82. The ALJ notes in his Recommended Decision that this rulemaking proceeding is intended to address interconnection matters that affect rural electric cooperatives in response to the passage and signing of HB08-1160. CREA and Tri-State, two of the representatives of the rural electric cooperatives participating in this docket, proposed in their comments additional

screens for Level 1 and Level 2 interconnection requests under rule 3665. Their proposed rule language included the addition of two defined terms: "highly seasonal circuit" and "minimum daytime loading." Their proposed rule language also detailed how interconnection requests would be screened with respect to such highly seasonal circuits. According to the comments provided by CREA and Tri-State, their proposed rules were modeled after similar rules promulgated in New Mexico. CREA and Tri-State filed copies of relevant sections of the New Mexico Interconnection Manual with their comments.

83. In its exceptions to Decision No. R09-0413, CoSEIA complains that interested persons were not afforded adequate opportunity to comment on the screens proposed by CREA and Tri-State. CoSEIA further complains that the new rule language is confusing. In particular, CoSEIA is concerned that the term "circuit" could be confused with "line section" with unacceptably discriminatory consequences to customers in rural areas.

84. In response to CoSEIA's comments, IREC offers modifications to the new screens adopted by the ALJ that it believes should satisfy CoSEIA's concerns. First, IREC recommends that the phrase "A fuse is not an automatic sectionalizing device" be added to subparagraphs 3665(c)(II)(A)(ii) and 3665(f)(IV)(A). IREC also suggests the replacement in those subparagraphs of certain instances of "circuit" or "segment" with "line section."

85. The Solar Alliance and IREC also recommend that the definition of "minimal daytime loading" be changed from "the lowest daily peak in the year on the line section" to "the lowest monthly peak in the year on the line section."

86. CREA and Tri-State respond to CoSEIA's exceptions, arguing that ample opportunity existed for comment on the proposed rural screens. CREA and Tri-State continue to support the rules adopted by the ALJ, claiming that they are neither ambiguous nor confusing

and that they will not preclude the deployment of customer-owned distributed generation in rural areas. CREA and Tri-State submit, however, that they support IREC's amendments concerning rule 3665.[10]

87. In light of the apparent agreement between IREC and CREA and Tri-State, we adopt IREC's proposed changes to subparagraphs 3665(c)(II)(A)(ii) and 3665(f)(IV)(A). These changes should clarify how the screens will be applied on distribution systems with highly seasonal loads.

88. We further note that the New Mexico Interconnection Manual as included in this record appears to define "minimum daytime loading" as "the lowest daily peak in the year on the Line Section," where Line Section means "that portion of a Utility's System connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line." We also find that the record insufficient to support the change from "daily peak" to "monthly peak," as the meaning of a "monthly peak" is ambiguous. Thus, we decline to change the definition of "minimum daytime loading."

C. Insurance

89. The ALJ makes no change to the insurance coverage requirements under rule 3665 that apply to small (mainly residential) installations by his Recommended Decision. However, the ALJ proposes modifications to paragraph 3665(e) that reduce the liability insurance requirements for systems between 10 kW and 500 kW. Customers with installations greater than 500 kW and up to 2 MW will continue to be subject to the same level of liability insurance as under the existing rule 3665.

[10] Public Service states in its response to exceptions that it supports CREA's and Tri-State's interconnection language.

90. CoSEIA argues in its exceptions that such insurance requirements should be eliminated for systems of 10 kW or less. CoSEIA argues that small systems pose minimal, if any, risk and that the QRUs have not identified the specific risks that would be beyond their own insurance policies. CoSEIA continues that if the Commission determines that additional insurance is needed, then the QRUs should purchase the coverage rather than the interconnecting customers. CoSEIA requests that the Commission require QRUs to provide documentation of the actual costs impacts to the QRUs from the QRU's insurance providers if the proof of insurance requirement under rule 3665 is eliminated for small systems.

91. IREC raises similar complaints in its exceptions, arguing that the Commission should conclude that requiring additional insurance above and beyond what a customer would usually carry merely adds to the costs of renewable energy systems with no appreciable offsetting benefits. In contrast to the modified insurance levels recommended by the ALJ, IREC proposes that no additional insurance be required for systems of 250 kW or less. IREC further suggests coverage at $1 million for systems between 250 kW and 2 MW and that $2 million be the level for installations greater than 2 MW. IREC further suggests that, if the Commission is not ready to eliminate the naming of the utility as an additional insured under paragraph 3665(e), the required endorsement should apply only to systems larger than 500 kW.

92. With respect to CoSEIA's suggestions, Public Service states that homeowners with on-site solar installations have insurance products readily available to them and that real risks exist that merit such coverage. With respect to IREC's suggestions, Public Service states that it supports the coverage levels established for the small and large systems in the ALJ's proposed rule, pointing out that IREC has presented no evidence that such levels of protection cannot be obtained by customers. Public Service further opines that good safety records of on-

site solar systems should translate into low prices for the required levels of coverage. Public Service states that it supports the rule requiring the owner of solar panels to name the QRU as an additional insured on the liability policy. Nevertheless, Public Service appears to agree that this rule could apply only to systems over 500 kW.

93. We agree with Public Service's position on the exceptions filed by IREC and CoSEIA regarding insurance and therefore decline to modify the levels of liability coverage set forth in by the ALJ. We do modify, however, subparagraph 3665(e)(XI)(B) as suggested by IREC to apply only to installations over 500 kW.

D. Other Changes

94. CoSEIA suggests in its exceptions that there is no need for a QRU to have a one-line diagram and that a requirement for such diagrams should be prohibited. If the Commission is not inclined to prohibit one-line diagrams at this time, CoSEIA suggests in the alternative that these diagrams should only be required at the time of the completion of a rebate application rather than at the time of the reservation of the rebate. Public Service counters that one-line diagrams provide significant amounts of important information to the QRUs and that they are essential for assuring safe and reliable service. We agree.

95. CoSEIA also argues in its exceptions for the elimination of interconnection agreements for small systems. CoSEIA states that, in the alternative, an investor owned QRU should be pressed to simplify their interconnection agreements and should be required to justify every paragraph in its interconnection agreements as part of a RES compliance plan proceeding. Public Service responds to CoSEIA by explaining that interconnection agreements are not burdensome, that they are understandable, and that they should be retained because they spell out responsibilities between the QRUs and their customers thereby reducing risk for all. We agree

96. Although we decline to modify rule 3665 as suggested by CoSEIA, we are mindful of the broad interest in streamlining the interconnection process as much as practicable. We note that rule 3665 makes no mention of a one-line diagram, yet this matter appears to have been discussed at length in comments in this proceeding. We further note that both Public Service and CoSEIA have expressed opposition to the ALJ's proposed changes to subparagraph 3657(a)(VII) that calls for the establishment of tariffs for standard interconnection agreements. We agree that an interconnection tariff is unnecessary. However, we modify subparagraph 3657(a)(VII) to require that application forms, standard agreements, and general procedures that are not evident by these forms and agreements be filed as part of a RES compliance plan. We do not agree with CoSEIA that as part of its RES compliance plan filing the investor owned QRU must justify each and every element of the applications and agreements; such a requirement would be unnecessarily burdensome for all involved in a RES compliance plan proceeding. However, we find the inclusion of such application forms and standard agreements, which presumably address such items as one-line diagrams and UEDS installations, will assist us in facilitating the further streamlining of interconnections, if necessary and appropriate, in the future.

97. In its exceptions, the Solar Alliance proposes that the Commission adopt a new provision to rule 3665 that requires the QRU to inform the interconnecting customers about the results of commissioning tests performed on larger interconnecting facilities within 48 hours. We find that results of such "witness tests" are apparently going unknown to interconnecting customers, such that they lack timely confirmation that their systems and the associated meters

are approved by the QRU for operation. We therefore accept the Solar Alliance's exceptions on this issue and adopt the proposed rule.

98. The Solar Alliance also proposes that the Commission adopt a new provision to rule 3665 that provides for the survivability of interconnection agreements when the ownership of on-site generation facilities changes. The Solar Alliance explains that this new provision complements the new language in rule 3658 allowing for on-site solar installations serving commercial tenants. IREC expresses support for the Solar Alliance's proposed rules in its response to exceptions. We agree that such an addition would facilitate on-site solar installations on commercial leased properties and adopt the proposed rule language as subparagraph 3665(b)(VII).

99. WRA objects in its exceptions to the ALJ's presumption of confidentiality concerning interconnection agreements in subparagraph 3665(e)(V), and WRA thus proposes associated rule changes. We reject these changes, since interconnection agreements deal with individual customers and that customer-specific information should, as a rule, enjoy protections of confidentiality.

V. RULE 3654 RENEWABLE ENERGY STANDARD

A. REC Shelf Life

100. The ALJ declines to change the RES rules to shorten the time in which a REC could be used for compliance with the RES before it expires; in other words, the Recommended Decision does not change the "shelf life" of a REC. The ALJ cites the lack of support for a shorter shelf life as the primary reason for not modifying the relevant paragraphs under rule 3654.

101. In its exceptions, WRA points out that it supported in its comments offered in this Docket a shelf life for RECs of three years, which is shorter than the shelf life for RECs under our existing RES rules. The shelf life would include the year the REC is generated and the two years prior to the compliance year. WRA argues that now is the time to ratchet down the shelf life of RECs in Colorado, since the amount of renewable resources is growing across the United States and the existing shelf life of RECs for compliance with the Colorado RES is too long.

102. Public Service and Black Hills strongly disagree with WRA's proposal. Public Service responds to WRA's exceptions that such a change in the shelf life of a REC could undermine its plans to expand renewable resources on its system, in part because it would have a "choking effect" on the retail rate impact. Public Service states that it has not accumulated so many RECs at this point that it can slow down or stop its acquisition of eligible energy resources, especially in light of Governor Ritter's Climate Action Plan. Black Hills points out that the shelf life of a REC was determined as part of the consensus rules offered to and adopted by the Commission when our RES rules were first promulgated after the passage of A37 and that WRA lent its support to those rules at that time.

103. We modify Decision No. R09-0413 to recognize that WRA indeed supported a shelf life for RECs of three years in its comments. However, we decline to shorten the shelf life of RECs at this stage. Based on the record in this proceeding, it is unclear why a three-year shelf life is better than an even shorter shelf life as discussed in other comments offered in this proceeding. Moreover, we will not adopt a shorter shelf life for RECs than the shelf life set forth in the A37 consensus rules that continue to serve as the foundation of many of the provisions in our RES rules. We accordingly reject WRA's proposed changes to paragraphs 3654(i) and 3659(f).

B. Other Changes

104. WRA complains in its exceptions that borrowing forward, as allowed for the years 2007 through 2010 under subparagraph 3654(k), could slow the development of renewable energy resources. Black Hills responds to WRA's proposal with a rejection of any premature termination of the provisions in our rules that allow for the borrowing forward of RECs. We note that the rule already applies only to the first four compliance years for investor owned QRUs and that 2010 is the last year. We modify paragraph 3654(k) to specify that the borrow forward option is available only for the 2007 through 2010 RES compliance plans.

105. WRA continues its exceptions by suggesting the insertion into paragraph 3654(m) of the phrase: "RECs shall be used for a single purpose only, and shall be retired upon use for that purpose." Although we note that paragraph 3659(h) sets forth the same provision, we find that WRA's suggestion can be accommodated without creating confusion.

106. WRA further worries, in its exceptions, about the potential for the double counting of RECs acquired by Public Service through its WindSource program and suggests rule language intended to prevent such double counting. WRA's proposed rule language is modeled after other proposed language discussed in rulemaking comments. Public Service responds to WRA's proposed rule language and suggests an alternative approach to addressing the matter. Given the multiple protections against double counting in our RES rules, we do not share the same concern as WRA about the potential for the double counting of RECs. Nevertheless, we adopt Public Service's suggested rule change as an additional precaution to prevent the inappropriate double counting of RECs acquired through voluntary eligible energy pricing programs.

VI. RULE 3659 RENEWABLE ENERGY CREDITS

107. Public Service requests in its exceptions that the Commission reject the ALJ's decision not to adopt a new rule that establishes the regulatory treatment afforded to REC sales made by an investor owned QRU. Public Service complains that it has been asking the Commission for such clarification for some time and that its absence has discouraged trades. Public Service points out that the Commission has previously deferred the matter to a rulemaking such as the instant proceeding and points out that the short time frame of REC trading likely prohibits the Commission from determining the regulatory treatment of REC sales when the sale is being made. Public Service proposes a rule by which 20 percent of the annual net margins from REC sales be retained by the investor owned QRU as earnings.

108. OCC does not oppose the sale of RECs by investor owned QRU's as suggested by Public Service, but it argues that a 20 percent share of margins as earnings is too generous. In support of this position, OCC contrasts REC trading with hourly, real-time market sales of electricity and points out that a "zero cost" approach to REC accounting suggests that there will only be an upside to many REC sales. OCC suggests a lower margin percentage that flows to earnings, such as 10 percent in the first year with a one percent per year decrease for the first five years. OCC appears to support the notion that proceeds from REC sales not retained by the investor owned QRU be used to increase headroom in the RESA.

109. CoSEIA does not oppose the sales of RECs as proposed by Public Service but instead explains in its response to Public Service's exceptions that the non-retained portion of REC sales margins should be used to fund rebates for solar installations.

110. We note that when the Commission declined to address the regulatory treatment afforded to REC sales by Decision No. C08-0559 in Docket No. 07A-462E concerning Public

Service's 2008 RES Compliance Plan, we stated that we would prefer to make such a decision "in the context of future development of REC markets and future carbon reduction requirements." While we are sensitive to Public Service's position and are reluctant to "kick down the road" this issue once again, we find that the record in this proceeding again fails to meet our needs for determining specific percentages of margins from REC sales that may be retained as earnings. We therefore adopt a new rule that acknowledges that investor owned QRUs have the discretion to sell or trade RECs at any time as long as it secures sufficient RECs to meet the RES. Our new rule will also state that the QRU may seek approval in an annual compliance plan filing to retain as earnings a percentage of the annual net margins from such REC sales. Funds not retained by the investor owned QRU as earnings shall flow into the RESA account to increase the "headroom" available to cover the net incremental costs of additional eligible energy resources.

VII. RULE 3655 RESOURCE ACQUISITION

A. Expedited Contract Review

111. The ALJ modifies existing paragraph 3655(c), re-promulgated and modified as paragraph 3655(b), to apply only to renewable energy supply contracts no greater than 30 MW. This restriction thus excludes contracts generally acquired pursuant to an Electric Resource Plan (ERP) under the Commission's ERP rules, 4 CCR 723-3-3600, *et seq*. He further modifies the rule language to extend the time in which the Commission must act on the contracts from 60 days from the time of their filing to 90 days from the time the Commission deems the associated application to be complete.

112. Public Service requests in its exceptions to restore the option that renewable energy supply contracts be afforded expedited review even if the contract is part of an ERP

process. Public Service claims that it does not intend to bring every contract before the Commission for approval, but that due to legal or financial exigencies, combined with questions as to the recoverability of costs, a quick Commission review and approval of contracts may be necessary. Public Service also objects to the extended process embodied in the ALJ's proposed rule. Public Service states that it can accept a 90-day process that is triggered when the application is filed rather than when the application is deemed complete.

113. We are reluctant to modify the ALJ's proposed rule to extend an expedited review option to renewable energy supply contracts of any size. We note that the ERP rules will afford investor owned QRU's a presumption of prudence as part of its Phase II process. We do, however, modify the proposed rule to establish a 90-day process that begins with the filing of the application.

B. Real Time Electronic Access to Data

114. The ALJ introduces a new paragraph 3655(i) that requires owners of eligible energy systems greater than 250 kW to provide, upon the QRU's request, system operations data being collected at the site.

115. Public Service requests in its exceptions that this new paragraph be modified to clarify that the access requested by the QRUs is real-time and electronic. Public Service also requests that the QRUs additionally have access to meteorological data being collected at the site. Public Service suggests that such changes are needed for it to expand the amount of renewable resources connected to its system and explains that the costs of such data access requirements can be incorporated in bid prices for SO-RECs.

116. CoSEIA, in its response to Public Service's exceptions, argues that there is a cost associated with the provision of real-time access to operations and meteorological data. CoSEIA

suggests that, if the installation receives a standard offer for SO-RECs, the QRU would be responsible for any additional costs. In its response, the Solar Alliance states that it supports the ALJ's new rule but argues that the only meteorological data that a QRU needs to have concerning on-site solar installations is the times for sunrise and sunset. The Solar Alliance therefore questions the need for access to real-time meteorological data from such systems. The Solar Alliance also points out that if the investor owned QRU needs such data, there is nothing in statute or our rules that would prevent it from recovering the associated costs.

117. We clarify "access" in paragraph 3655(i) to mean real-time electronic access. Furthermore, it is our understanding that Public Service's proposed rule does not obligate eligible energy systems greater than 250 MW to collect meteorological data on a real time basis.[11] Rather, Public Service's proposal entails the QRU's access to any meteorological data being collected at such facilities. Therefore we expand the rule to provide QRUs with real-time electronic access to meteorological data being collected at the sites of eligible energy systems greater than 250 kW.

C. Other Changes

118. The Solar Alliance suggests in its exceptions that an independent evaluator would be preferable to an independent auditor as set forth in paragraph 3655(i). Public Service opposes the replacement of the independent auditor for an independent evaluator, arguing that an independent evaluator will be used for eligible energy resources greater than 30 MW under the Commission's ERP rules and that a similar independent evaluator for smaller systems would be expensive and unnecessary, particularly since the evaluation of bids for such small resources will

[11] Purchased power contracts used for resource acquisition under the Commission's ERP process typically establish data collection and access requirements for resources greater than 30 MW.

likely be straightforward. We agree with Public Service and decline to adopt the Solar Alliance's suggestion.

119. The Solar Alliance also suggests that the Commission establish a twelve-month "blackout period" that would prevent an investor owned QRU from participating in competitive solicitations as a bidder if it had administrated a competitive acquisition process for the same eligible energy technology or resource type in the past twelve months. The Solar Alliance argues that this approach is necessary to preserve fairness in bidding, since the QRU will have recent access to highly proprietary information from other bidders. Public Service objects to the Solar Alliance's suggestion, arguing that such a blackout period runs counter to statutory policies encouraging QRU ownership of eligible energy resources. Public Service also complains that a blackout period could prevent a QRU from ever participating in competitive solicitations when such processes take place annually if not more frequently. We agree with Public Service on this matter and do not adopt the Solar Alliance's recommended blackout period.

VIII. OTHER EXCEPTIONS—RULES 3652, 3656, 3657, 3660, AND 3662

120. We adopt Black Hills' proposal in its exceptions to change paragraph 3652(b) regarding the definition of "biomass." We find that Black Hills' suggested replacement of "forest products designated as waste matter by applicable government agencies" for the ALJ's proposed insertion of "forestry products and their byproducts" should alleviate WRA's concerns, as expressed in its exceptions, that the ALJ's proposed rule is too inclusive.

121. We are disappointed that this proceeding has not resulted in an improved definition for "community-based projects" under paragraph 3652(c). However, we agree with the ALJ that the record in this proceeding is insufficient to craft an improved definition at this time. We suggest that the interested persons participating in this docket, such as CHEN, RFU,

GEO and the QRUs, attempt to work out an improved definition that is acceptable to them all and to present this definition to us for consideration again in the future.

122. Contrary to WRA's concerns, as described in its exceptions, about the double counting of RECs from eligible energy used for compliance with the RES, we find that the ALJ's proposed changes to the RES rules will not increase the risk that QRUs will engage in the double counting of RECs. We therefore decline to modify the replacements in the existing rules of "eligible energy" with "eligible energy and RECs" as proposed by the ALJ,[12] and we will not adopt WRA's proposed addition to rule 3652 of "unbundled RECs" as a defined term.

123. We agree with the Solar Alliance and IREC that it is reasonable to exclude net metered systems from the requirements of rule 3656 concerning environmental impacts consistent with existing practices for net metered customers. Therefore we modify rule 3656 as they propose.

124. With respect to the suggestions put forward by the Conservation Collaborative in its exceptions on the ALJ's proposed rule 3656, we have concerns about some of the proposed language in the proposed "consensus rule" and would prefer to have more information about the nature of the underlying consensus prior to adopting the suggested changes. We also have concerns about the expectations placed on the Colorado Division of Wildlife with respect to our RES rules. Therefore, we are reluctant at this point to adopt the consensus language offered by the Conservation Collaborative.

125. We agree with the ALJ and with OCC's response to Public Service's exceptions that it is premature to allow investor owned QRUs to file their RES compliance plans less

[12] The ALJ suggests replacing certain instances of "eligible energy" in the existing RES rules with "eligible energy and RECs" in order to acknowledge that recycled energy can be used to comply with the RES but that recycled energy does not create RECs.

frequently than annually under paragraph 3657(a). We thus deny Public Service's request to change paragraph 3657(a) to accommodate RES compliance plan filings made on something other than an annual cycle.

126. OCC restates in its exceptions to Decision No. R09-0413 the suggestion that interest accrue on "banked" RESA collections at the current after tax weighted average cost of capital. We decline to modify the interest rate that the ALJ establishes in his proposed changes to paragraph 3660(b) because we find that he reached a reasonable compromise in this instance. We do, however, modify the ALJ's proposed paragraph 3660(b) in response to the suggestions raised by Public Service and Black Hills to clarify that such interest shall accrue symmetrically on positive and negative RESA account balances.

127. Although Public Service states in its exceptions that it accepts the ALJ's proposed changes to paragraph 3660(b) concerning the banking of RESA funds, Public Service takes issues with the ALJ's discussion about the Commission's authority over an investor owned QRU's acquisition of RECs. We have carefully reviewed the relevant sections of Decision No. R09-0413 in response to Public Service's concerns and find that the ALJ properly discusses the interplay between the determination of the retail rate impact, the Commission's general authorities as regulators of investor owned QRUs, and the banking of RESA funds. We therefore decline to modify the ALJ's decision on this matter.

128. WRA suggests in its exceptions that paragraph 3660(e) be further modified to allow an investor owned QRU to own up to 50 percent of eligible energy resources that replace energy that would have otherwise been produced by a coal plant, where such coal plant has been retired for the benefit of the environment and public health of Colorado. Public Service suggests in its response to WRA's exceptions that the Commission give serious consideration to this

proposal, but that it would prefer a "one-for-one" trade. We note that we have taken up similar considerations in Public Service's current ERP proceeding, Docket No. 07A-447E. Because we intend to address the issues surrounding coal plant retirements and replacement resources in ERP proceedings, we decline to modify the ALJ's decision as suggested here by WRA.

129. We adopt Public Service's suggestion in its exceptions to modify subparagraph 3662(a)(XI) to require the recalculation of the retail rate impact only when the QRU is out of compliance with the RES due to the retail rate impact. We find that Public Service's proposed changes conform to Decision No. C08-0559 in which we interpreted subparagraph 3662(a)(XI) in the same manner.

130. We decline to modify paragraphs 3662(d) and 3662(e) concerning confidential information in annual RES compliance reports as suggested by WRA in its exceptions. We agree with Public Service's response that our existing procedural rules properly deal with matters concerning confidential information and that WRA's proposed modifications are not warranted.

131. Finally, we reject CoSEIA's suggestion in its exceptions that investor owned QRUs install net meters for all new installations due to the reasons put forward by Public Service in its response to CoSEIA's exceptions. We further note our interest in exploring new meter installations more generally in the future, beyond what is possible given the record in this proceeding.

IX. <u>ORDER</u>

A. The Commission Orders That:

1. The exceptions to Decision No. R09-0413 filed by Public Service are granted, in part, and denied, in part, consistent with the discussion above.

2. The exceptions to the Recommended Decision filed by Black Hills are granted, in part, and denied, in part, consistent with the discussion above.

3. The exceptions to the Recommended Decision filed by OCC are denied.

4. The exceptions to the Recommended Decision filed by the Solar Alliance are granted, in part, and denied, in part, consistent with the discussion above.

5. The exceptions to the Recommended Decision filed by CoSEIA are denied.

6. The exceptions to the Recommended Decision filed by IREC are granted, in part, and denied, in part, consistent with the discussion above.

7. The exceptions to the Recommended Decision filed by CHEN and RFU are denied.

8. The exceptions to the Recommended Decision filed by the Conservation Collaborative are denied.

9. The exceptions to the Recommended Decision filed by WRA are granted, in part, and denied, in part, consistent with the discussion above.

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

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

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

13. A copy of the rules adopted by the Order shall be filed with the Office of the Secretary of State for publication in the Colorado Register. The rules shall be submitted to the

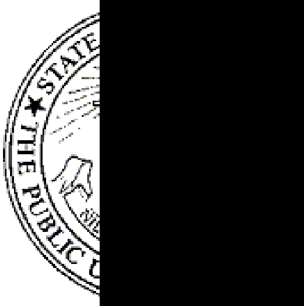
appropriate committee of the Colorado General Assembly if the General Assembly is in session at the time this Order becomes effective, or for an opinion as to whether the adopted rules conform with § 24-4-103, C.R.S.

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

15. This Order is effective on its Mailed Date.

B. ADOPTED IN COMMISSIONER'S WEEKLY MEETING September 2, 2009.

(S E A L)



ATTEST: A TRUE COPY

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

RONALD J. BINZ

JAMES K. TARPEY

MATT BAKER

Commissioners

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COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

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

PART 3
RULES REGULATING ELECTRIC UTILITIES

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BASIS, PURPOSE, AND STATUTORY AUTHORITY.

The basis and purpose of these rules is to describe the electric service to be provided by jurisdictional utilities and master meter operators to their customers; to designate the manner of regulation over such utilities and master meter operators; and to describe the services these utilities and master meter operators shall provide. In addition, these rules identify the specific provisions applicable to public utilities or other persons over which the Commission has limited jurisdiction. These rules address a wide variety of subject areas including, but not limited to, service interruption, meter testing and accuracy, safety, customer information, customer deposits, rate schedules and tariffs, discontinuance of service, master meter operations, flexible regulation, procedures for administering the Low-Income Energy Assistance Act, cost allocation between regulated and unregulated operations, recovery of costs, the acquisition of renewable energy, small power producers and cogeneration facilities, and appeals regarding local government land use decisions. The statutory authority for these rules can be found at §§ 29-20-108, 40-1-103.5, 40-2-108, 40-2-124~~(2)~~, 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), ~~and~~ 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) through (j) and (m); 3659(a)(I) through (a)(V), (b) through (k), 3660(i), 3661(b), (c), (g), and (j), 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) through (j) and (m); 3659(a)(I) through (a)(V), (b) through (k).

(e) The following rules in this Part 3 shall apply to municipally owned utilities which are not qualifying retail utilities:

(I) Rules 3650(d).

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) through (j), and (m), 3659(a)(I) through (a)(V), (b) through (k), 3660(i), 3661(b), (c), (g),and (j), 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) through (j) and (m), 3659(a)(I) through (a)(V), (b) through (k) 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.

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. 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, forest products designated as waste matter by applicable governmental authorities, 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.

(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~~ or RECs~~.

(g) "Eligible energy resources" are renewable energy resources or facilities that generate recycled energy~~ or 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 thirty megawatts or less. Hydropower resources not in existence on January 1, 2005 must have a nameplate rating of ten megawatts or less~~.

(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) “On-site solar system” means a solar renewable 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) “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) “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) “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) “Renewable energy” means energy generated from ~~eligible~~ renewable energy resources.

(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~~n~~ ~~eligible~~ 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 thirty 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.

(~~q~~r) “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.

(~~r~~s) “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.

(~~s~~t) “Solar electric generation technologies” means any technology that uses solar radiation energy to generate electricity.

(~~t~~u) “Solar on-site renewable energy credit” or “SO-REC” means a REC created by an on-site solar system.

(~~u~~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.

(~~v~~w) “Solar renewable energy system” means a system that uses a solar electric generation technology to generate electricity.

(~~w~~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.

~~(x) “Watt” means a unit of measure of alternating current electric power at a point in time, as capacity or demand. For the purposes of measurement of output from solar renewable energy systems used in the solar program, the watts referenced herein mean those determined by a nationally accepted testing organization.~~

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 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 percent of its retail electricity sales in Colorado for each of the compliance years 2011 through 2014;

(IV) Fifteen percent of its retail electricity sales in Colorado for each of the compliance years 2015 through 2019; and

(V) Twenty 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 ~~renewable~~ energy amounts specified in ~~rule~~ 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) 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) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy generated in Colorado shall be counted as 1.25 kilowatt-hours of eligible energy.

(g) 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) For purposes of compliance with the renewable energy standard, each kilowatt-hour of eligible energy may take advantage of only one of the compliance multipliers in rules 3654(e), (f) or (g).

(i) 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 ~~it was~~ they were generated, provided that such eligible ~~renewable~~ energy and RECs are ~~is~~ generated no later than July 1 of the calendar year immediately following the end of the compliance year for which ~~it is~~ they are being counted;

(II) For the compliance year during which ~~it was~~ they were generated; or

(III) For the five compliance years immediately following the compliance year during which ~~it was~~ 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 ~~it was~~ they were generated.

(j) For purposes of compliance with this renewable energy standard, a QRU may substitute the equivalent RECs, S-RECs, or SO-RECs for eligible energy.

(k) For the first four compliance years, 2007 through 2010, the QRU may borrow forward eligible energy and RECs generated during the following two compliance years. Any borrowed eligible energy and RECs generated during a compliance year must be made up by actual eligible energy and RECs generated during that compliance year or borrowed from subsequent compliance

years, provided that the fourth compliance year is the last compliance year that borrowing forward may occur pursuant to this rule. For purposes of this rule, the term “borrow forward” means that a QRU may count eligible energy and RECs that it has not yet generated or caused to be generated to satisfy its current year obligations toward compliance with the renewable energy standard and the term “made up” means that any counting of eligible energy ~~resources~~ 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) For the first four compliance years, 2007 through 2010, no administrative penalties shall be assessed against an investor owned QRU if the failure to meet the renewable energy standard results from events beyond the reasonable control of the QRU which could not have reasonably been mitigated by the QRU.

(m) For purposes of compliance with this renewable energy standard, there shall be no “double counting” of ~~renewable~~ 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 ~~renewable~~ 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) ~~A QRU may apply to the Commission for a determination as to whether eligible energy sold by the QRU under an optional renewable energy pricing program may be counted by the QRU toward compliance with the renewable energy standard. Such eligible energy shall not be counted toward compliance with the renewable energy standard until the Commission grants approval of the utility’s application following an evidentiary hearing.~~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) For purposes of compliance with this renewable energy standard, if a generation system uses a combination of fossil fuel and ~~eligible~~ renewable energy resources to generate electricity, a QRU may count only as eligible ~~renewable~~ energy the proportion of the total electric output of the generation system that results from the use of ~~eligible~~ renewable energy resources. The QRU shall include in its annual compliance plan the method of calculation used to determine the proportion of ~~eligible~~ renewable energy.

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

3655. Resource Acquisition.

(a) It is the Commission’s policy that utilities should meet the renewable energy standard in the most cost-effective manner. To this end, the competitive acquisition provisions and exemptions of the Commission’s 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 in accordance with a process set forth in a Commission-approved compliance plan.

~~(b) Competitive solicitations shall be conducted by each investor owned QRU to achieve the statutory policies contained in the legislative declaration of intent, with the exception of renewable energy from on-site solar systems acquired under rule 3658. Whenever a QRU acquires renewable energy and/or RECs by competitive acquisition, to the extent possible, the solicitations and evaluations of proposals should be coordinated to avoid redundancy and to minimize the cost of acquiring such renewable energy and/or RECs. A QRU may conduct, in its discretion, separate solicitations or combined solicitations, for any of the following:~~

~~(I) Renewable energy from on site solar systems;~~

~~(II) Renewable energy from solar energy systems that are not on-site solar systems;~~

~~(III) Renewable energy from non-solar resources such as wind, geothermal, biomass, hydropower, fuel cells;~~

~~(IV) Renewable energy credits (RECs);~~

~~(V) Solar renewable energy credits (S-RECs); and~~

~~(VI) Solar on-site renewable energy credits (SO-RECs).~~

(~~c~~b) The investor owned QRU may apply to the Commission, at any time, for review and approval of ~~renewable energy supply contracts and~~ renewable energy credit contracts of any size, and renewable energy supply contracts with facilities no greater than 30 MW. The Commission will review and rule on these contracts within ~~sixty~~ ninety 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.

(~~d~~c) 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.

(~~e~~d) 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.

~~(f) Competitive solicitations for eligible energy from on-site solar systems that provide SO-RECs shall be conducted at least two times per year by each investor owned QRU in 2006 and 2007 and thereafter as necessary to comply with the renewable energy standard.~~

~~(I) The treatment of any solar-generated electricity generated on-site in excess of the consumption of the host facility will be governed by the net metering provisions pursuant to rule 3664.~~

~~(g) Competitive solicitations for the acquisition of S-RECs may be conducted by each investor owned QRU as needed to comply with the renewable energy standard.~~

~~(h) Competitive solicitations for renewable energy or RECs from eligible energy resources other than on-site solar systems shall be conducted by each investor owned QRU in a timeframe that takes into account the projected needs of the QRU.~~

~~(i) Each competitive solicitation pursuant to these rules shall be targeted toward acquiring the amount of eligible energy required for compliance with each component of the renewable energy standard, and taking into account:~~

~~(I) The retail rate impact, and~~

~~(II) The estimated number of SO-RECs procured under and expected to be procured under the standing standard rebate offer.~~

~~(j) Each investor owned QRU shall provide all parties to the bid process timely notice of bidding procedure.~~

~~(k) Each investor owned QRU shall disclose, at the Commission's request, all information that will be used in the acquisition process, including but not limited to, interconnection and transmission studies, and methods for modeling or otherwise analyzing bids. Confidential information may be protected in accordance with rules 1100 through 1102 of the Commission's Rules of Practice and Procedure.~~

(~~l~~e) 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.

(mf) Responses to competitive solicitations shall be evaluated and ranked by the investor owned QRU.

(I) In addition to the cost of the renewable 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, and any other factor the QRU determines is relevant to the 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) A 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 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 QRU shall include, as part of its Compliance compliance Planplan, a description of its methodology and price(s) it intends to use for this evaluation.

(ng) Within 15 days of the receipt of bids to a competitive solicitation, the investor owned QRU shall notify respondents as to whether their bid has met the bid submission criteria.

(oh) 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.

(p) If there is a dispute between a bidder and the investor owned QRU, either party may refer the dispute to the Commission for resolution.

(i) For eligible energy resources greater than 250 kW, the owner shall provide, at the QRU's request, real time electronic access to the QRU to system operation data. In the event that an eligible energy resource greater than 250 kW also collects meteorological data, the owner shall

provide, at the QRU's request, real time electronic access to the QRU to such meteorological data.

3656. Environmental Impacts.

(a) Eligible energy resources must meet all applicable federal, state, and local environmental permitting requirements.

(b) For eligible energy resources larger than two MW that are not net-metered with 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 and habitats of concern.

(c) For eligible energy resources larger than two MW that are not net-metered with or any wind turbine structures extending over 50 feet in height, the QRU renewable energy supply contract shall require project developers to certify, as a condition precedent to achieving commercial operation:

(I) , that the The developer has performed and made publicly available site specific avian and other wildlife surveys conducted on the facility's site prior to construction. ;

(II) The developer shall further certify that the The developer used the results of these surveys in the design, placement, and management of the facilities to ensure that the environmental impacts of facility development are minimized to state and federally listed species and species of special concern, sites shown to be local bird migration pathways, critical habitat and areas where birds or other wildlife are highly concentrated and are considered at risk; and

(III) The results of these surveys shall be shared with the Colorado Division of Wildlife prior to construction.

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 rules, regulations and tariffs, if applicable, and the following:

(I) The QRU's:

(A) Determination of the retail rate impact pursuant to rule 3661;

(B) Estimate of its retail electricity sales;

(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 the renewable energy standards;

(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 rule;

(E) Plan to acquire additional eligible energy and RECs given the constraints of the retail rate impact rule, including the allocation of the funds available under the retail rate impact rule to acquire eligible energy or RECs from each of the following: on-site solar systems; solar renewable energy systems that are not on-site solar systems; and non-solar eligible energy;

(F) Standard rebate offer and the QRU's estimate of the eligible energy that will be acquired under the standard rebate offer;

(G) Plan to 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 ~~solar eligible renewable energy~~ SO-RECs it needs to meet the renewable energy standard;

(I) The proposed request for proposals including any standard contracts ~~to be included with the acquisition for all eligible energy that~~ the QRU plans to ~~acquire by~~ use as part of a competitive acquisition process; and

(J) Proposed ownership investment, if any, in eligible energy resources and estimate of whether its investment will provide net economic benefits to the QRU's customers, entitling the QRU to extra profit on its investment, pursuant to rule 3660.

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

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

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

(VII) Application forms, standard agreements, and general procedures for the ~~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 an approved compliance plan will be presumed prudent.

(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 for on-site solar systems~~, up to a maximum of 100 kW per system,~~ that become operational on or after December 1, 2004. 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 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.

(b) Investor owned QRUs may establish one or more standard offers to purchase renewable energy credits from on-site solar systems that meet the definition of ~~sub~~paragraph 3652(i) so long as the on-site solar system is 500 kW or less in size. Subject to the retail rate impact in rule 3661, 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 programs.

(c) The standard rebate offer 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 for an on-site solar system smaller than 500 watts.

(II) The rebate 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 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 a 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 ~~rule~~ paragraph 3658(a), and SO-REC payment, pursuant to ~~rule~~ subparagraph 3658(c)(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)(VII)(~~iii~~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).

(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 ~~for less~~ different than 20 years as permitted by subparagraph 3655(~~e~~d)(III), the rebate shall be prorated to reflect the ~~shorter~~ 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(c)(VII)(~~iii~~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 ~~rule~~ subparagraph 3658(c)(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(c)(VII)(~~iii~~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. ~~If the condominium unit is sold, either the on-site solar system owned by the condominium owner shall become the property of the new owner who is responsible for the net metered electric bill or the new owner shall continue the agreement with the third party who owns the on-site system on behalf of the condominium owner.~~

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

(e) 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 energy resources during a compliance year may include:

(I) RECs generated by ~~eligible~~ 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 ~~rule~~ paragraph 3654(i);

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

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

(c) The Commission shall not restrict the QRU's ownership of RECs if the QRU complies with the renewable energy standard established in rule 3654 and does not exceed the retail rate impact established in rule 3661.

(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 ~~from on site customer facilities that are no larger than one hundred kilowatts~~ under § 40-2-124(1)(e), C.R.S.

(e) All contracts between QRUs and the owners of ~~eligible~~ 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) A renewable energy credit 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) 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) 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) If a renewable energy system uses ~~an eligible~~ 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 ~~eligible~~ renewable energy resources shall be eligible to count toward compliance with the renewable energy standard.

(k) If an on-site solar systems of ten kW or below has received a one-time REC payment from a QRU under rule 3658, the QRU shall be entitled to count the anticipated SO-RECs purchased by the one-time REC payment for compliance with the renewable energy standard even if the on-site solar systems is removed or becomes inoperable.

(l) An investor owned QRU:

(I) Shall develop an auditable process to account for RECs using a central database. In the absence of a central third-party database, the QRU shall maintain its own REC internal database and shall make an extract of the REC information available on the utility's website.

(II) Shall designate within its database any REC sold to a wholesaler if the REC has been assigned to that wholesaler.

(III) Shall apply for the inclusion of any losses or gains from the purchase or sale of RECs through an appropriate adjustment clause mechanism.

(IV) Shall hire an independent auditor to verify the accuracy of the QRU internal database which tracks REC. The independent verification shall occur after two years then every three years thereafter.

(m) The investor owned QRU shall record REC information from eligible energy resources in a central database. The database shall include, but not be limited to, a list of all eligible energy resources the QRU intends to use for compliance with the renewable energy standard, including their type, location, owner, operator, start of operation, actual REC generation, ownership, transfer and retirement. A summary database shall be provided to the Commission Staff and be publicly viewable via the Commission's website. Owners of eligible energy resources with nameplate ratings of 100kW or below and larger eligible energy resources, at their option, shall have their name and address encoded for privacy. Systems that are encoded for privacy shall have a unique identifying number assigned, and will continue to have the zip code reported.

(n) In conjunction with the QRU compliance plans specified in rule 3657, a QRU may make a request that the Commission allow the use of a central third-party database to account for RECs. If a QRU proposes to use a central third-party database for the accounting of RECs, the QRU must show that the central third-party database can be readily audited by the Commission Staff to verify that the renewable energy standard is met and that the alternative system is cost effective.

(o) 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) 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. 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). The investor owned QRU may seek approval in an annual compliance plan filing under subparagraph 3657(a)(I)(D) 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 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 ~~resources~~and RECs. The QRU shall be entitled to recover its investment and expenses associated with these rules through appropriate adjustment clauses that allow recovery of expenditures without the full resetting of electric rates.

(b) ~~In advance of the approval of the first compliance plan, an~~An investor owned QRU may ~~propose, by application, to implement~~ use a forward-looking cost recovery mechanism to provide funding for implementing the renewable energy standard. In its ~~application~~compliance plans and reports, the QRU must demonstrate that the funding mechanism proposed will not exceed the retail rate impact test. So long as the funding mechanism does not exceed the retail rate impact test, the QRU shall be entitled to collect and bank funds 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. ~~If approved, the forward-looking funding mechanism may be implemented prior to the first compliance year.~~ Each QRU with a forward-looking cost recovery mechanism shall separately identify the forward-looking cost recovery mechanism on its customers' bills.

(I) Interest shall accrue on the ~~unexpended~~ deferred balance (positive or negative) of the account associated with the ~~funds collected from a~~ 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. ~~A QRU may request interest on any funds it expends in excess of those collected through the forward-looking rider. The request for interest on excess expenditures shall include the reason(s) for the excess expenditures. The request for interest shall be included as part of the annual compliance report, pursuant to rule 3662.~~

(c) 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. These carried forward amounts shall not increase the amounts that a QRU may charge customers under the retail rate impact rule.

(d) 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 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.

(e) 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 ~~rule~~ paragraph 3660(e):

(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, 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, 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)(I) and (e)(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 ~~rule~~ paragraph 3660(e). 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 ~~rule~~ subparagraphs 3660(e)(I) or (e)(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 ~~rule~~ paragraph 3660(e) shall prevent the Commission from waiving, repealing, or revising any Commission rule in a manner otherwise consistent with applicable law.

(f) 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 weighted average cost of capital, including its cost of debt and its most recently authorized rate of return on equity, during the construction, startup, and operation phases of the eligible energy resource.

(g) 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) 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) 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.

(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 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 and assumptions it used in its most recently approved ~~least-cost planning case~~ electric resource plan under rule 3613, 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") ~~over the upcoming compliance year~~ 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 to comply with the renewable energy standard and the retail rate impact rule. ~~By approving the compliance plan of an investor owned QRU, the Commission will be approving the investor owned QRU's budget for acquiring eligible energy over the compliance year. Once approved by the Commission, the investor owned QRU shall implement its compliance plan. Actions taken by an investor owned QRU in compliance with the filed and approved compliance plan shall be deemed prudent.~~

(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 ~~limit~~ cap is as follows:

(I) The QRU shall determine all commercially available resources to the QRU, either through ownership or by contract, ~~at the time of the beginning of the compliance year and~~ for ~~a minimum of the ten years thereafter (~~the “RES planning period~~”)~~. The projected costs of these available resources shall be reflected in both of the scenarios analyzed ~~by the QRU’s computer planning models~~ 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~~ planning ~~Period~~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 ~~reflecting a gradual ramp-up to the twenty percent level~~. The second scenario, a “No RES plan” should reflect the QRU’s resource plan that ~~meets the QRU’s capacity and energy requirements over the RES planning period by replacing~~ replaces the new eligible energy resources in the RES plan with new nonrenewable resources reasonably available. ~~For purposes of this rule, new eligible renewable energy means eligible energy from resources which are not commercially operational at the time these two modeling scenarios are performed.~~

(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.

(~~II~~IV) The QRU shall ~~use the comparison of~~ compare the costs and benefits of the two plans ~~model runs of the RES planning period along with any additional analysis needed~~ to ~~calculate~~ project the estimated annual net retail rate impact for the ~~first compliance year of 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 that the QRU compliance plan does~~ so as not to exceed the maximum retail rate impact for ~~the first compliance year of~~ the RES planning period. In calculating the ~~annual~~ net retail rate impact ~~in each compliance plan for the first compliance year of the RES planning period~~, 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 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 ~~the effective date of these rules~~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, unless otherwise approved by the Commission. In the sixth year after such annual ongoing net incremental costs were locked down, the costs shall be unlocked and reset for an additional five years of compliance plan filings to reflect changes in methodologies and assumptions in the investor owned QRU's most recently approved resource plan under rule 3613.

(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) ~~Any investor owned QRU with annual retail sales of less than five million megawatt-hours can use an alternate method to determine the estimate of the retail rate impact. The alternative method can be used for those RES planning period years when the only remaining portion of the renewable energy standard with which the QRU needs to comply is the eligible energy that must be acquired from solar electric generating technologies.~~The projections of the retail rate impact calculated under paragraph 3661(h) shall not result in the compounding of the net retail rate impact.

~~(I) The retail rate impact will be determined by using the estimated costs of the proposed solar electric generating technologies less the estimated annual average costs of energy of existing resources that would be replaced with energy generated by the proposed solar electric generating technologies. The QRU shall also incorporate into this retail rate impact analysis other cost savings created by the deployment of the solar electric generating technologies and any other cost savings from the deployment of other non-solar eligible energy resources used to meet the standard. These cost savings include, but are not limited to, the avoided or deferred costs of generation, transmission and distribution facilities.~~

~~(II) The QRU will then convert this net cost figure into a percent of total electric bill annually for each customer. In no event shall the percent of total electric bill annually exceed one percent for each customer. To the extent that the net cost figure results in the QRU exceeding the two percent for each customer threshold, the QRU shall modify its acquisition of solar electric generating technologies in order to not exceed the maximum retail rate impact.~~

(j) 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~~ 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;

(II) The total amount and source of eligible energy and RECs acquired by the QRU during the compliance year for each component of the renewable energy standard. 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;

(~~III~~IV) The total amount of eligible energy and RECs borrowed forward, pursuant to ~~rule~~ paragraph 3654(~~f~~k), in previous compliance years that was made up during the compliance year to achieve compliance with each component of the renewable energy standard;

(~~I~~V) The total amount of eligible energy and RECs borrowed forward, pursuant to ~~rule~~ paragraph 3654(~~f~~k), 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 ~~rule~~ subparagraph 3654(~~d~~i)(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 ~~rule~~ subparagraph 3654(~~d~~i)(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 ~~rule~~ subparagraph 3654(~~d~~i)(III) to future years for each component of the renewable energy standard;

(~~VIII~~IX) The total amount of eligible energy and RECs the QRU has counted toward compliance with each component of the renewable energy standard in the compliance year. The QRU shall separately identify amounts of ~~eligible~~ renewable energy by each type of resource;

(~~I~~X) The total amount of renewable energy or RECs acquired by the QRU during the compliance year pursuant to the standard rebate offer 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 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 due to the retail rate impact cap under rule 3661, The the retail rate impact cap shall be recalculated based on the actual compliance year values if the QRU developed the retail rate impact cap pursuant to rule 3661(h) and (i). 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) 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.

(XIIXV) 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 during the most recently completed compliance year, or explain why the QRU had difficulty meeting the renewable energy standard.

(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 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 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 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 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 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 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; and

(B) State whether the Commission is satisfied that the failure to meet the renewable energy standard 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 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 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 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 during the most recently completed compliance year. The QRU may assert that the renewable energy standard 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 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. 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 standard 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 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.

(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, provided that the generating capacity of the customer's facility meets the following two criteria:

(I) The generator 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 does not exceed the customer's service entrance capacity.

(b) If a customer of an investor owned QRU with an eligible energy resource generates renewable energy pursuant to subsection (a) of rule 3664 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 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. 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. Nothing in this rule shall prohibit an investor owned QRU from requesting changes in rates at any time.

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.

(IV) "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.

(~~VIII~~X) "Point of interconnection" means the point where the Interconnection facilities connect with the utility's system.

(~~I~~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.

(~~XII~~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 ~~(IC)~~ 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 ~~circuit~~ 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 ~~segment~~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.

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

(~~i~~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 48 hours of the commissioning test. 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 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 ~~two MW~~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 $~~2~~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) ~~Except for those solar systems installed on a residential premise which have a design capacity of ten kW or less~~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 ~~circuit~~ 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. ~~I further agree to relinquish my claims to any REC that will be generated with my equipment as part of this agreement.~~

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. – 3699. [Reserved]