

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

DOCKET NO. 05R-112E

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IN THE MATTER OF THE PROPOSED RULES IMPLEMENTING RENEWABLE ENERGY  
STANDARDS 4 CCR 723-3.

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**ORDER GRANTING, IN PART, AND DENYING, IN PART,  
REHEARING, REARGUMENT AND RECONSIDERATION**

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Mailed Date: March 8, 2006

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

1. This matter comes before the Commission for consideration of applications for Rehearing, Reargument and Reconsideration (RRR) filed to Decision No. C06-0091 by the Colorado Renewable Energy Society (CRES); Public Service Company of Colorado (Public Service); and a joint filing by Western Resource Advocates and the Colorado Solar Energy Industries Association (WRA/CoSEIA).

2. Applications for RRR were due by 5:00 p.m. on February 23, 2006. The RRR of WRA/CoSEIA was faxed to the Commission's office and indicated that it was faxed on February 23, 2006 at 6:01 p.m. and it was single-spaced. On February 24, 2006, Commission Counsel contacted legal counsel for WRA to inquire into the apparent late status of the fax filing and the single-spaced formatting. At our prior deliberations in this docket, we reluctantly accepted a single-spaced pleading from WRA/CoSEIA despite the requirement in our rules of Practice and Procedure that all pleadings be double-spaced. We reiterated at those deliberations that future pleadings must comport with our rules of Practice and Procedure. Counsel for WRA contended that they had timely filed the application for RRR and the incorrect time stamp was likely caused by a recent Public Service Company rolling blackout its office had experienced. Counsel for WRA represented that he would nonetheless correct the filing with the proper double-spaced formatting and file a motion for acceptance of a late-filed RRR along with an employee affidavit.

3. On February 27, 2006, WRA/CoSEIA filed a Motion to Accept as Late-Filed the Request for Rehearing, Reargument or Reconsideration of Decision No. C06-0091 (Motion). Attached to the Motion was an affidavit of a WRA employee attesting that she faxed the RRR

pleading to the Commission by the 5:00 p.m. deadline on February 23, 2006. We grant WRA/CoSEIA's motion to accept its filing as a late filed application for RRR.

4. We note that the RRR pleading filed by CRES is also single-spaced. The Commission finds it troubling that both of the RRR pleadings submitted by WRA/CoSEIA and CRES were either prepared by, or in cooperation with, prior Colorado PUC Commissioners. It appears these previous Commissioners have forgotten the requirements of our Rules of Practice and Procedure. Should any commentor file a future application for RRR in single-spaced formatting, the Commission will be inclined to summarily reject it.

5. Deliberations on the applications for RRR were held on March 3, 2006.

#### **1. Rule 3655 – Resource Acquisition**

6. Public Service recommends additional language to Rule 3655(a) which would provide the QRUs the option of conducting competitive solicitations for solar facilities which are 10kW and greater. It claims this change is necessary to avoid any negative inferences from the combination of this rule and the Standard Rebate Offer (SRO) Rule 3658, that would prevent a QRU from acquiring RECs from solar facilities greater than 10kW under the SRO through the use of competitive bidding.

7. WRA/CoSEIA claim there would be no consistency problem, as indicated in Decision No. C06-0091, of providing the rebate to a solar photovoltaic system that would also bid their RECs in a competitive solicitation, provided that the amount of the rebate is known at the outset within Rule 3655(a).

8. We fail to see the necessity of Public Service's suggested change. Rule 3658(c)(VII) requires that, for a customer to receive a SRO, a customer must transfer all SO-RECs to the QRU. Thus we cannot foresee a situation where a QRU could acquire, through the

use of competitive bidding, RECs from solar facilities greater than 10kW under the SRO program. Therefore, we deny Public Service's request for reconsideration on this point. We also deny as moot WRA/CoSEIA's request for the price of the rebate to be known at the outset of any competitive bidding for RECs to be acquired from facilities that receive a SRO.

9. Another suggested change of Public Service is to strike the last sentence of Rule 3655(g). It asserts the definition for S-RECs covers the point being address by the last sentence of this rule. We agree. We find the definition of S-RECs, Rule 3650(r), correctly addresses the relationship of S-RECs and SO-RECs. As a result, we grant reconsideration.

10. CRES disagrees with the Commission's recent change to Rule 3655(m)(I), which would make the consideration of the seven policies goals of Amendment 37 permissive in nature. It contends that this gives the QRU the discretion to not take them into account. CRES asserts that, other than requiring solicitations to achieve the policy goals by undefined means and allowing utilities to consider, or ignore the policy goals, the Commission's rule omits further mention of, attention to, or implementation language regarding the six other policy goals of Amendment 37. CRES suggests that the recently filed public version of Public Service's All-Source RFP Bid Evaluation Report is totally devoid of any attention to the six other policy goals of Amendment 37 even though Public Service claims it will be counting these resources for Amendment 37 purposes.

11. Likewise, WRA/CoSEIA disagree with our recent ruling for Rule 3655(m)(I). They contend this change scales back the QRU's obligation to consider non-price factors in the bid evaluation and due diligence process. WRA/CoSEIA believe it is important for the Rules to incorporate the stated policy objectives into the resource acquisition process. They contend that, if bids are evaluated and ranked solely based on price and certain bids are eliminated on that

basis, it may be too late in the process for the underlying characteristics of the resources to be considered in the due diligence phase.

12. We find the legislative declaration of intent for Amendment 37, which is included in Rule 3651, aspirational in nature. The seven goals are contained only in the legislative declaration of intent. The language reads, "in order to [achieve the seven goals], it is in the best interests of Colorado to develop and utilize renewable energy resources to the maximum practicable extent."<sup>1</sup> We believe all of these goals will be furthered by implementing the objectively quantified percentage mandates listed in § 40-2-124, C.R.S. If the legislature wanted particular weighting of the seven goals, it could have said so. Indeed, it did require that renewable energy sources located in Colorado be assigned a 1.25 weighting factor, which we have incorporated in our rules. *See* Rule 3654(c). Absent similar explicit legislative assignments for the other goals, we decline to assign arbitrary weighting factors to them.

13. As a result, we do not require specific rules that assign weighting factors to each goal contained within the legislative declaration of intent. We note that it would be virtually impossible to promulgate rules to implement each policy goal or to balance the goals interests between each of the policy goals. For instance, given two renewable resource bids: a large project located near a thriving rural area which would create seven new jobs, and a small project located in an economically stagnant rural area which would create only three new jobs—which one would be selected, if all other factors were equal? We conclude that, through the deployment of renewable resources, as mandated by the statute, and pursuant to the Rules we promulgate here, the seven policy goals included in the legislative declaration should be achieved, and

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<sup>1</sup> We have included this language in Rule 3651, the "Overview and Purpose" rule. Commissioner Miller dissented from this inclusion.

no specific weightings should be assigned in the bid selection process. We find no new arguments raised in the RRR applications which convinces us to change Rule 3655(m)(I). Thus we deny reconsideration on Rule 3655(m)(I).

14. WRA/CoSEIA recommend that the Commission reinstate its previous version of Rule 3655(m)(IV), which used the tariffed Qualifying Facility (QF) avoided electricity costs as part of the methodology to put REC bids on equal basis for evaluation purposes when a renewable energy bid has both the electricity and the REC. To address our stated concern in Decision No. C06-0091 that the QF figures are out of date, WRA/CoSEIA suggest that Public Service be ordered to update those figures. As an alternative, they suggest the Compliance Plan rule be modified to require the QRU to disclose its methodology and price of electricity for this type of bid evaluation analysis.

15. We agree with the WRA/CoSEIA suggestion to require a QRU, as part of its Compliance Plan, to disclose the proposed methodology and price(s) it intends to use to evaluate REC bids on an equal basis when a bid contains the associated electricity. Thus, we grant reconsideration and adopt Rule 3655(m)(IV) as follows:

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 Plan, a description of its methodology and price(s) it intends to use for this evaluation.

## **2. Rule 3656 – Environmental Standards**

16. Public Service proposes to add the phrase “wind turbine” to Rules 3656(b) and 3656(c) to ensure that roof-top solar facilities would not have to comply with this rule. It asserts that the purpose of this rule is to address possible negative avian impacts from wind turbines not

roof-top solar facilities on buildings which are over 50 feet in height. We find this an appropriate modification and grant reconsideration.

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

17. WRA/CoSEIA renew their request to include a quality of service program for the QRU's implementation of the solar photovoltaic program. They note the recently approved settlement in Public Service's Amendment 37 tariff filing incorporated reporting to track the solar photovoltaic program's growth.<sup>2</sup> WRA/CoSEIA state that its recent experience with Public Service's Area Engineers indicates that they are taking up to six weeks to process the paperwork and conduct final inspections. They contend this processing time is longer than the amount indicated on the Company's website.

18. We find this request should be granted. In adopting this new rule, we are purposely including broad language for how a QRU will track the quality of service it is providing to customers participating in the SRO program. We envision that these quality of service programs should only include quantifiable metrics and not subjective qualitative evaluations. Rule 3657(a)(I)(G) reads: "Each annual QRU plan shall include rules, regulations and tariffs, if applicable, and the following: The QRU's plan to track how it 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."

19. The remaining rules in this subsection have been renumbered to account for the new rule (G).

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<sup>2</sup> See Decision No. C06-0155 in Docket No. 06S-016E.

#### **4. Rule 3659 – Renewable Energy Credits**

20. WRA/CoSEIA suggest a new Rule 3659(f)(IV) to address the issue of a customer wishing to publicize environmental or renewable claims relating to the RECs being generated by the customer's own on-site solar system. WRA/CoSEIA note that they do not expect the QRU to police its customers, but rather to take the responsibility for informing the customer through the contractual language addressing this issue. Their suggested new Rule 3659(f)(IV) is: "All RECs utilized by the QRU to comply with the Renewable Energy Standard may not be used in conjunction with commercial environmental or renewable claims."

21. We have serious reservations regarding this suggestion. We find that we have no jurisdiction over whether and how customers of a QRU may wish to advertise their use of renewable energy. We note there are constitutional issues surrounding commercial free speech and advertising here which we do not care to venture into. As a result, we deny this request for reconsideration.

#### **5. Rule 3660 – Cost Recovery**

22. WRA/CoSEIA assert that a statement in Decision No. C06-0091 -- that the practical effect of moving costs out of the rider into base rates "frees-up" money that can be spent on more renewable energy projects on a going forward basis -- demonstrates, in their opinion, that the Commission has mistaken the rider for the retail rate impact limit. They believe that regardless of the mechanism used to recover costs (i.e., a rider or base rates) the statute has a one percent limit. WRA/CoSEIA contend that the impact of the Commission's revision is for a QRU to recover all of its costs for these Rules with no reflection of the related cost savings. In their opinion, without the cost savings (fuel, production, transmission and distribution), the ratepayers will be misled. To avoid misleading ratepayers, WRA/CoSEIA suggest that the



original language in Rule 3660(a), which provides that costs can be moved into base rates, should be restored. WRA/CoSEIA also advocate that the Commission require QRUs perform a “true net cost” analysis periodically and to disclose such information on its customers’ bills.

23. We agree with WRA/CoSEIA that, regardless of whether the costs of Amendment 37 are recovered through the rider or base rates, no additional money is “freed-up.” However, we disagree that the language permitting costs to be moved out of a rider into the base rates of a QRU in its next rate case should be reinstated. We find that the costs of Amendment 37 should continue to be recovered only through a rider. As we stated in paragraph 100 of Decision No. C06-0091:

...when a cost which was once recovered in a rider is moved out of the adjustment clause into base rates, it loses its unique cost association. As it relates to these Rules, if costs which are attributable to Amendment 37 are initially recovered in a rider are then subsequently moved into base rates, those costs would no longer be identified as being attributable to Amendment 37 from a customer’s bill perspective.

24. We affirm our prior decision that costs of Amendment 37 should be readily shown on a customer bill so that they will know the cost of the Renewable Energy Standard. Therefore, we deny the request for reconsideration of Rule 3660(a).

25. We find it problematic to require a QRU to perform the “true net cost” analysis WRA/CoSEIA is advocating. First, we expect that identification of what would be considered “net benefits” from renewable resources would be quite contentious. This alone could result in a party contesting either prior to or after the analysis that the analysis excluded a renewable energy related benefit. Even if the benefits could be agreed upon, we would expect the monetization aspects of some benefits could be arbitrary. Furthermore, we expect the calculation of those net benefits would be a data and labor intensive process. For example, presumably a QRU would have to examine for each of the 8,760 hours in a year how many megawatts of renewable energy

it received. Then it would have to determine whether it had excess generation of its own or under contract with fossil fuel resources so that it could determine the replacement cost of the renewable energy. Next, assuming that a QRU did not have any excess power available, the analysis would then require the QRU to find out what the spot market price of electricity had been for that hour. We find the “true net cost” analysis would not be a wise use of the limited funds available under Amendment 37, as it would decrease funds available to procure renewable energy. As a result, we deny reconsideration.

26. WRA/CoSEIA express concerns that the projected price of natural gas used at the time the QRU files its Compliance Plan might be different than the actual price of gas used during the Compliance Year, and as a result this could lead to over- or under-spending by a QRU. They note that when a QRU over-spends it can carry the amount forward under Rule 3660(c). However, in their opinion, when a QRU under-spends the ratepayers may be deprived of the full benefits of the initiative because there is no protection afforded to the customers who seek to have the QRU achieve the Standard. To correct this asymmetry, WRA/CoSEIA recommend in the post Compliance Year calculation of the Retail Rate Impact, the Commission require QRUs to acquire RECs with any unexpended funds which the QRUs may have resulting from the use of actual Compliance Year data.

27. We find this request problematic. We disagree with the premise of WRA/CoSEIA’s request that a QRU must spend money for the sake of spending money if it has excess funds. We are unclear whether this required spending happens regardless of whether the QRU has reached compliance with the Standard or not. If the premise of the WRA/CoSEIA suggestion is that a QRU has not achieved compliance with the Standard and has excess funds, we do not believe that a rule should usurp the QRU management’s discretion. Under this

scenario, QRU management will have to determine how it wishes to proceed. There are two likely options. First a QRU could buy RECs in the market, as suggested by WRA/CoSEIA, or it could defer buying RECs and borrow-forward RECs from a future Compliance Year.<sup>3</sup> We find that the QRU should determine how it wishes to rectify a possible noncompliance situation and the Rules should not automatically force a QRU into a purchasing REC. If a QRU ultimately fails to achieve compliance with the Standard, the Rules provide for the assessment of administrative penalties.<sup>4</sup> We find the Rules do provide symmetry for the over and under-spending situation. In both cases either a QRU may request that interest be accrued on the over-spending in the next Compliance Plan filing or the customers automatically receive interest on the under-spending in the next Compliance Plan.<sup>5</sup> As a result, we deny reconsideration on this issue.

## **6. Rule 3661 – Retail Rate Impact**

28. Public Service requests rehearing on this portion of the Rules because it contends that the modeling required is so complex that the Commission and the parties may not completely understand it. Public Service suggests that a hearing to address how the “math” under this rule would work would be appropriate.

29. While we agree that the underlying math of the modeling has not been addressed during this rulemaking, we find holding additional hearings would have the effect of sacrificing the good for the perfect. We expect that after a complete Compliance Year cycle (Compliance Plan filing, Annual Compliance Report review, and possible Compliance Hearing) has been

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<sup>3</sup> We note that the ability to borrow-forward is only allowed during the first four years of the Standard, *see* Rule 3654(f).

<sup>4</sup> Under Rule 3663(c)(I)(A), the Commission can assess penalties against the QRU for the costs that would have been incurred by the QRU to fully comply with such component standard through the acquisition of RECs.

<sup>5</sup> *See* Rule 3660(b)(I).

completed, other rules, besides just the “math” of this rule, will need to be re-examined based on that experience. We find that the Rules and our written decisions provide a reasonable basis for the parties to determine how to interpret the Rules should an area remain unclear. As noted by Public Service, these models are complex and because of that there will be many assumptions and inputs which must be determined. We find it is better to analyze the Rules in the context of actual numbers instead of continued discussions with possible demonstration numbers. Therefore, we deny reconsideration for this request.

30. CRES contends that by using the modeling inputs, methodologies, and assumptions from the LCP in Rule 3661(d), and ignoring every other policy goal of Amendment 37, the Commission has transformed the broad policies that voters ratified into the policy of sole focus on “least-cost” that represents the Commission’s policy preference. CRES alleges that the Commission has substituted its policy judgments for those of the framers and majority of voters. Consistent with our prior ruling on Rule 3655(m)(I) regarding the seven policy goals, we deny this request for reconsideration. We believe that maximizing the acquisition of renewable energy (subject to the retail cost cap) is furthered by Rule 3661(d), which is consistent with Amendment 37

31. WRA/CoSEIA also object to Rule 3661(d). They request that the Commission provide interested parties with access to bid price information, modeling inputs, methodologies and assumptions under standard confidentiality in order to provide transparency and public legitimacy to the implementation of the Standard. They strenuously object to a general rule affording highly confidential treatment to unsuccessful bid price information. WRA/CoSEIA contend there is absolutely no evidence that allowing interested parties access to this information somehow compromises the integrity of the process.

32. We note in Decision No. C06-0091 we specifically removed the language which would have automatically granted highly confidential treatment for unsuccessful bid price information. In its place we included language which provides that any claimed confidential information will be protected in accord with our rules of Practice and Procedure. Under our confidential rules any party may request confidential treatment and other parties have the opportunity to challenge the request. Therefore we deny WRA/CoSEIA's request for reconsideration.

33. CRES contends that the Commission does not have jurisdiction to amend the statute to require "commercial operation" as a condition of treating eligible renewable energy resources differently for compliance purposes than for purposes of calculating rate impacts under Rule 3661(f)(I). It claims this interpretation acts to reduce the scope of the renewable energy standard policy of sustained, orderly development of renewable resources. CRES asserts that it is logical that if resources are counted for compliance they should be counted for determining net benefits.

34. We disagree with CRES regarding this Commission's jurisdiction. Under the Rulemaking statute of the Colorado Administrative Procedures Act (APA), an agency has broad authority to interpret statutes which require that agency to promulgate rules. After considering written comments, oral testimony and evidence, we have determined to include the term "commercially operational" into the language of the rule. We find that determination to be within the discretion afforded this Commission under the APA.

35. WRA/CoSEIA believes the additional language regarding "commercially operational" can not be supported by the statute. The Commission's decision has the effect of imposing a temporal limitation associated with nonrenewable resources onto the eligible

renewable resources as well. They argue that if an eligible renewable energy resource is generating electricity in 2007 and that electricity is part of the QRU's retail electricity sales in 2007, then the costs and benefits for generating that electricity must be counted towards the retail rate impact determination in that year, regardless of when the renewable energy facility went into commercial operation.

36. Public Service also objects to the "commercially operational" standard, albeit from a different direction. It seeks reconsideration of the Commission's ruling that renewable energy facilities which it is pursuing from its recent Least-Cost Planning (LCP) Request for Proposals (RFPs) should only be included in one of the model runs under Rule 3661(f)(I). Public Service believes these renewable facilities should be included in both model runs. It contends, that if it has already contracted with a bidder, it is not in a position to realistically substitute non-renewable resources for these renewable resource in any future resource plan because of contractual commitments. Public Service asserts that if the artificial savings created by these wind facilities are included in the Retail Rate Impact calculation it will have the practical effect of having customers surrender the savings. It notes that these savings could turn out to be costs (reducing the amount under the Retail Rate Impact limit) if the Company uses some of the modeling assumptions from its most recent LCP regarding the carbon tax and the REC values.<sup>6</sup> Public Service provides suggested language if the Commission is inclined to change it mind.

37. Public Service also provides additional alternative language, if the Commission wishes to uphold its prior ruling. It notes that a QRU may want to acquire renewable resources

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<sup>6</sup> We note the Company used a REC value of \$8.75 based on the comprehensive settlement it reached in its most recent LCP case.

above and beyond what is required for Amendment 37 purposes because it could be in the ratepayer's best interest. Public Service suggests that the rule include language that the analysis is to address only resources necessary to comply with the Standard. It states that it does not oppose the "rolling concept" (resources which are currently operational will change over time), but the Rules should address the idea that the on-going annual costs from prior year Compliance Plans needs to be accounted for in the analysis.

38. We find that no new arguments were presented in these pleadings which would lead us to change our prior ruling regarding the commercially operational standard used for modeling purposes of the Retail Rate Impact. We note that our ruling was a compromise given two divergent opinions. However, we find our ruling best comports with the plain language of § 40-2-124(g)(I), namely, that ratepayers will receive the actual savings which a renewable facility creates when it becomes operational and actually displaces higher priced generation through a fuel adjustment clause on their bills. However, until a renewable facility actually becomes operational those "savings" are captured in the modeling analysis which can provide for more renewable resources to be acquired through the calculation of the Retail Rate Impact. As we noted in paragraph 124 of Decision No. C05-1461, which adopted these rules:

...According to comments provided by both Public Service and Aquila, implementation of Amendment 37 will not result in any new spending on wind resources; rather, virtually all spending on energy procurement pursuant to the RES will be for solar resources for the first few years. This means that, while the benefits of wind procured through Public Service's ongoing RFP will be counted to allow more spending under the retail rate cap (which will be spent on solar resources for the first few years), the cost of procuring such wind energy will not, at least until wind generation is no longer cost-competitive with other resources, reduce the amount of additional spending under the retail rate impact calculation.

39. Therefore, we deny the requests for reconsideration regarding the commercially operational standard.

40. Public Service provides additional language to improve, in its opinion, Rule 3661(f)(I), should the Commission retain the commercially operational standard. Within the first sentence of 3661(f)(I) it adds the concepts of “expected to be available” and “during the ten years of the RES Planning Period.” We find this language to be problematic. We conclude that, if this language were incorporated, the 775 MW of possible new wind resources (that Public Service announced it is pursuing as part of its recent All-Source RFP) would be considered resources which would be included in both model runs—the RES Plan and the No-RES Plan. This is in conflict with our ruling regarding “commercially operational.” As a result, we deny the request for reconsideration.

41. The next series of additional language to Rule 3661(f)(I) addresses Public Service’s contention that it may be in the ratepayers’ interest for it to acquire more resources than the level required under the Standard. To address this concern, Public Service adds the word “necessary” within the sentence regarding the new renewable resources to be acquired. We agree with Public Service’s concern, but retain concerns about possible gaming by a QRU. We determine that a QRU could game this rule with respect to when the Standard changes from the three percent to six percent level, and then again when it changes from six percent to ten percent. For instance, under the Standard a QRU has a three percent compliance level for the period 2007 to 2010, but in 2011 it increases to six percent. We conclude that a QRU should, for modeling purposes, reflect the gradual building of renewable resources over time. Thus we would expect that for the compliance periods of 2007 to 2010 a QRU will gradually increase the level of renewable resources up to the six percent level which is effective starting in 2011. In granting this reconsideration we are deferring the issues of whether Amendment 37 funds are being used to acquire renewable resources above the Standard and whether any of the associated RECs can



be counted for compliance with the Standard until we have an actual case before us. Thus we grant reconsideration with modification, and Rule 3661(f)(I) shall read:

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. 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 of that system over the RES Planning Period. The first scenario, a Renewable Energy Standard Plan or "RES Plan" should reflect the QRU's plans and actions to acquire new Eligible Renewable Energy necessary to meet the Renewable Energy Standard reflecting a gradual ramp-up to the 10% 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 the new Eligible Renewable Energy Resources in the RES Plan with new nonrenewable resources reasonably available. For purposes of this rule, new Eligible Renewable Energy means Eligible Renewable Energy from resources which are not commercially operational at the time these two modeling scenarios are performed.

42. The next suggested change of Public Service is to Rule 3661(f)(II). These changes address improved language, and the concept that the ongoing annual costs associated with all Eligible Renewable Energy a QRU has contracted for under the SRO program, or from renewable facilities which were not commercially operational at the time of the modeling runs for Compliance Year 2007, should be reflected in future model runs. We agree with the recommended language except for the language regarding the 2007 Compliance Year. We find that limiting it to only the 2007 Compliance Year is too restrictive. There may be instances in the future when a renewable facility might become commercially operational within a matter of days or weeks of when this analysis is performed, and its ongoing costs should be reflected in the modeling run. Therefore we grant reconsideration with modification. Rule 3661(f)(II) reads:

The QRU shall use the comparison of the two model runs of the RES Planning Period along with any additional analysis needed to calculate 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 one percent of the total retail bill annually for each customer. To the extent the RES Plan exceeds this maximum retail rate impact, the QRU shall modify the RES Plan to limit the acquisition of Eligible Renewable Energy so that the QRU Compliance Plan does not 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 on-going annual costs of all Eligible Renewable Energy that the QRU has contracted to acquire under the Standard Rebate Offer under Rule 3658 and all Eligible Renewable Energy from resources that were not commercially operational to the QRU at the time of performance of the two modeling scenarios by the QRU under Rule 3661(f)(I).

43. WRA/CoSEIA assert that Rule 3661(g) is still missing a determination of the off-setting benefits and cost savings associated with renewable energy resources other than solar. It notes that the statute requires a netting of new nonrenewable sources of electricity. WRA/CoSEIA suggest a proxy representing the difference between the all-in costs per kWh of eligible non-solar resources and the new nonrenewable source of electricity can be developed by the QRU and used in this rule.

44. We find this request reasonable, but will not adopt the suggested concept of “all-in” cost per kWh. Instead we include broad language requiring the QRU to incorporate any other cost savings from the deployment of other non-solar renewable resources into the alternative analysis. Thus we grant reconsideration with modification and adopt Rule 3661(g)(I), which reads as follows:

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 renewable 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.

## **7. Rule 3662 – Annual Compliance Report**

45. CRES asserts that the QRUs' Annual Compliance Reports must address whether each of the Amendment 37 policy goals are being met. We find this request untimely. In Decision No. C05-1461, which adopted these Rules, the Commission specifically rejected a similar request of Core37<sup>7</sup> by adopting Public Service's proposed language for the Annual Compliance Report<sup>8</sup> section of the Rules. Therefore we deny reconsideration.

46. Public Service believes the last sentence of Rule 3662(a)(I) should be deleted because its accounting system does not track retail sales by type of resource. We find this request reasonable and therefore grant the request.

47. Public Service also suggests the last sentence of Rule 3662(a)(IX) should be deleted because, by definition, the SRO produces SO-RECs and it is the only type of resource that can be acquired under the SRO. We find this request reasonable and grant it as well.

## **8. Rule 3663 – Compliance Report Review**

48. WRA/CoSEIA believe the QRU should have the burden of proof in cases where the QRU claims it could not have complied with the Rules because of either the Retail Rate Impact cap or for events beyond its reasonable control which could have been mitigated as provided in Rules 3663(b)(I)(B) and 3663(b)(II). They note that § 40-2-124(1)(i) C.R.S. states: "...The Commission shall exempt a qualifying retail utility from administrative penalties for an individual compliance year if the utility demonstrates that the retail rate impact cap ... has been reached and the utility has not achieved full compliance with [the renewable energy standards]."

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<sup>7</sup> See paragraph 132 of Decision No. C05-1461.

<sup>8</sup> See paragraph 136 of Decision No. C05-1461.

Thus, in WRA/CoSEIA's opinion, the burden of proof is clearly on the QRU asserting the claim of noncompliance due to the Retail Rate Impact cap.

49. In Decision No. C06-0091, we changed Rule 3663(b)(II) to conform with the Administrative Practice Act (APA) that the proponent of an order shall have the burden of proof. See § 24-4-105(7) C.R.S. We now clarify that § 40-2-124(1)(i) C.R.S. specifically shifts the burden of proof to a QRU should it claim that the Retail Rate Impact cap prevented it from achieving compliance with the Standard. Thus we grant reconsideration and adopt a new Rule 3663(b)(II), which reads:

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.

50. However, we deny WRA/CoSEIA's request for reconsideration that a QRU has the only burden of proof in cases where it claims it could not achieve compliance with the Standard because of events beyond its reasonable control. Rather we find that in such a proceeding, there is a shifting of the burden of proof. That is, when the proponent of an order brings forward a claim that a QRU failed to meet the Renewable Energy Standard, the burden of proof lies with the proponent to prove the QRU failed to meet the Standard. On the other hand, should the QRU raise the affirmative defense that it failed to meet the Standard due to circumstances beyond its control, the burden shifts to the QRU to prove its claim.<sup>9</sup>

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<sup>9</sup> See *Harris v. State Board of Agriculture*, 968 P.2d 148 (Colo. App 1998), where the Court held that the burden of proof was on a state employee to prove she was terminated involuntarily. However, once the employee prevails on that issue, it will then be the agency's burden to prove that the termination was justified by the factual circumstances.

51. We add additional language to Rule 3663(b)(III) by inserting the phrase “that could not have been reasonably mitigated” to make this rule consistent with Rule 3663(c)(I)(C).

52. Public Service adds the phrase “all or part of” to Rule 3663(c)(A) for the possible amount the Commission might impose as an administrative penalty. It believes this phrase provides more flexibility to the Commission. We find this request reasonable and grant reconsideration.

## **II. ORDER**

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

1. The Motion to Accept as Late-Filed the Request for Rehearing, Reargument or Reconsideration of Decision No. C06-0091 filed on February 27, by Western Resources Advocates and the Colorado Solar Energy Industry Association is granted.

2. The applications for Rehearing, Reargument and Reconsideration filed by the Colorado Renewable Energy Society, Public Service Company of Colorado, the Colorado Solar Energy Industries Association, and Western Resource Advocates are granted, in part, and denied, in part, consistent with the above discussion.

3. The Commission adopts the Proposed Rules Implementing Renewable Energy Standards 4 CCR 723-3 attached to this Order as Attachment A.

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

5. A copy of the rules adopted by the Order shall be filed with the Office of the Secretary of State for publication in *The Colorado Register*. The rules shall be submitted to the appropriate committee of the Colorado General Assembly if the General Assembly is in session at the time this Order becomes effective, or to the committee on legal services, if the General

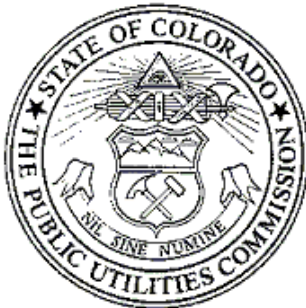
Assembly is not in session, for an opinion as to whether the adopted rules conform with § 24-4-103, C.R.S.

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

7. This Order is effective upon its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' DELIBERATIONS MEETING  
March 3, 2006.**

(S E A L)



ATTEST: A TRUE COPY

*Doug Dean*

Doug Dean,  
Director

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

GREGORY E. SOPKIN

POLLY PAGE

CARL MILLER

Commissioners

COMMISSIONER CARL MILLER  
CONCURRING, IN PART,  
DISSENTING, IN PART.

**III. COMMISSIONER CARL MILLER CONCURRING, IN PART, AND DISSENTING, IN PART**

**A. Overview – Rule 3651**

1. Recognizing the Commission's and Staff's goal to reduce, streamline, and simplify regulations, I see no need to include the legislative declaration as an overview for Rule 3651. The legislative declaration has no force of law and is therefore meaningless in this rulemaking proceeding. Including the legislative declaration may in fact cause confusion and a misinterpretation, thereby providing opportunity for unwarranted challenges and disputes.

2. I believe Senate Bill 05-143 captures the spirit and intent of Amendment 37 as expressed by the Colorado voters. It should be noted that no attempt was made by individuals, parties, or organizations to include the legislative declaration language in statute (*i.e.*, SB-05-143).

3. For the reasons stated, I oppose the inclusion of the legislative declaration as an overview statement to Rule 3651.

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

CARL MILLER

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Commissioner

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### **3650. Special Definitions**

The following definitions apply only to rules 3650 – 3665.

- (a) “Annual Compliance Report” means the report a QRU is required to file annually with the Commission pursuant to Rule 3662 to demonstrate compliance with the Renewable Energy Standard.
- (b) "Biomass" means nontoxic plant matter consisting of agricultural crops or their byproducts, urban wood waste, mill residue, slash, or brush; animal wastes and products of animal wastes; or methane produced at landfills or as a by-product of the treatment of wastewater residuals.

- (c) "Compliance Plan" means the annual plan a QRU is required to file with the Commission pursuant to Rule 3657.
- (d) "Compliance Year" means a calendar year for which the Renewable Energy Standard is applicable.
- (e) "Eligible Renewable Energy" means either Renewable Energy or RECs or both
- (f) "Eligible Renewable Energy Resources" are 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 Renewable Energy Resources. Fossil and nuclear fuels and their derivatives are not eligible energy sources. 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.
- (g) "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.
- (h) "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 is limited to a maximum size of 2 MW.
- (i) "Person" means Commission staff or any individual, firm, partnership, corporation, company, association, cooperative association, joint stock association, joint venture, governmental entity, or other legal entity.
- (j) "Qualifying Retail Utility" or "QRU" means any provider of retail electric service in the state of Colorado that serves over 40,000 customers.
- (k) "Renewable Energy" means energy generated from Eligible Renewable Energy Resources.
- (l) "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 an Eligible Renewable Energy Resource. One REC results from one megawatt-hour of electric energy generated from an Eligible Renewable Energy Resource. For the purposes of these rules, RECs include, but are not limited to, S-RECs and SO-RECs.
- (m) "Renewable Energy Credit Contract" means a contract for the sale of Renewable Energy Credits without the associated energy.
- (n) "Renewable Energy Standard" means the electric resource standard for Eligible Renewable Energy Resources specified in §40-2-124, C.R.S.

- (o) "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.
- (p) "Solar Electric Generation Technologies" means any technology that uses solar radiation energy to generate electricity.
- (q) "Solar On-site Renewable Energy Credit" or "SO-REC" means a REC created by an On-site Solar System.
- (r) "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.
- (s) "Solar Renewable Energy System" means a system that uses a Solar Electric Generation Technology to generate electricity.
- (t) "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 that do not exceed 100 kW per installation.
- (u) "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.

### **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 the power to regulate public utilities delegated to the Commission by §24-4-101 C.R.S., *et seq.*, §40-2-108 C.R.S., §40-3-102 C.R.S., §40-3-103 C.R.S., §40-4-101 C.R.S., and §40-2-124 C.R.S.

Section 40-2-124 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.

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. Applicability**

- (a) Rules 3650 to 3665 shall apply to all jurisdictional electric utilities in the state of Colorado which serve over 40,000 customers, that have not voted to exempt themselves, and are subject to the Commission's regulatory authority.
- (b) The board of directors of each QRU subject to these rules may, at its option, submit the question of its exemption from 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 exemption, providing that a minimum of 25% of eligible consumers participate in the election.
  - (I) Within 45 days of the conclusion of any vote for exemption, the QRU shall provide written notification of the outcome of the vote to the Director of the Commission.
- (c) The board of directors of each municipally owned electric utility or rural electric cooperative 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% 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 or rural electric cooperative shall provide written notification of the outcome of the vote to the Director of the Commission.
- (d) For municipal utilities and cooperative electric associations that become qualifying retail utilities after December 31, 2006, the percentage requirements identified in Rule 3654(a) shall begin in the first calendar year following qualification as follows:
  - (I) Years one through four: Three percent of retail electricity sales;
  - (II) Years five through eight: Six percent of retail electricity sales; and
  - (III) Year nine and thereafter: Ten percent of retail electricity sales.
- (e) Nothing in these rules is intended to expand the Commission's regulatory oversight and powers over municipally owned electric utilities or rural electric cooperatives.

**3653. Municipal and Cooperative Utilities**

- (a) If a municipally owned electric utility or a rural electric cooperative implements a renewable energy standard substantially similar to the provisions of §40-2-124 C.R.S., then the municipally-owned electric utility or rural electric cooperative will have no obligations under this article.
- (b) The municipally owned utility or rural electric cooperative 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 renewable energy resources must be limited to those identified in subsection §40-2-124(1)(a);

- (II) The percentage requirements must be equal to or greater in the same years than those identified in subsection §40-2-124(1)(c)(I) and counted in the manner allowed by Rule 3654(c); 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.
- (c) The statement to be submitted by a municipally owned utility or rural electric cooperative is for information purposes only and is not subject to approval by the Commission.
- (d) Nothing in this section prohibits a municipally owned electric utility or a rural electric cooperative from buying and selling RECs.

**3654. Renewable Energy Standard**

- (a) Each QRU shall generate or cause to be generated (through purchase or by providing rebates or other form of incentive) Eligible Renewable Energy in the following minimum amounts:
  - (I) 3% of its retail electric energy sales in Colorado for each of the Compliance Years 2007 through 2010;
  - (II) 6% of its retail electric energy sales in Colorado for each of the Compliance Years 2011 through 2014;
  - (III) 10% of its retail electric energy sales in Colorado for each Compliance Year beginning in 2015 and continuing thereafter.
- (b) Of the Eligible Renewable Energy amounts specified in Rule 3654(a), at least four percent shall be derived 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.
- (c) For purposes of compliance with the Renewable Energy Standard, each kilowatt-hour of Eligible Renewable Energy generated in Colorado shall be counted as 1.25 kilowatt-hours of Eligible Renewable Energy.
- (d) For purposes of compliance with this Renewable Energy Standard, a QRU may generate, or cause to be generated, and count Eligible Renewable Energy for compliance:
  - (I) For the Compliance Year immediately preceding the Compliance Year during which it was generated, provided that such Eligible Renewable Energy is generated no later than July 1 of the calendar year immediately following the end of the Compliance Year for which it is being counted;
  - (II) For the Compliance Year during which it was generated; or
  - (III) For the five Compliance Years immediately following the Compliance Year during which it was generated.
  - (IV) Eligible Renewable Energy generated on or after January 1, 2004 may be counted for compliance with this Renewable Energy Standard. Renewable 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 Renewable Energy shall expire at the end of the fifth calendar year following the calendar year during which it was generated.

- (e) For purposes of compliance with this Renewable Energy Standard, a QRU may substitute the equivalent RECs, S-RECs, or SO-RECs for Eligible Renewable Energy.
- (f) For the first four Compliance Years, 2007 through 2010, the QRU may borrow forward Eligible Renewable Energy generated during the following two Compliance Years. Any borrowed Eligible Renewable Energy generated during a Compliance Year must be made up by actual Eligible Renewable Energy generated during that Compliance Year or borrowed from subsequent Compliance Years, provided that the 2010 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 Renewable Energy 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 Renewable Resources 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.
- (g) For the first four Compliance Years, 2007 through 2010, no administrative penalties shall be assessed against a 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.
- (h) For purposes of compliance with this Renewable Energy Standard, there shall be no "double counting" of Renewable Energy or RECs. Notwithstanding the foregoing, Eligible Renewable Energy 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.
- (i) A QRU may apply to the Commission for a determination as to whether Eligible Renewable 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 Renewable 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.
- (j) 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.
- (k) 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 QRU shall use competitive bidding for acquiring Renewable Energy from Eligible Renewable Energy Resources using Solar Electric Generation Technologies with nameplate rating greater than 100 kW.

- (b) Competitive solicitations shall be conducted by each QRU to achieve the statutory policies contained in the legislative declaration of intent. 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) The QRU may apply to the Commission, at any time, for review and approval of Renewable Energy Supply Contracts and Renewable Energy Credit Contracts. The Commission will review and rule on these contracts within sixty 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 QRU's Compliance Plan, that contract shall be deemed approved by the Commission under this rule.
- (d) Renewable Energy Supply Contracts entered into after the effective date of these rules:
  - (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) Renewable Energy Credit Contracts entered into after the effective date of these rules:
  - (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.
- (f) Competitive solicitations for Eligible Renewable Energy from On-Site Solar Systems that provide SO-RECs shall be conducted at least two times per year by each QRU in 2006 and 2007 and thereafter as necessary to comply with the Renewable Energy Standard.

- (l) 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 QRU as needed to comply with the Renewable Energy Standard. ~~S-REC requirements not likely to be met may be solicited from SO-REC providers.~~
- (h) Competitive solicitations for Renewable Energy or RECs from Eligible Renewable Energy Resources other than On-Site Solar Systems shall be conducted by each 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 Renewable Energy required for compliance with each component of the Renewable Energy Standard, and taking into account:
  - (l) The Retail Rate Impact, and
  - (ll) The estimated number of SO-RECs procured under and expected to be procured under the standing Standard Rebate Offer.
- (j) Each QRU shall provide all parties to the bid process timely notice of bidding procedure.
- (k) Each 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) If the QRU intends to accept proposals for renewable 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.
- (m) Responses to competitive solicitations shall be evaluated and ranked by the QRU.



- (I) In addition to the cost of the Renewable Energy and RECs, the QRU may take into consideration the characteristics of the underlying Eligible Renewable 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 Plan, a description of its methodology and price(s) it intends to use for this evaluation.
- (n) Within 15 days, the QRU shall notify respondents as to whether their bid has met the bid submission criteria.
  - (o) Upon ranking of eligible bids, each 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 QRU, either party may refer the dispute to the Commission for resolution.

### **3656. Environmental Impacts**

- (a) Renewable electric generation facilities must meet all applicable federal, state, and local environmental permitting requirements.
- (b) For Eligible Renewable Energy Resources larger than 2 MW with 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 Renewable Energy Resources larger than 2 MW with 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, that the developer has performed and made publicly available site specific avian and other wildlife surveys conducted on the facility's site prior to construction. The developer shall further certify that 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.

**3657. QRU Compliance Plan**

- (a) Every year on or before July 1, beginning in 2007, each 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 QRU shall file with the Commission, by application, its proposed plan for the 2007 Compliance Year within 60 days after the effective date of these rules. 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 Renewable Energy that the QRU already has acquired and the QRU's estimate of the additional Eligible Renewable Energy 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 Renewable Energy under the Retail Rate Impact rule;
  - (E) Plan to acquire additional Eligible Renewable Energy given the constraints of the Retail Rate Impact rule, including the allocation of the funds available under the Retail Rate Impact rule to acquire Renewable 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 Renewable Energy;
  - (F) Standard Rebate Offer and the QRU's estimate of the Eligible Renewable Energy that will be acquired under the Standard Rebate Offer;
  - (G) Plan to track how it 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.
  - (HG) Plan to acquire the additional Eligible Renewable Energy, including the QRU's use of competitive acquisitions to obtain the additional solar Eligible Renewable Energy it needs to meet the Renewable Energy Standard;
  - (IH) The proposed Request for Proposal including any standard contracts to be included with the acquisition for all Eligible Renewable Energy that the QRU plans to acquire by competitive acquisition; and
  - (J) Proposed ownership investment, if any, in Eligible Renewable 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 renewable 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) The net metering for renewable energy resources, pursuant to Rule 3664; and
- (VII) The interconnection of renewable energy resources, pursuant to Rule 3665; and
- (b) The Commission shall either approve the QRU's Compliance Plan or order modifications to the Compliance Plan. QRU actions consistent with an approved compliance plan will be presumed prudent.
- (c) The QRU may apply to the Commission at any time for approval of amendments to an approved Compliance Plan.

**3658. Standard Rebate Offer**

- (a) Each QRU shall make available to its retail electricity customers a Standard Rebate Offer 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. At the QRU's option, the Standard Rebate Offer may be paid based upon the direct current (DC) watts produced by the On-site Solar Systems. Any SO-RECs acquired by the 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 QRU for purposes of compliance with the Renewable Energy Standard.
- (b) On or before June 1, 2006, each QRU shall make a one-time offer to purchase, under a Renewable Energy Credit Contract, the SO-RECs associated with On-site Solar Systems, up to a maximum of 10 kW per system existing prior to December 1, 2004, and Off-grid On-site Solar Systems, up to a maximum of 10 kW per system. The purchase price offered by the QRU for such SO-RECs shall be no less than the QRU's then current standard offer payment rate for SO-RECs, exclusive of the standard rebate payment, associated with the QRU's Standard Rebate Offer and established pursuant to Rule 3658. Subsequent offers shall be made at the discretion of the QRU. SO-RECs purchased by a QRU pursuant to this rule may be counted for purposes of compliance with the Renewable Energy Standard.
- (c) The Standard Rebate Offer of the QRU shall be set forth at least annually and shall meet the following requirements:
  - (I) The 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 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 3658(a), and SO-REC payment, pursuant to Rule 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.
- (VI) Customers may contract to expand their On-site Solar Systems and obtain a rebate for the expanded capacity.
- (VII) In order to receive the SRO rebate payment, the customer must enter into an agreement with the 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 QRU.
- (VIII) For On-site Solar Systems, up to and including 10 kW, that become operational on or after December 1, 2004, the 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 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 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 10 kW that become operational on or after December 1, 2004, the 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 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 10 kW, the REC payment may be adjusted, either up or down, based on the calculation of expected kWh of electric output derived from Rule 3658(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 10%.
- (XI) The level of SO-REC payments for systems of 10 kW and smaller offered in connection with a QRU's SRO program may be adjusted from time to time as needed to achieve compliance with the Renewable Energy Standard.
- (XII) The On-site Solar System installed must remain in place on the customer's premises for the duration of its useful life. The customer's 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 the system ineligible for participation and payments under the SRO program.

### **3659. Renewable Energy Credits**

- (a) Renewable Energy Credits will be used to comply with the renewable energy standard. Eligible RECs acquired by contracts or through a system of tradable renewable energy credits, exchanges, or brokers may also be used by QRUs to comply with this standard. In calculating compliance, the total RECs acquired from Eligible Renewable Energy Resources during a compliance year may include:
- (I) RECs generated by 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 standing 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 3654(d);
- (VII) RECs borrowed forward from future compliance years, pursuant to Rule 3654(f).
- (b) RECs representing electricity generated at Eligible Renewable Energy Resources located in the state of Colorado shall be counted as 1.25 RECs for the purpose of compliance with Rule 3654.
- (c) 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.
- (d) A Renewable Energy Credit shall expire at the end of the fifth calendar year following the calendar year during which it was generated.
- (e) Renewable Energy Credits that are generated on or after January 1, 2004 may be counted for compliance with this Renewable Energy Standard.
- (f) RECs shall be used for a single purpose only, and shall expire or be retired upon use for that purpose. All RECs utilized by the QRU to comply with the Renewable Energy Standard:
  - (I) May not be sold or otherwise exchanged with any other party, or in any other state or jurisdiction;
  - (II) May not be included within a blended energy product certified to include a fixed percentage of renewable energy in any other state or jurisdiction;
  - (III) May be counted simultaneously toward compliance with a federal renewable portfolio standard and with the Renewable Energy Standard.
- (g) RECs that are generated with fuel cell energy using hydrogen derived from an Eligible Renewable Energy Resource are eligible for compliance purposes only to the extent that the energy used to generate the hydrogen did not create Renewable Energy Credits.
- (h) If a renewable energy system uses an Eligible 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.
- (i) If an On-Site Solar Systems of 10 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.
- (j) A 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.
- (k) The QRU shall record REC information from Eligible Renewable Energy Resources in a central database. The database shall include, but not be limited to, a list of all Eligible Renewable 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 worldwide web. Owners of Eligible Renewable Energy Resources with nameplate ratings of 100kW or below and larger Eligible Renewable 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.
- (l) 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.

**3660. Cost Recovery**

- (a) The 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 Renewable Energy Resources. 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, a QRU may propose, by application, to implement a forward-looking cost recovery mechanism to provide funding for implementing the Renewable Energy Standard. In its application, the QRU must demonstrate that the funding mechanism proposed will not exceed the retail rate impact test. 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 balance of funds collected from a forward-looking rider. The interest rate shall be at the Commission's customer deposit interest rate 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 QRU incurs costs in acquiring Eligible Renewable 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 QRU shall be entitled to earn an extra profit on the QRU's ownership investment in a specific Eligible Renewable Energy Resource if that Eligible Renewable 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% 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 Renewable 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 Renewable 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 Rule 1100 through 1102 of the Commission's Rules of Practice and Procedures.
  - (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) 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 QRU under the contract shall be deemed to be prudent expenditures.
- (f) If the 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 Renewable Energy Resource.
- (g) If a wholesale customer agrees to pay the full costs associated with the acquisition of renewable resources and associated RECs by its wholesale provider, the wholesale customer shall be entitled to receive the appropriate credit toward the Renewable Energy Standard as well as any associated RECs. To the extent that the full costs are not recovered from wholesale customers, a QRU shall be entitled to recover those costs from retail customers.

### **3661. Retail Rate Impact**

- (a) The net rate impact of actions taken by a 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.



- (b) The net 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 Renewable Energy Resources.
- (c) 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.
- (d) For purposes of calculating the retail rate impact, the QRU shall use the same methodologies and assumptions it used in its most recently approved Least-Cost Planning case, 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.
- (e) In its Compliance Plan filed under Rule 3657, the QRU shall estimate the retail rate impact of its plan to comply with the Renewable Energy Standard 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 QRU's Compliance Plan, the Commission will be approving the QRU's budget for acquiring Eligible Renewable Energy over the Compliance Year. Once approved by the Commission, the QRU shall implement its Compliance Plan. Actions taken by a QRU in compliance with the filed and approved Compliance Plan shall be deemed prudent.
- (f) The basic method for performing the estimate of the retail rate impact limit 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. 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 of that system over the RES Planning Period. The first scenario, a Renewable Energy Standard Plan or "RES Plan" should reflect the QRU's plans and actions to acquire new Eligible Renewable Energy necessary to meet the Renewable Energy Standard reflecting a gradual ramp-up to the 10% 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 the new Eligible Renewable Energy Resources in the RES Plan with new nonrenewable resources reasonably available. For purposes of this rule, new Eligible Renewable Energy Resources means Eligible Renewable Energy from resources which are not currently commercially operational at the time these two modeling scenarios are performed.
  - (II) The QRU shall use the comparison of the two model runs for the first year of the RES Planning Period along with any additional analysis needed to calculate 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 one percent of the total retail bill annually for each customer. To the extent the RES Plan exceeds this maximum retail rate impact, the QRU shall modify the RES Plan to limit the acquisition of Eligible Renewable Energy so that the QRU Compliance Plan does not exceed the maximum retail rate impact for the current-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 on-going annual costs of all Eligible Renewable Energy that the QRU has contracted to acquire under the Standard Rebate Offer under Rule 3658 and all Eligible Renewable Energy from resources that were not commercially operational to the QRU at the time of performance of the two modeling scenarios by the QRU under Rule 3661(f)(I).

- g) Any 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 Renewable Energy that must be acquired from Solar Electric Generating Technologies.
- (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 renewable 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 one 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.

### **3662. Annual Compliance Report**

- (a) Beginning in 2007, the QRU shall file an Annual Compliance Report on June 1 to report on the status of the QRU's compliance with the Renewable Energy Standard for the most recently completed Compliance Year. The Annual Compliance Report 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 Renewable Energy required for compliance with each component of the Renewable Energy Standard. The QRU shall separately identify amounts of megawatt-hours sold by each type of resource;
- (II) The total amount and source of Eligible Renewable Energy acquired by the QRU during the Compliance Year for each component of the Renewable Energy Standard. The QRU shall separately identify amounts of Eligible Renewable Energy by each type of resource;
- (III) The total amount of Eligible Renewable Energy borrowed forward, pursuant to Rule 3654(f), in previous Compliance Years that was made up during the Compliance Year to achieve compliance with each component of the Renewable Energy Standard;
- (IV) The total amount of Eligible Renewable Energy borrowed forward, pursuant to Rule 3654(f), from future Compliance Years to achieve compliance with each component of the Renewable Energy Standard in the Compliance Year;

- (V) The total amount and source of Eligible Renewable Energy the QRU is carrying back from the year following the Compliance Year under Rule 3654(d)(I) to achieve compliance with each component of the Renewable Energy Standard in the Compliance Year;
  - (VI) The total amount of Eligible Renewable Energy the QRU has carried forward from prior calendar years under Rule 3654(d)(III) to apply in the Compliance Year for each component of the Renewable Energy Standard.
  - (VI) The total amount of Eligible Renewable Energy the QRU has acquired in the Compliance Year that the QRU proposes to carry forward under Rule 3654(d)(III) to future years for each component of the Renewable Energy Standard;
  - (VIII) The total amount of Eligible Renewable Energy 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;
  - (IX) The total amount of Renewable Energy or RECs acquired by the QRU during the Compliance Year pursuant to the Standard Rebate Offer Program. ~~The QRU shall separately identify REC amounts by each type of resource;~~
  - (X) Whether the QRU has invested in any Eligible Renewable Energy Resource and whether that resource is under construction or in operation; and
  - (XI) The funds expended and the retail rate impact of the Eligible Renewable Energy acquired.
- (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 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

- (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

- (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 the Retail Rate Impact limit or~~ to events beyond the reasonable control of the QRU that could not have been reasonably mitigated.

(c) Compliance Penalties

(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 QRUs shall allow the customer's retail electricity consumption to be offset by the electricity generated from Eligible Renewable 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 rated capacity of the generator does not exceed 2000 kW; and
  - (II) The rated capacity of the generator does not exceed the customer's service entrance capacity.
- (b) If a customer with an Eligible Renewable 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 QRU shall compensate the customer for any accrued excess kilowatt-hour credits, at the QRU's average hourly incremental cost of electricity supply over the most recent calendar year.
- (c) The 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 Renewable Energy Resource shall be equipped with metering equipment that can measure the flow of electric energy in both directions. The 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 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 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 10 kW, a second meter shall be required to measure the Solar Renewable Energy System output for the counting of RECs.
  - (II) For systems 10 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.
- (g) A QRU shall provide net metering service at non-discriminatory rates to customers with Eligible Renewable 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 renewable energy resource. Nothing in this rule shall prohibit a QRU from requesting changes in rates at any time.

### 3665. Interconnection

**NOTE: The following rule is numbered using the FERC's numbering convention and not the Colorado Commission's numbering convention. This rule largely tracks FERC Order 2006.**

#### **Small Generator Interconnection Procedures (SGIP)**

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.

(a) General Overview

(i) Applicability

- (1) A request to interconnect a certified Small Generating Facility no larger than 2 MW shall be evaluated under the Level 2 Process. A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kW shall be evaluated under the Level 1 Process. A request to interconnect a Small Generating Facility larger than 2 MW but no larger than 10 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.
- (2) Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 of the body of these procedures.
- (3) 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.
- (4) 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.
- (5) 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 Interconnection Customer 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 Interconnection Customer 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:**
  - (1) Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;
  - (2) An option to purchase or acquire a leasehold site for such purpose; or
  - (3) An exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease, or grant the Interconnection Customer 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.



(b) Level 2 - Fast Track Process

(i) Applicability

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with the utility's System if the Small Generating Facility is no larger than 2 MW and if the Interconnection Customer'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.

(1) Screens

- A. 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.
- B. 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 shall not exceed 15 % of the line section's annual peak load as most recently measured at the substation or calculated for the line segment. 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.
- C. The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 % 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.
- D. 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 % of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.
- E. 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 Interconnecting Customer, 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

- F. 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.
- G. 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 % of the nameplate rating of the service transformer.
- H. No construction of facilities by the utility on its own system shall be required to accommodate the Small Generating Facility.
- I. 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 5 % 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 10% 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 utilizes 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.

- (2) If the proposed interconnection passes the screens, the Interconnection Request shall be approved and the utility will provide the Interconnection Customer an executable interconnection agreement within five Business Days after the determination.
- (3) 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 Interconnection Customer an executable interconnection agreement within five Business Days after the determination.
- (4) 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 Interconnection Customer is willing to consider minor modifications or further study, the utility shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.
- (5) **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 Interconnection Customer 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 Interconnection Customer 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:
  - A. 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
  - B. 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
  - C. 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 (iii) (1) (B). The Interconnection Customer shall be responsible for the utility's actual costs for conducting the supplemental review. The Interconnection Customer 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.

- (1) 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.
  - A. If so, the utility shall forward an executable interconnection agreement to the Interconnection Customer within five Business Days.
  - B. If so, and Interconnection Customer 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 Interconnection Customer within five Business Days after confirmation that the Interconnection Customer has agreed to make the necessary changes at the Interconnection Customer's cost.
  - C. 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 Interconnection Customer within ten Business Days that requires the Interconnection Customer to pay the costs of such system modifications prior to interconnection.
  - D. If not, the Interconnection Request will continue to be evaluated under the Level 3 Study Process.

(c) Level 3 - Study Process

- (j) 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 2 MW but no larger than 10 MW, (2) is not certified, or (3) is certified but did not pass the Fast Track Process or the 10 kW Inverter Process.
- (ii) Scoping Meeting
  - (1) 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.
  - (2) 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 Interconnection Customer, 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.

- (3) The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer 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 Interconnection Customer, 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.
- (4) 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

- (1) The feasibility study shall identify any potential adverse system impacts that would result from the interconnection of the Small Generating Facility.
- (2) 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.
- (3) The scope of and cost responsibilities for the feasibility study are described in the attached feasibility study agreement.
- (4) 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.
- (5) 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

- (1) 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.
- (2) 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 Interconnection Customer 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.

- (3) 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 Interconnection Customer 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.
  - (4) 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 Interconnection Customer a distribution system impact study agreement.
  - (5) If the feasibility study shows no potential for transmission system or Distribution System adverse system impacts, the utility shall send the Interconnection Customer 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.
  - (6) In order to remain under consideration for interconnection, the Interconnection Customer must return executed system impact study agreements, if applicable, within 30 Business Days.
  - (7) A deposit of the good faith estimated costs for each system impact study may be required from the Interconnection Customer.
  - (8) The scope of and cost responsibilities for a system impact study are described in the attached system impact study agreement.
  - (9) 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 Interconnection Customer 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
- (1) Once the required system impact study(s) is completed, a system impact study report shall be prepared and transmitted to the Interconnection Customer 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 Interconnection Customer within the same timeframe.
  - (2) In order to remain under consideration for interconnection, or, as appropriate, in the utility's interconnection queue, the Interconnection Customer must return the executed facilities study agreement or a request for an extension of time within 30 Business Days.

- (3) 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).
- (4) 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 Interconnection Customer and the utility may agree to allow the Interconnection Customer 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 Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain an independent design and cost estimate for any necessary facilities.
- (5) A deposit of the good faith estimated costs for the facilities study may be required from the Interconnection Customer.
- (6) The scope of and cost responsibilities for the facilities study are described in the attached facilities study agreement.
- (7) Upon completion of the facilities study, and with the agreement of the Interconnection Customer to pay for Interconnection Facilities and Upgrades identified in the facilities study, the utility shall provide the Interconnection Customer an executable interconnection agreement within five Business Days.

(d) 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 Interconnection Customer agree to a different schedule. If the utility cannot meet a deadline provided herein, it shall notify the Interconnection Customer, 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
  - (1) The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
  - (2) 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.  
4.2.3 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.
  - (3) 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.

- (4) 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.
  - (5) 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 Interconnection Customer's expense in accordance with Commission requirements or the utility's specifications.
- (iv) **Commissioning tests**  
Commissioning tests of the Interconnection Customer'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 Interconnection Customer for its expense in witnessing level 2 and Level 3 commissioning tests.
- (v) **Confidentiality**
  - (1) 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 Interconnection Customer shall be deemed confidential information regardless of whether it is clearly marked or otherwise designated as such.
  - (2) 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.
    - A. 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.
    - B. 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.
  - (3) 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 Interconnection Customer 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 Interconnection Customer 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 Interconnection Customer as required by these procedures. The Interconnection Customer 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**
  - (1) 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.
  - (2) 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.

- (3) The Interconnection Request shall be evaluated using the maximum rated capacity of the Small Generating Facility.

(xi) Insurance

- (1) For systems of 10 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 10 kW and up to 2 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 2 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.
- (2) Except for those solar systems installed on a residential premise which have a design capacity of 10 kW or less, 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 thirty (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.
- (3) 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 from 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.

(e) Level 1 10 kW Inverter Process

The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 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:
- (1) 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 shall not exceed 15 % of the line section annual peak load as most recently measured at the substation or calculated for the line section. 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.
  - (2) 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.
  - (3) 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% of the nameplate rating of the service transformer.
  - (4) No construction of facilities by the utility on its own system shall be required to accommodate the Small Generating Facility.
  - (5) Provided all the criteria in Section 5.4 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.
  - (6) 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.
  - (7) 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.
  - (8) 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.

#### **Attachment 1 - Definitions**

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Distribution System** – 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.

**Distribution Upgrades** – 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.

**Interconnection Customer** – Any entity, including the utility, any affiliates or subsidiaries of either, that proposes to interconnect its Small Generating Facility with the utility's System.

**Interconnection Facilities** – 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.

**Interconnection Request** – The Interconnection Customer's request, in accordance with the Tariff, to interconnect a new Small Generating Facility, [We will have a Tariff] 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.

**Party or Parties** – The utility, Interconnection Customer, or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the utility's System.

**Small Generating Facility** – 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.

**Study Process** – The procedure for evaluating an Interconnection Request that includes the Level 3 scoping meeting, feasibility study, system impact study, and facilities study.

**System** – The facilities owned, controlled, or operated by the utility that are used to provide electric service under the Tariff.

**Upgrades** – The required additions and modifications to the utility's System at or beyond the Point of Interconnection. Upgrades do not include Interconnection Facilities.

## **Attachment 2 - Level 1 10 kW Inverter Process**

### **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 % ownership by any electric utility):

Small Generating Facility Information

Location (if different from above):

Electric Service Company:

Account Number:

Small Generator 10 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 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Attachments 3 and 4 of the Small Generator Interconnection Procedures (SGIP), 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 10kW and return of the Certificate of Completion.

Company Signature: \_\_\_\_\_

Title: Date:

Application ID number: \_\_\_\_\_

Company waives inspection/witness test? Yes \_\_\_\_ No \_\_\_\_

### **Attachment 3**

#### **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

## **Attachment 4**

### **Certification of Small Generator Equipment Packages**

- 1.0 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 SGIP Attachment 3, (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.
- 2.0 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.
- 3.0 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.
- 4.0 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.
- 5.0 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.
- 6.0 An equipment package does not include equipment provided by the utility.

## **Attachment 5**

### **Terms and Conditions for Level 1 Interconnections -- Small Generating Facility No Larger than 10kW**

#### **1.0 Construction of the Facility**

The Interconnection Customer (the "Customer") may proceed to construct the Small Generating Facility when the utility approves the Interconnection Request (the "Application") and returns it to the Customer.

#### **2.0 Interconnection and Operation**

The Customer may operate Small Generating Facility and interconnect with the utility's electric system once all of the following have occurred:



- 2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and
- 2.2 The Customer returns the Certificate of Completion to the utility, and
- 2.3 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.
- 2.4 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.

### **3.0 Safe Operations and Maintenance**

The 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.

### **4.0 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.

### **5.0 Disconnection**

The utility may temporarily disconnect the Small Generating Facility upon the following conditions:

- 5.1 For scheduled outages per notice requirements in the utility's tariff or Commission rules.
- 5.2 For unscheduled outages or emergency conditions pursuant to the utility's tariff or Commission rules.
- 5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.
- 5.4 The utility shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

### **6.0 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.

## **7.0 Insurance**

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 10 kW or less. The policy shall include that written notice be given to the utility at least thirty (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. 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.

## **8.0 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 paragraph 6.0.

## **9.0 Termination**

The agreement to operate in parallel may be terminated under the following conditions:

### **9.1 By the Customer**

By providing written notice to the utility.

### **9.2 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.

### **9.3 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.

### **9.4 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.

## **10.0 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]**