Decision No. C05-0314

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

DOCKET NO. 05R-112E

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

NOTICE OF PROPOSED RULEMAKING

Mailed Date: March 29, 2005
Adopted Date: March 23, 2005

I. BY THE COMMISSION

A. Statement

1. The Colorado Public Utilities Commission (Commission) gives notice of proposed rulemaking regarding new Rules pertaining to the implementation and regulation of renewable energy standards as required pursuant to § 40-2-124, C.R.S. The intent of the proposed rules identified as 4 *Code of Colorado Regulations* (CCR) 723-3-3650, *et seq*. is to establish a process to implement the renewable energy standard for qualifying retail utilities in Colorado, pursuant to the jurisdiction provided to the Commission pursuant to § 40-2-124, C.R.S.

2. In the 2004 Colorado general election, voters approved Amendment 37 concerning renewable energy standards for large providers of retail electric service. Amendment 37 required that eligible renewable energy resources be statutorily defined to include solar, wind, geothermal, biomass, small hydroelectricity, and hydrogen fuel cells. Amendment 37 further required that a percentage of retail electricity sales be derived from renewable resources, beginning with three percent in the year 2007 and increasing to ten percent by 2015. It also required utilities to offer customers a rebate of $2.00 per watt and other incentives for solar

electric generation, as well as providing incentives for utilities to invest in renewable energy resources that provide net economic benefits to customers.

3. In addition, Amendment 37 limits the retail rate impact of renewable energy resources to $0.50 per month for residential customers. The Amendment prohibits utilities from using condemnation or eminent domain to acquire land for generating facilities used to meet its standards. For those utilities with requirements contracts, Amendment 37 requires they address shortfalls from the standards. Amendment 37 also requires specification of election procedures by which the customers of a utility may opt out of its requirements. Finally, Amendment 37 requires that the Commission promulgate rules to establish major aspects of the measure.

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

5. The Commission *en banc* will conduct a hearing on the proposed rules and related issues at the below stated time and place. Interested persons may submit written comments on the rules and present these orally at hearing, unless the Commission deems oral presentations unnecessary. The Commission also encourages interested persons to submit written comments before the hearing scheduled in this matter. In the event interested persons wish to file comments before the hearing, the Commission requests that such comments be filed no later than May 18, 2005. Reply comments should be submitted by June 15, 2005. The Commission requests that interested persons submitting comments do so both in paper and electronic format. The Commission may post electronically submitted comments to its web site. The Commission will consider all submissions.

6. Pursuant to the provisions of Amendment 37, the Colorado Legislature enacted § 40-2-124, C.R.S., effective December 1, 2004, as provided in section 3 of Amendment 37.

Section 40-2-124(1) requires that on or before April 1, 2005, the Commission shall initiate one or more rulemaking process to establish renewable energy standards. Specifically, the Commission must establish: (a) definitions of eligible renewable energy resources that can be used to meet the standards; (b) standards for the design, placement and management of electric generation technologies that use eligible renewable energy resources to ensure that the environmental impacts of such facilities are minimized; (c) electric resource standards for renewable energy resources; (d) a system of tradable renewable energy credits that may be used by a qualifying retail utility to comply with this standard; (e) a standard rebate offer program; (f) policies for the recovery of costs incurred with respect to these standards for qualifying retail utilities subject to Commission rate regulation; (g) a maximum retail rate impact for this section of 50 cents per month for the average residential customer of a qualifying retail utility. *See*, § 40-2-124(1)(a)-(g), C.R.S. All rules called for in these subsections (a) through (g) are required to be established by the Commission by March 31, 2006.

7. Commission Staff conducted two informal workshops regarding the renewable energy standard rules pursuant to § 24-4-103(2), C.R.S. on March 4 and 10, 2005. The intent of the informal workshops was to provide an open forum for discussion about the proposed rules, in order to make subsequent rulemakings progress more expediently and efficiently. The informal workshops were highly productive and resulted in numerous suggestions and comments regarding the interpretation of statutory requirements, intent of Amendment 37 and possible points of contention. The attached proposed rules are the result of the written and oral comments received at the informal workshops.

8. The proposed rules include a general definition section to define terms specific to renewable energy standards.

9. Rule 3653 details applicability of the renewable energy standard to municipally owned electric utilities and rural electric cooperatives, and allows those utilities to self certify the renewable energy standard, which will relieve them from any obligations pursuant to this article.

10. Rule 3654 sets out the renewable energy standard requiring each qualifying retail utility to generate or cause to be generated electricity from renewable energy resources in minimum amounts for specified periods of time. This section also addresses the standards for compliance as provided in § 40-2-124(a)-(f). However, rather than set out a specific rule for 40-2-124(g), the Commission proposes two options for rule (g).

11. The Commission also proposes options for the competitive bidding process addressed in Rule 3655, including an "Administrator" approach and an "LCP" approach.

12. The requirement that renewable electric generation facilities must meet all applicable federal, state and local environmental permitting requirements is addressed in Rule 3656.

13. The Commission provides two options for Rule 3657, the "Qualifying Retail Utility" Plan or the "Program Administrator" Plan. Both options are set out in detail in the attached proposed rules.

14. Rule 3658 addresses Solar Electric Generating Technologies. The Commission has provided two options regarding possible approaches for interconnection. Option #1 provides that interconnection is to be addressed as part of the utility plan pursuant to Rule 3657. Option #2 details three levels of interconnection for on-site solar systems, and the review process by qualifying retail utilities for applications for each level of customer generator facilities.

15. The Commission has also provided two possible approaches for net metering. Option #1 provides that net metering is to be addressed as part of the utility plan

under Rule 3657. Option #2 provides specific net metering requirements and standards which all qualifying retail utilities shall follow.

16. Two possible approaches are also provided by the Commission under Rule 3658 for a standard rebate offer. Option #1 provides that a standard rebate offer is be addressed as part of the utility plan pursuant to Rule 3657. Option #2 specifies the requirements each qualifying retail utility must have in place for a standard rebate offer for on-site solar systems greater than 500 watts.

17. Rule 3659 addresses renewable energy credits (RECs). The Commission offers two approaches to RECs. Option #1 is an optional REC plan, while Option #2 is a mandatory REC plan. The Commission also provides two options regarding REC accounting. Option #1 contemplates utilizing the WREGIS plan, while Option #2 makes use of the WREGIS plan optional. Regarding this issue, the Commission requests specific comments from the parties on the statutory requirement that the Commission analyze the effectiveness of utilizing any regional system of renewable energy credits at the time of this rulemaking process. We encourage interested parties to provide comments on a wide array of regional systems in order to provide us a thorough evaluation as possible to determine the regional system to be utilized here.

18. Cost recovery mechanisms are addressed in Rule 3660. Again, the Commission offers two options for cost recovery mechanisms.

19. Rule 3661 provides that the retail rate impact of actions taken by a qualifying retail utility to comply with the renewable energy standard shall not exceed $0.50 per month for the average residential consumer of the qualifying retail utility. The rule also specifies the make up of the net rate impact and the process for making such determinations.

20. The proposed rules also include approaches for filing of annual compliance reports to be submitted to the Commission and the information to be included in those reports. The Commission provides two options: whether this requirement should be addressed as part of the utility plan pursuant to Rule 3657, or whether the Commission should adopt the requirements for submission and review of annual reports as set forth in the attached proposed rules.

21. Finally, Rule 3663 details Commission actions regarding approvals of renewable energy contracts, compliance reporting and compliance report hearings.

22. Notwithstanding this NOPR, we note that the parties now have an opportunity to offer comment and suggest changes to the proposed rules regarding renewable energy standards. The Commission will consider any suggestions as to how the rules may be made more reasonable, efficient or meaningful.

II. ORDER

A. The Commission Orders That:

1. This Notice Of Proposed Rulemaking shall be filed with the Colorado Secretary of State for publication in the May 10, 2005 edition of *The Colorado Register*.

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

DATE	July 11 – 14, 2005
TIME:	9:00 a.m.
PLACE:	Commission Hearing Room A Office Level 2 (OL2) Logan Tower 1580 Logan Street Denver, Colorado

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

3. Interested persons may file written comments in this matter before hearing. The Commission requests that such pre-filed comments be submitted in both paper and electronic format no later than May 18, 2005. Reply comments should be submitted by June 15, 2005. All submissions, whether oral or written, will be considered by the Commission.

4. This Order is effective upon its Mailed Date.

B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING March 23, 2005.

(S E A L)

ATTEST: A TRUE COPY

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

GREGORY E. SOPKIN

POLLY PAGE

CARL MILLER

Commissioners

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COLORADO DEPARTMENT OF REGULATORY AGENCIES

Public Utilities Commission

4 CODE OF COLORADO REGULATIONS (CCR) 723-3

RULES REGULATING IMPLEMENTING RENEWABLE ENERGY STANDARD

RENEWABLE ENERGY STANDARD

3650 Special Definitions

The following definitions apply only to rules 3650 – 3665.

(a) "Administrator" means a QRU or a third-party administrator responsible for the activities associated with the implementation of these rules including but not limited to program administration, management and reporting.

(b) "Area Network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit, which is generally used in large metropolitan areas that are densely populated, in order to provide high reliability of service. This term has the same meaning as the term "secondary grid network" as defined in IEEE Standard 1547, Section 4.1.4.

(c) "Biomass" means nontoxic plant matter that is the byproduct of agricultural crops, urban wood waste, mill residues, 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.

(d) "Carrying Costs" means the on-going directly attributable costs associated with an investment in facilities. These include depreciation, taxes, and a return on the investment.

(e) "Compliance Year" means a calendar year that begins on January 1 and ends on December 31.

(f) "Eligible Renewable Energy Credits" means RECs, SO-RECs, and S-RECs.

(g) "Eligible Renewable Energy Resources" are solar, wind, geothermal, biomass, hydroelectricity with a nameplate rating of 10 megawatts or less, and fuel cell using hydrogen derived from these eligible resources. Fossil and nuclear fuels and their derivatives are not eligible resources.

(h) "Eligible Renewable Energy System" means an electricity generating system using Eligible Renewable Energy Resources.

(i) "Equipment Package" means a group of components connecting an electric generator with an electric distribution system, and includes all interface equipment including switchgear, inverters, or other interface devices. An equipment package may include an integrated generator or electric source.

(j) "On-site Solar System" means a Solar Renewable Energy System located on the customer's premises wherein the customer qualifies for net metering and has annual net excess generation. In the case of a Solar Renewable Energy System not interconnected with the grid, the Administrator shall determine that the system qualifies as an "On-site Solar System" if there is a reasonable

possibility that a grid connection would be provided, if requested, to a utility distribution grid in Colorado. Such systems are limited to no more than 10 kW.

(k) "Net Metering" means the ability of a single electric meter to spin bi-directionally in order to net consumption against generation on a kilowatt-hour basis.

(l) "PV" means a photovoltaic system.

(m) "Qualifying Retail Utility" or "QRU" means any provider of retail electric service in the state of Colorado that serves over 40,000 customers.

(n) "Qualifying Retail Utility Affiliated Renewable Energy System" means a Renewable Energy System owned, operated or controlled by a QRU or its domestic parent, subsidiary, or affiliate entity.

(o) "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 renewable energy generation. One REC is generated by one megawatt-hour of renewable energy generation.

(p) "Renewable Energy Credit Contract" means a contract for the sale of Renewable Energy Credits produced from energy delivered to a QRU.

(q) "Renewable Energy Standard" means an electric resource standard for Eligible Renewable Energy Resources that requires a QRU to generate or cause to be generated a specified minimum amount of electricity from Eligible Renewable Energy Resources.

(r) "Renewable Energy Supply Contract" means a Renewable Energy Contract for electricity and RECs delivered to a QRU.

(s) "Solar Electric Generation Technologies" means any technology which uses solar radiation energy to generate electricity.

(t) "Solar On-site Renewable Energy Credit" or "SO-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 renewable energy generation derived from an On-site Solar System that is interconnected to the distribution grid serving Colorado or for generators not interconnected to the grid, where the Administrator determines based on reasonable evidence that the generator would have been interconnected to the distribution grid serving Colorado. One SO-REC is generated by one megawatt-hour of on-site solar renewable energy generation.

(u) "Solar Renewable Energy Credit" or "S-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 renewable energy generation derived from a Solar Renewable Energy System that delivers energy to the transmission grid serving Colorado. One S-REC is generated by one megawatt-hour of eligible solar renewable energy generation.

(v) "Solar Renewable Energy System" means a Renewable Energy System that uses solar radiation exclusively to generate electricity.

(w) "Spot Network" means a type of electric distribution system that uses two or more inter-tied transformers to supply an electrical network circuit. A spot network is generally used to supply power to a single customer or a small group of customers.

(x) "Standard Rebate Offer" or "SRO" means a standardized incentive program offered by a QRU to its retail customers for On-site Solar Systems.

(y) "Utility Discount Rate" shall be equal to the QRU's last Commission authorized rate of return on rate base.

(z) "Watt" means a unit of measure of electric power at a point in time, as capacity or demand.

3651 Overview

The purpose of these rules is 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. Electricity generated from renewable sources has less harmful environmental impacts than electricity generated from conventional fuels. The environmental benefits of using renewable energy include cleaner air and water, more efficient use of water, and less damage to the landscape. Using a variety of resources to meet Colorado's increasing electricity needs will improve the stability and security of Colorado's electricity supply. Increasing Colorado's use of renewable energy will reduce its dependence on conventional fuels. It is the Commission's policy that utilities should meet the renewable energy standard in the most cost-effective manner and should use competitive bidding when it is administratively feasible.

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 participates 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.

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 governing body of the municipally owned electric utility or rural electric cooperative may self-certify the renewable energy standard and upon self-certification will have no obligations under this article.

(b) The municipally owned utility or rural electric cooperative shall submit a statement to the Commission that demonstrates such a utility or cooperative has a substantially similar renewable energy standard. In order for a such a utility or cooperative to self-certify, such renewable energy standard shall at a minimum meet 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

(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 electricity from eligible renewable energy resources in the following minimum amounts:

(i) 3% of its retail electricity sales in Colorado for the years 2007 through 2010;

(ii) 6% of its retail electricity sales in Colorado for the years 2011 through 2014;

(iii) 10% of its retail electricity sales in Colorado for the years 2015 and thereafter.

(b) Of the amounts specified in rule 3654(a), at least 4% shall be derived from solar electric generation technologies. At least one-half of this 4% shall be derived from solar electric technologies located on-site at customers' facilities.

(c) For purposes of compliance with this standard, each kilowatt-hour of renewable electricity generated in Colorado shall be counted as 1.25 kilowatt-hours.

(d) For purposes of compliance with this standard, a QRU shall use its actual retail electric kilowatt-hour sales during the compliance year normalized for weather.

(e) For purposes of compliance with this standard, a QRU may purchase eligible RECs retroactively for its current compliance year within 90 days of close of the compliance year.

(f) For purposes of compliance with this standard, a QRU may carry-forward eligible RECs which were not needed in the current compliance year for three years after the compliance year in which the RECs are generated.

The Commission seeks comment on two possible approaches for rule (g).

OPTION #1

(g) For purposes of compliance with this standard, a QRU will use a four-year rolling average of the kilowatt-hours from eligible renewable energy resources with respect to the minimum amounts specified in rule 3654(a).

OPTION #2

(g) For purposes of compliance with this standard, a QRU will use the calculated value of kilowatt-hours from eligible renewable energy resources for each compliance year, with respect to the minimum amounts specified in rule 3654(a).

(h) For purposes of compliance with this standard, any REC associated with an optional renewable energy pricing program offered by a QRU shall not be counted unless the QRU has previously received Commission approval to count the REC toward the renewable energy standard.

3655 Competitive Bidding

The Commission seeks comment on two possible approaches.

OPTION #1 (The Administrator approach)

(a) Competitive solicitations shall be conducted by the Administrator. To the extent possible, solicitations and evaluation of proposals should be coordinated to avoid redundancy and to minimize the cost of acquiring renewable energy and RECs. There shall be separate solicitations for:

(i) On-site solar systems (SO-RECs);

(ii) Solar energy generating systems that are not on-site solar systems (S-RECs); and

(iii) All eligible renewable energy systems (RECs) for those systems using eligible renewable resources other than solar.

(b) In cooperation with the Administrator and other stakeholders, each QRU shall develop standardized solar and non-solar electricity and REC contracts, and REC-only contracts, in advance of their first solicitation. Such contracts shall be submitted to the Commission for approval.

(c) Renewable Energy Supply Contracts:

(i) Shall be for the acquisition of both electricity and RECs;

(ii) May reflect a fixed price, or a price that varies by year; and

(iii) Shall have a minimum term of 20 years (or shorter at the sole discretion of the seller).

(d) Renewable Energy Credit Contracts:

(i) Shall be for the acquisition of RECs only;

(ii) May reflect a fixed price, or a price that varies by year; and

(iii) Shall have a minimum term of 20 years.

(e) Competitive solicitations for renewable energy credit contracts that provide SO-RECs from on-site solar systems shall be conducted at least two times per year by the Administrator beginning no later than December 31, 2005.

(i) The treatment of any solar-generated electricity generated on-site in excess of the consumption of the host facility will be governed by the net metering provisions of these rules.

(ii) Each QRU shall have a standing offer to purchase SO-RECs from eligible systems equal to or smaller than 10 kW including non-metered systems. The standing offer shall be structured as a single payment to the system owner for the estimated SO-RECs to be generated for 20 years.

(1) The standing SO-REC Offer shall be initially set at a baseline amount of $2.00 per watt of installed capacity through calendar year 2008. Subsequent to 2008, the Administrator shall determine the baseline standing SO-REC offer payment as the net present value of the projected revenue stream over 20 years produced by SO-REC sales, reduced to a dollar per watt amount. The projected revenue stream shall be calculated as the projected baseline generation times the average SO-REC price projected over the 20-year period. All baseline amounts are determined using the PVWatts Version 1 (or equivalent) solar calculator using a fixed-tilt 1,000 watt system, set at a tilt angle equal to the latitude of the nearest weather station, on an azimuth of 180 degrees.

(2) The baseline standing SO-REC offer shall be applicable to systems that have a tilt angle greater than or equal to 10 degrees and less than or equal to 50 degrees and an azimuth greater than or equal to 135 degrees and less than or equal to 225 degrees. For systems outside of these parameters, and for systems with one or two axis tracking, the standing SO-REC offer will be adjusted upwards or downwards using the ratio produced by the results of the same solar calculator (as in (1) above) as applied to the attributes of the on-site solar system seeking standing SO-REC offer payment, but assuming a capacity of 1,000 watts, as the numerator, to the baseline amount as the denominator.

(3) The standing SO-REC offer shall be available at all times unless the Administrator determines that no additional SO-RECs are needed to meet the SO-REC goals for the subsequent 12 months.

(iii) If a project of 10 kW or less which has received a standing SO-REC offer payment from the QRU is removed or becomes inoperable, the QRU may still count the SO-RECs towards its on-site solar obligation as if the project were still in place.

(f) Competitive solicitations for the acquisition of S-RECs shall be conducted by the Administrator every three years with the initial solicitation on or before December 31, 2005. S-REC requirements not likely to be met may be solicited from SO-REC providers.

(g) Competitive solicitations for eligible renewable energy systems for those systems using eligible renewable resources other than solar shall be conducted by the Administrator in a timeframe that takes into account the projected needs of the QRU. REC requirements not likely to be met may be solicited from S-REC and SO-REC providers.

(h) Each competitive solicitation pursuant to these rules shall be for a fixed number of SO-RECs, S-RECs and RECs with the number determined by the QRU in consultation with the Administrator, and taking into account:

(i) The need to purchase the three classes of RECs for use to meet the QRU's future compliance requirements, and

(ii) The estimated number of SO-RECs procured under and expected to be procured under the standing SO-REC offer.

(i) Responses to competitive SO-REC, S-REC and REC solicitations shall be separately evaluated and ranked by the Administrator.

(i) In addition to the cost of the RECs, consideration shall be given to the characteristics of the underlying renewable resource including reliability, viability, economic development benefits, energy security benefits, amount of water used, fuel cost savings, environmental impacts, load reduction during higher cost hours, transmission capacity and scheduling and any other factor the Commission determines is relevant to the solicitation. The Commission shall also determine prior to the solicitation the appropriate weighting of the factors for consideration.

(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 that exceeds X times the weighted average cost of RECs in all bids for any individual solicitation, unless authorized by the Commission.

(iv) For purposes of comparing bids for RECs only with bids for electricity and RECs, the electricity shall be assigned the value contained in the applicable QRUs avoided capacity and energy tariff on file with the Commission. The Administrator will subtract this value from the electricity and RECs bid, and evaluate bids on the basis of RECs only, taking into account the value of any associated rebates.

(v) Within 15 days, the Administrator shall notify respondents as to whether the competitive solicitation requirements have been met;

(vi) Within 45 days, the Administrator will provide to each QRU the eligible solicitation responses ranked in preferential order on the basis of the weighting factors;

(j) Upon receiving the ranking of eligible bids from the Administrator, each QRU shall:

(i) Within 15 days indicate to all respondents with which proposals it intends to pursue a contract, and

(ii) Within 45 days have substantially completed contract negotiations.

(k) The Administrator shall arbitrate any disputes that may arise between the QRU and the successful bidders.

OPTION #2: (The LCP approach)

(a) The QRU shall meet the requirements the renewable energy standard through a competitive acquisition process. The QRU shall have the flexibility to propose multiple acquisitions at various times. However, if any QRU that is subject to the Least Cost Planning rules intends to acquire non-solar renewable energy supply contracts greater than 30 MW, it shall acquire those resources at the same time that it seeks resources under the LCP rules. The acquisition of RECs (without the associated electricity) and the acquisition of solar renewable energy supply contracts may occur at any time.

(b) Each QRU shall establish a written bidding policy to ensure that bids are solicited and evaluated in a fair and reasonable manner. The QRU shall specify such competitive acquisition procedures that it intends to use to obtain renewable resources to meet the renewable energy standard.

(c) 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 sixty 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.

(d) In selecting the winning renewable bidders, the QRU's objective shall be to minimize the net present value of rate impacts consistent with reliability considerations, with financial and development risks and with meeting the renewable energy standard.

3656 Environmental Impacts

(a) Renewable electric generation facilities must meet all applicable federal, state, and local environmental permitting requirements.

The Commission seeks comment on the following additional language:

(b) For renewable electric generation facilities larger than 2 MW with any structures extending over 50 feet in height, the QRU shall make publicly available from project developers any site specific avian and other wildlife surveys conducted on each proposed site prior to construction. Pre-construction surveys should include field surveys during the breeding, migrating, and wintering seasons and should conform to generally accepted practices. The results of these surveys shall be used 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 Plan or Administrator

The Commission seeks comment on two possible approaches.

OPTION #1 (The QRU plan approach)

(a) Each QRU shall file an application that provides the specific details as to how the QRU will comply with these rules within 60-days of the effective date of these rules. The QRU plan shall include rules, regulations and tariffs, if applicable, the following:

(i) The interconnection of eligible renewable energy resources;

(ii) Net metering;

(iii) The determination of the retail rate impact;

(iv) The annual reporting purposes;

(v) The treatment, tracking, and trading of RECs;

(vi) The competitive acquisition process for renewable energy resources;

(vii) The determination of minimizing environmental impacts from renewable energy resource;

(viii) Twenty–year contracts for both the electricity generated from eligible renewable energy systems and RECs;

(ix) The establishment of the initial level and adjustments to the Standard Rebate Offer for solar electric generation resources;

(x) The establishment of cost recovery mechanism.

OPTION #2 (The Administrator approach)

(a) The Commission shall establish a mechanism for competitively selecting an Administrator. Any QRU may participate as a respondent to the Commission's competitive solicitation process.

(b) Prior to advertising for candidates, the Commission shall delineate the separation of roles and responsibilities of the QRUs and the Administrator. This delineation shall be the primary basis for soliciting for candidates.

(c) The Commission shall conduct all aspects of the selection process. It may draw upon any form of outside expertise (such as the QRUs, renewable energy developers, consumer interests, and other stakeholders) it wishes to carry out this function. The Administrator shall be selected by the Commission by giving equal weight to the attributes of competence, cost, independence and freedom from conflict of interests.

(d) Until such time as the Administrator is able to assume his/her duties, the Administrator's functions shall be carried out by the Commission and its staff.

(e) Under no circumstances will the Administrator, nor his/her firm nor any associated firm, submit a response to any competitive solicitation it administers under these rules.

(f) The Administrator shall be responsible for establishing rules and standards that:

(i) Assist QRUs in achieving complete and timely compliance of their renewable energy obligations;

(ii) Maximize the use of renewable energy for the State of Colorado in a cost-effective manner;

(iii) Balance the granting of on-site solar contracts by ratepayer class consistent with cost-effective implementation; and

(iv) Promote system performance and vendor accountability.

(g) The Administrator shall provide ranked winning bids to each applicable QRU taking into account geographic location, benefits to each QRU's system, and each QRU's obligations under rule 3654.

(h) The Administrator shall not be a signatory to any contracts. Renewable Energy Supply Contracts and Renewable Energy Credit Contracts shall only be between the supplier and the QRU.

(i) Lowest cost bids will prevail, except for good cause, and the Administrator's decision on the ranking of successful bids is final. The QRU may not refuse to contract with a bidder approved by the Administrator. Appeals of Administrator decisions may be made to the Commission.

(j) The Administrator will oversee the QRUs for assuring proper measurement and verification of RECs eligible for compliance with rule 3654 and for establishing a methodology for the creation of RECs from co-fired systems.

(k) The Administrator shall record REC information from eligible renewable energy systems in a central database for all QRU's subject to these regulations. The database shall include, but not be limited to, a list of all registered eligible renewable energy systems, including their type, location, owner, operator, start of operation, projected and actual REC generation, ownership, transfer and retirement. The database shall be publicly viewable via the worldwide web. Owners of registered eligible renewable energy systems may, at their option, 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) The Administrator is encouraged and empowered to form an Advisory Committee of stakeholders with a demonstrated interest in the successful implementation of these rules.

(m) The Administrator shall submit quarterly reports to the Commission. The Administrator shall note in his/her submission any objections and concerns of the QRUs, the bidders, and the Advisory Committee.

(n) The Administrator shall maintain a toll free number and website to answer retail customer questions; provide information regarding the SRO program; and for comments and suggestions for SRO program improvement.

3658 Solar Electric Generating Technologies

(a) RECs created by solar generating technology facilities

(i) Any REC associated with solar electric generating technologies will either be a SO-REC or a S-REC depending upon the ownership of the facility.

(ii) The Administrator or QRU shall separately track the SO-RECs and S-RECs for compliance reporting purposes.

(iii) The owner of the solar electric generating technology facility will have the option for REC determination purposes of either having its generation separately measured or estimated based on the designed specifications of the facilities.

The Commission seeks comment on two possible approaches for interconnection.

OPTION #1

To be addressed as part of the utility plan under rule 3657, or

OPTION #2

(b) Interconnection

(i) These interconnection rules are intended for on-site solar systems. A customer-generator that intends to sell energy wholesale, or to sell energy into a FERC-regulated market, shall comply with FERC's interconnection requirements.

(ii) Each QRU shall provide the following three review procedures for applications for interconnection of customer-generator facilities:

(1) Level 1: a QRU shall use this review procedure for applications to connect inverter-based customer-generator solar facilities, which have a power rating of 10 kW or less;

(2) Level 2: a QRU shall use this review procedure for applications to connect customer-generator facilities with a power rating of 2 MW or less; and

(3) Level 3: a QRU shall use this review procedure for applications to connect customer-generator facilities, which do not qualify for either Level 1 or Level 2 interconnection review procedures.

(iii) Each QRU shall designate an employee or office from which an applicant can obtain basic application forms and information through an informal process. Upon request, this employee or office shall provide all relevant forms, documents, and technical requirements for submittal of a complete application for interconnection review under these rules, as well as specific information necessary to contact the QRU representatives assigned to review the application.

(iv) In order to maximize the number of on-site solar systems, each QRU shall make a determination whether it is cost-effective to upgrade existing distribution facilities at or near applicant's requested site in the event that applications for on-site solar systems would exceed the safety limits in that area.

(v) Upon request, the QRU shall meet with an applicant who qualifies for Level 2 or Level 3 interconnection review to assist them in preparing the application.

(vi) An application for interconnection review shall be submitted on a standard form, available from the QRU. The application form shall have the following types of information:

(1) Basic information regarding the applicant;

(2) Information regarding the type and specifications of the customer-generator facility;

(3) Information regarding the contractor who will install the customer-generator facility; and

(4) Certifications and agreements regarding utility access to the customer-generator's property, emergency procedures, liability, compliance with electrical codes, proper operation and maintenance; and

(5) Any other information that is necessary to determine compliance with these rules.

(vii) If an applicant for interconnection disagrees with a QRU's determination of fact or need regarding matters covered in these rules, the applicant may file an informal complaint with the Commission.

(viii) In order to qualify for the Level 1 and the Level 2 interconnection review a customer-generator facility must be certified as complying with the following standards, as applicable:

(1) IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems as of _____

(2) UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems, as of _____

(3) An equipment package shall be considered certified for interconnected operation if it has been submitted by a manufacturer to a nationally recognized testing and certification laboratory, and has been tested and listed by the laboratory for continuous interactive operation with an electric distribution system.

(4) If the equipment package has been tested and listed in accordance with these rules as an integrated package, which includes a generator or other electric source, the equipment package shall be deemed certified, and the QRU shall not require further design review, testing or additional equipment for certification.

(5) If the equipment package includes only the interface components (switchgear, inverters, or other interface devices), an interconnection applicant must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and consistent with the testing and listing specified for the package. If the generator or electric source being utilized with the equipment package is consistent with the testing and listing performed by the nationally recognized testing and certification laboratory, the equipment package shall be deemed certified, and the QRU shall not require further design review, testing or additional equipment for certification.

(6) A certified equipment package does not include equipment provided by the QRU.

(ix) QRU shall not require a customer-generator whose facility meets the criteria for interconnection approval under the Level 1 or Level 2 interconnection review procedure to install additional controls or external disconnect switches not included in the equipment package, to perform or pay for additional tests, or to purchase additional liability insurance (provided the customer-generator's general liability insurance meets the requirements in the standard form interconnection agreement), except if agreed to by the applicant. A QRU shall not require customer-generator to purchase additional liability or other insurance provided the customer-generator's general home or business owner's general liability insurance provides at least $300,000 of coverage for Level 1 interconnections and $500,000 plus $1,000 per kW of rated capacity (not to exceed $2.0 million) for Level 2 with no exclusion for on-site generation. In no event will the QRU require the customer-generator, or its agent, to waive subrogation rights, require the customer-generator to list QRU as a named insured, nor require annual notification from the insurance company of customer-generator's continued policy. For Level 1 interconnection a copy of the customer's current proof of homeowner's insurance will suffice to demonstrate insurance. Proof of insurance may be waived by the QRU.

(x) Each QRU shall include in any tariff or published procedures for Level 3 interconnection a review of each element of an impact study, including a description of the review the QRU will undertake for each element. An impact study shall include the following elements, as applicable:

(1) Load flow study;

(2) Short-circuit study;

(3) Circuit protection and coordination study;

(4) Impact on the operation of the electric distribution system;

(5) Stability study (and the conditions that would justify including this element in the impact study);

(6) Voltage collapse study (and the conditions that would justify including this element in the impact study); and

(xi) A QRU shall not charge any fee or other charge for connecting to the QRU's equipment or for operation of a customer-generator facility for the purposes of net metering, except for the fees provided for under these rules.

(xii) If a net metering interconnection has been approved, the QRU shall not require a customer-generator to test or perform maintenance on its facility except for any manufacturer-recommended testing or maintenance.

(xiii) A QRU shall have the right to inspect a customer-generator's facility after interconnection approval is granted, at reasonable hours and with reasonable prior notice to the customer-generator. If the QRU discovers that the customer-generator's facility is not in compliance with the requirements of these rules, and the non-compliance adversely affects the safety or reliability of the electric distribution system, the QRU may require the customer-generator to disconnect the customer-generator facility until compliance is achieved.

(xiv) All interconnection contracts and the associated electricity generated by renewable energy resources shall be for 20-years.

(c) Level 1 interconnection review

(i) Each QRU shall adopt a Level 1 interconnection review procedure. The QRU shall use the Level 1 review procedure for an application to interconnect a customer-generator facility that meets all of the following criteria:

(1) The facility is inverter-based;

(2) The facility has a capacity of 10 kW or less;

(3) The facility has been certified consistent with these rules; and

(4) The facility will not be interconnected to a transmission line or directly to an area network.

(ii) An applicant shall submit an application for Level 1 interconnection review on a standard form, available from the QRU. An applicant may choose to simultaneously submit a QRU standard form interconnection agreement executed by the applicant.

(iii) A QRU shall not charge an application or other fee to an applicant that requests Level 1 interconnection review. However, if an application for Level 1 interconnection review is denied because it does not meet the requirements for Level 1 interconnection review, and the applicant resubmits the application under another interconnection review procedure, the QRU may impose a fee for the resubmitted application.

(iv) For a Level 1 customer-generator facility, the QRU shall approve interconnection if all applicable requirements are met. A QRU shall not impose additional requirements not specifically authorized under these rules.

(v) Within three business days after receiving an application for Level 1 interconnection review, the QRU shall provide written or e-mail notice to the applicant that it received the application and whether the application is complete. If the application is incomplete, the written notice shall include a list of all of the information needed to complete the application.

(vi) Within ten business days after the QRU notifies the applicant that the application is complete, the QRU shall notify the applicant:

(1) Whether the customer-generator facility met all of the criteria that apply to the facility, and the interconnection will be approved pending QRU processing of the interconnection application; or

(2) Whether the customer-generator facility failed to meet the criteria that apply to the facility and the interconnection application is denied.

(vii) If a customer-generator facility meets all of the applicable criteria, the QRU shall, within three business days after sending the notice of approval:

(1) Notify the applicant within 15 days if a QRU inspection of the customer-generator facility for compliance with these rules is required prior to commencing operation of the facility; and

(2) Execute and send to the applicant a Level 1 interconnection agreement unless:

i. The QRU does not require an interconnection agreement for customer-generator facilities that qualify for Level 1 interconnection review; or

ii. The applicant has already submitted such an agreement with its application for interconnection.

(viii) An applicant that receives an interconnection agreement shall execute the agreement and return it to the QRU at least five business days prior to

commencing operation of the customer-generator facility. The applicant shall indicate the anticipated start date for operation of the customer-generator facility.

(ix) Upon receipt of the executed interconnection agreement from the customer-generator, and satisfactory completion of an inspection if required, the QRU shall approve the interconnection, conditioned on approval by the electrical code officials with jurisdiction over the interconnection.

(x) If a QRU does not notify an applicant in writing or by e-mail whether the interconnection is approved or denied within 20 business days after the notification of receipt of an application under Level 1 interconnection procedures, the interconnection shall be deemed approved.

(d) Level 2 interconnection review

(i) Each QRU shall adopt a Level 2 interconnection review procedure. The QRU shall use the Level 2 interconnection review procedure for an application to interconnect a customer-generator facility that meets both of the following criteria:

(1) The facility has a capacity of 2 megawatts or less ; and

(2) The facility has been certified consistent with these rules.

(ii) An applicant shall submit an application for Level 2 interconnection review on a standard form, available from the QRU.

(iii) For a Level 2 interconnection review, the QRU may charge fees of up to $50 plus $1 per kilowatt of the proposed capacity (as measured in alternating current) of the customer-generator proposed facility, plus the cost of any minor modifications to the electric distribution system or additional review. Costs for such minor modifications or additional review shall be based on QRU estimates.

(iv) For a Level 2 customer-generator facility, the QRU shall approve interconnection if all of the applicable requirements are met. A QRU shall not impose additional requirements not specifically authorized under these rules.

(v) If a customer-generator facility is to be connected to a radial distribution circuit, the aggregate generation capacity connected to the electric distribution system, including the customer-generator facility, shall not exceed 15% of the total circuit annual peak load or peak load on a line section. For the purposes of these rules, annual peak load shall be based on measurements taken over the most recent twelve months and measured at the substation nearest to the customer-generator facility. Where peak load of a line section is not available, the capacity of the line section shall be used instead.

(vi) The aggregate generation capacity connected to the distribution circuit, including the customer-generator facility, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the primary voltage level nearest the proposed point of common coupling.

(vii) The aggregate generation capacity on the distribution circuit to which the customer-generator facility will interconnect, including the capacity of the customer-generator facility, shall not cause any distribution protective equipment (including but not limited to substation breakers, fuse cutouts, and line reclosers), or customer equipment on the electric distribution system, to exceed 90 percent of the short circuit interrupting capability of the equipment. In addition, a customer-generator facility shall not be connected to a circuit that already exceeds 90 percent of the short circuit interrupting capability, prior to interconnection of the facility.

(viii) If there are posted transient stability limits to generating units located in the general electrical vicinity of the proposed point of common coupling (e.g., within 3 or 4 transmission voltage level busses), the aggregate generation capacity (including the customer-generator facility) connected to the distribution low voltage side of the substation transformer feeding the distribution circuit containing the point of common coupling shall not exceed 10 MW.

(ix) Using the table below, each application for Level 2 interconnection shall 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 QRU electrical 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*

(x) If a customer-generator facility is to be connected to a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the customer-generator facility, shall not exceed 20 kilovolt-amps (kVA).

(xi) If a customer-generator facility is single-phase and is to be connected to a transformer center tap neutral of a 240 volt service, the addition of the customer-generator facility shall not create an imbalance between the two sides of the 240 volt service, which is greater than 20% of the nameplate rating of the service transformer.

(xii) A customer-generator facility's point of common coupling shall not be on a transmission line.

(xiii) If a customer-generator facility's proposed point of common coupling is on a spot or area network, the interconnection shall meet the following additional requirements:

(1) For a customer-generator facility that will be connected to a spot network circuit, the aggregate generation capacity connected to that spot network from customer-generator facilities, including the customer-generator facility, shall not exceed 5% of the spot network's maximum load;

(2) For a customer-generator facility that utilizes inverter based protective functions, which will be connected to an area network, the customer-generator facility, combined with other exporting customer-generator facilities on the load side of network protective devices, shall not exceed 10% of the minimum annual load on the network, or 500 kW, whichever is less. For the purposes of this rule, the percent of minimum load for solar electric generation customer-generator facility shall be calculated based on the minimum load occurring during an off-peak daylight period;

(3) For a customer-generator facility that will be connected to a spot or an area network that does not utilize inverter based protective functions, or for an inverter based customer-generator facility that does not meet the requirements of 1 or 2 above, the customer-generator facility shall utilize reverse power relays or other protection devices that ensure no export of power from the customer-generator facility, including inadvertent export (under fault conditions) that could adversely affect protective devices on the network.

(xiv) Within three business days after receiving an application for Level 2 interconnection review, the QRU shall provide written or e-mail notice to the applicant that it received the application and whether the application is complete. If the application is incomplete, the written notice shall include a list of all of the information needed to complete the application.

(xv) Within fifteen business days after the QRU notifies the applicant that the application is complete, the QRU shall perform an initial review of the proposed interconnection to determine whether the interconnection meets the applicable requirements. During this initial review, the QRU may, at its own expense, conduct any studies or tests it deems necessary to evaluate the proposed interconnection. The initial review shall result in one of the following determinations:

(1) Whether the customer-generator facility meets the applicable requirements. If the facility meets the requirements. the QRU shall notify the applicant that the interconnection will be approved pending completion of the interconnection application process. Within three business days after this notice, the QRU shall provide the applicant with an executable standard form interconnection agreement;

(2) Whether the customer-generator facility has failed to meet the applicable requirements, but the QRU has nevertheless determined that the customer-generator facility can be interconnected consistent with safety, reliability, and power quality. In this case, the QRU shall notify the applicant that the interconnection will be approved pending completion of the interconnection application process. Within five business days after this notice, the QRU shall provide the applicant with an executable standard form interconnection agreement;

(3) Whether the customer-generator facility has failed to meet the applicable requirements, but the initial review indicates that additional review may enable the QRU to determine that the customer-generator facility can be interconnected consistent with safety, reliability, and power quality. In such a case, the QRU shall offer to perform additional review to determine whether minor modifications to the electric distribution system (for example, changing meters, fuses, or relay settings) would enable the interconnection to be made consistent with safety, reliability and power quality. The QRU shall provide to the applicant a non-binding, good faith estimate of the costs of such additional review, and/or such minor modifications. The QRU shall undertake the additional review or modifications only after the applicant consents to pay for the review and/or modifications; or

(4) Whether the customer-generator facility has failed to meet the applicable requirements, and the initial review indicates that additional review would not enable the QRU to determine that the customer-generator facility could be interconnected consistent with safety, reliability, and power quality. In such a case, the QRU shall notify the applicant that the interconnection application has been denied, and shall provide an explanation of the reason(s) for the denial, including a list of additional information and/or modifications to the customer-generator's facility, which would be required in order to obtain an approval under Level 2 interconnection procedures.

(xvi) An applicant that receives a Level 2 interconnection agreement shall:

(1) Execute the agreement and return it to the QRU at least ten business days prior to starting operation of the customer-generator facility; and

(2) Indicate to the QRU the anticipated start date for operation of the customer-generator facility.

(xvii) The QRU may require a QRU inspection of a customer-generator facility for compliance with these rules prior to operation, and may require and arrange for witness of commissioning tests as set forth in IEEE Standard 1547. The applicant shall schedule any tests requested by the QRU on a non-holiday weekday during normal business hours. The applicant shall not begin operating the customer-generator facility until after the inspection and testing is completed.

(xviii) For an applicant that receives a Level 2 interconnection agreement, approval of interconnected operation of the customer-generator facility shall be conditioned on all of the following occurring:

(1) The interconnection has been approved by the electrical code official with jurisdiction over the interconnection;

(2) Any QRU inspection and/or witnessing of commissioning tests are successfully completed; and

(3) The planned start date provided by the applicant has passed.

(e) Level 3 interconnection review:

(i) Each QRU shall adopt a Level 3 interconnection review procedure. The QRU shall use the Level 3 review procedure for an application to interconnect a customer-generator facility that does not qualify for the Level 1 or Level 2 interconnection review procedures

(ii) An applicant shall submit an application for Level 3 interconnection review on a standard form, available from the QRU.

(iii) For a Level 3 interconnection review, the QRU may charge fees of up to $100 plus $2 per kilowatt of the proposed capacity (as measured in alternating current) of the customer-generator proposed facility, as well as charges for actual time spent on any impact and/or facilities studies. If the QRU must install facilities in order to accommodate the interconnection of the customer-generator facility, the cost of such facilities shall be the responsibility of the customer-generator.

(iv) For a Level 3 customer-generator facility, the QRU shall approve interconnection if all of the applicable requirements are met. A QRU shall not impose additional requirements not specifically authorized under these rules.

(v) The QRU shall conduct an initial review of the application and shall offer the applicant an opportunity to meet with QRU staff to discuss the application. At the meeting, the QRU shall provide pertinent information to the applicant, such as the available fault current at the proposed interconnection location, the existing peak loading on the lines in the general vicinity of the customer-generator facility, and the configuration of the distribution lines at the proposed point of common coupling.

(vi) The QRU shall provide an impact study agreement to the applicant, which shall include a good faith cost estimate for an impact study to be performed by the QRU. An impact study is an engineering analysis of the probable impact of a customer-generator facility on the safety and reliability of the QRU's electric distribution system. An impact study shall be conducted in accordance with good utility practice and shall:

(1) Detail the impacts to the electric distribution system that would result if the customer-generator facility were interconnected without modifications to either the customer-generator facility or to the electric distribution system;

(2) Identify any modifications to the QRU's electric distribution system that would be necessary to accommodate the proposed interconnection; and

(3) Focus on power flows, utility protective devices and control requirements.

(vii) If the proposed interconnection may affect electric transmission or delivery systems other than that controlled by the QRU, operators of these other systems may require additional studies to determine the potential impact of the interconnection on these systems. If such additional studies are required, the QRU shall coordinate the studies but shall not be responsible for their timing. The applicant shall be responsible for the costs of any such additional studies required by another affected system. Such studies shall be conducted only after the applicant has provided written authorization.

(viii) After the applicant has executed the impact study agreement and has paid the QRU the amount of the good faith estimate, the QRU shall conduct the impact study and shall notify the applicant of the results as follows:

(1) If the impact study indicates that only insubstantial modifications to the QRU's electric distribution system are necessary to accommodate the proposed interconnection, the QRU shall send the applicant an interconnection agreement that details the scope of the necessary modifications and an estimate of their cost; or

(2) If the impact study indicates that substantial modifications to the QRU's electric distribution system are necessary to accommodate the proposed interconnection, the QRU shall provide an estimate of the cost of the modifications, which shall be accurate to within plus or minus 25%. In addition, the QRU shall offer to conduct a facilities study at the applicant's expense, which will identify the types and cost of equipment needed to safely interconnect the applicant's customer-generator facility.

(ix) If an applicant requests a facilities study, the QRU shall provide a facilities study agreement. The facilities study agreement shall describe the work to be undertaken in the facilities study and shall include a good faith estimate of the cost to the applicant for completion of the study. Upon the execution by the applicant of the facilities study agreement, the QRU shall conduct a facilities study, which shall identify the facilities necessary to safely interconnect the customer-generator facility with the QRU's electric distribution system, the cost of those facilities, and the time required to build and install those facilities.

(x) Upon completion of a facilities study, the QRU shall provide the applicant with the results of the study and an executable interconnection agreement. The agreement shall list the conditions and facilities necessary for the customer-generator facility to safely interconnect with the QRU's electric distribution system, the cost of those facilities, and the estimated time required to build and install those facilities.

(xi) If the applicant wishes to interconnect, it shall execute the standard form interconnection agreement, provide a deposit of not more than 50% of the cost of the facilities identified in the facilities study, complete installation of the customer-generator facility, agree to pay the QRU the amount required for the facilities needed to interconnect as identified in the facilities study, and attest that the interconnection has been approved by the electrical code officials with jurisdiction over the interconnection.

(xii) All times required for the completion of construction of QRU facilities and customer-generator facilities, shall be incorporated into the standard form interconnection agreement as an addendum. Within 15 business days after notice from the applicant that the customer-generator facility has been installed, the QRU shall inspect the customer-generator facility and shall arrange to witness any commissioning tests required under IEEE Standard 1547. The applicant shall schedule any tests requested by the QRU on a non-holiday weekday during normal business hours. The applicant shall not begin operating the customer-generator facility until after the inspection and testing are completed.

(xiii) Provided that the customer-generator facility passes any required commissioning tests satisfactorily, the QRU shall notify the applicant in writing, within three business days after the tests that the interconnection is approved and the customer-generator facility may begin operation; or at the option of the QRU, it may provide authorization to operate immediately after witnessing the commissioning tests.

(xiv) If the commissioning tests are not satisfactory, the customer-generator shall repair or replace the unsatisfactory equipment and reschedule a commissioning test. If the commissioning requires more than two witnessing visits from the QRU, the customer-generator shall be responsible for QRU costs of additional visits.

The Commission seeks comment on a possible short form application for interconnection agreement, a standard application for interconnection agreement and a model agreement for interconnection. These documents are included as Attachment B to the proposed rules. The documents are excerpts from the October 2003 National Association of Regulatory Utility Commissioners paper *Model Interconnection Procedures and Agreement for Small Distributed Generation Resources*. Below is the link to entire document.

http://www.naruc.org/associations/1773/files/dgiaip_oct03.pdf

The Commission notes that the model agreement contains incorrect references. It references Exhibit A when in fact it should reference Exhibit B and vice versa.

The Commission seeks comment on two possible approaches for net metering.

OPTION #1

To be addressed as part of the utility plan under rule 3657, or

OPTION #2

(f) Net metering

(i) All QRUs shall offer net metering to their customers that generate electricity on the customer's side of the meter and are interconnected with the QRU, provided that the generating capacity of the customer-generator's facility meets both of the following criteria:

(1) The rated capacity of the generator does not exceed two megawatts; and

(2) The rated capacity of the generator does not exceed the customer's service entrance capacity.

(ii) The QRU shall develop a net metering tariff that provides for customer-generators to be credited in kWh at a ratio of 1:1 for any excess production of their generating facility that exceeds the customer's on-site consumption of kWh in the billing period following the billing period of excess production. However, any excess kWh credits shall not reduce any fixed monthly customer charges imposed by the QRU.

(iii) The QRU shall carry over any excess kWh credits earned and apply those credits to subsequent billing periods to offset any customer consumption in those billing periods until all credits are used or the end of the calendar year is reached. Any QRUs that cycle-bills throughout the month may use the December billing month as the end of the calendar year.

(iv) At the end of each calendar year, or when the customer-generator terminates it service, the QRU shall compensate the customer-generator for any excess kWh credits, at the QRU's average hourly incremental cost of electricity supply over the same calendar year period.

(v) A customer-generator facility used for net metering shall be equipped with metering equipment that can measure the flow of electricity in both directions at the same rate. For customer facilities less than 10 kW, this shall be accomplished through use of a single bi-directional electric revenue meter that has only a single register for billing purposes.

(vi) A customer-generator may choose to use its existing electric revenue meter if the following criteria are met:

(1) The meter is capable of measuring the flow of electricity both into and out of the customer-generator's facility at the same rate; and

(2) The meter is accurate to within plus or minus two percent when measuring electricity flowing from the customer-generator facility to the electric distribution system.

(vii) If the customer-generator'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-generator, at the company's expense. Any subsequent revenue meter change necessitated by the customer-generator, whether because of a decision to stop net metering or for any other reason, shall be paid for by the customer-generator.

(viii) The QRU shall not require more than one meter per customer-generator. However, an additional meter may be installed under either of the following circumstances:

(1) The QRU may install an additional REC meter at its own expense if the customer-generator consents; or

(2) The customer-generator may request that the QRU install a REC meter, in addition to the revenue meter at the customer-generator's expense. In such a case, the QRU shall charge the customer-generator no more than the actual cost of the meter and its installation.

(ix) A QRU shall provide electric service at non-discriminatory rates to net-metered customer-generators that are identical, with respect to rate structure, retail rate components, and any monthly charges, to the rates that a customer-generator would be charged if not a customer-generator.

(x) A QRU shall not charge a customer-generator any fee or charge; or require additional equipment, insurance or any other requirement not specifically authorized under

these rules unless the fee, charge, or other requirement would apply to other similarly situated customers who are not customer-generators.

(xi) Each QRU shall submit an annual net metering report to the Commission. The report shall be submitted by April 30th of each year, and shall include the following information for the previous compliance year categorized by type of customer generating technology:

(1) The total number of customer-generator facilities;

(2) The total estimated rated generating capacity of its net metering customer-generators;

(3) The total estimated net kilowatt-hours received from customer-generators; and

(4) The total estimated amount of energy produced by the customer-generators.

The Commission seeks comment on two possible approaches for Standard Rebate Offer.

OPTION #1

To be addressed as part of the utility plan under rule 3657, or

OPTION #2

(g) The Standard Rebate (SRO)

(i) Each QRU shall have a SRO program for on-site solar systems greater than 500 watts, along with a proposed budget showing estimated program costs for each year of its SRO program, including administrative, promotional, and rebate expenses.

(ii) The SRO program of a QRU shall be made available to all retail utility customers of the QRU on a non-discriminatory, first-come first-served basis. The Administrator shall develop and maintain a chronological based system for reserving SROs based on applications submitted in the proper form.

(iii) Each year at the time of filing its annual compliance report, each QRU shall submit to the Commission a concurrent filing of its SRO program that includes:

(1) Total program participants for the preceding year by customer class;

(2) Total program kilowatts installed and distribution of size of systems installed;

(3) Average system cost and total installed cost, if known;

(4) Total program expenditures and expenditures by FERC account; and

(5) Adjustments to the program budget for the next program year provided the budget has the advice and consent of the Administrator;

(iv) SRO applications will include a check, payable to the Administrator for an amount equal to $100 times the kW system rating. This application fee will be fully refunded if the installation is completed in timely fashion or if the SRO application is declined due to program limits. After the expiration of a SRO rebate reservation, an applicant may re-submit an application with loss of priority for the same customer without additional fee.

(v) Applicants that are accepted for SRO funding by the Administrator shall have one year from the date of their reservation notification to demonstrate substantial completion of their proposed solar project. Substantial completion includes the purchase and installation of all major system components. Projects that do not achieve substantial completion will have their funding reservations canceled. An extension will be available for reasonable cause at the discretion of the Administrator.

(vi) The Administrator will notify the QRU of rebates awarded to customers and the QRU shall remit the proceeds within 15 days of notification by the Administrator. SRO amounts awarded to customers will be based on the estimated installed system rating, in watts.

(vii) All systems eligible for SRO incentive funding must be covered by a minimum five-year warranty. The warranty must cover all of the major components, except batteries if included, of the generating system to protect against breakdown or degradation in electrical output of more than ten percent from their originally rated electrical output. The warranty shall cover the full cost of repair or replacement of defective components or systems, including coverage for labor costs to remove and reinstall defective components or systems. This warranty would not cover equipment damage due to accidents, abuse, vandalism, weather, or other acts of God.

(viii) The Administrator shall be responsible for maintaining a listing of eligible PV equipment.

(ix) Equipment installed is to be in place for the duration of its useful life. Equipment must have electrical connections in accordance with industry practice for permanently installed equipment, and 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 deem the system ineligible.

(x) As the potential for certain kinds of detrimental interactions with the grid does not exist with off-grid systems, the Administrator is encouraged to allow appropriate flexibility in determining eligible PV equipment for off-grid systems.

(xi) Equipment that is commercially available and factory new when installed is eligible for SRO funding. Rebuilt, used, or refurbished equipment is not eligible to receive incentives under the program.

(xii) Customer-generator capacity expansions may receive applicable rebates. The street address will be used to determine the location of a customer-generator. If the total capacity causes the project to change levels, the project will need to meet the requirements of the new level. If a customer-generator at a particular address has been given an SRO program, and then removes some or all of that capacity, they may receive new SROs only for increases above the capacity

upon which payments were originally received. Upgrades of equipment that do not increase total capacity do not qualify for additional payment.

(xiii) Project owners or their designated installer, will submit a SRO program application and other required documentation to the Administrator. The application will include an attestation by the applicant or installer to the following principal installation parameters:

(1) Tilt of the system in degrees (horizontal = 0 degrees);

(2) Orientation of the system in degrees (south = 180 degrees);

(3) That 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 a horizontal plane.

(4) 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 calculator) using the following parameters for input:

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).

(5) A recent copy of the applicant's electric bill;

(6) Project owners or their designated installer, will submit SRO application and other required documentation to the Administrator. The application will include an attestation by the applicant or installer to the requirements of this rule.

(xiv) Rebate levels for all on-site solar systems will initially be set at $2.00 per watt subject to modification by the Administrator or QRU to achieve program objectives.

(xv) On-site solar systems installed prior to the promulgation of these rules but after December 1, 2004 shall be eligible for participation in the SRO program. The system owner must provide proof of installation date to the Administrator or QRU and the system must otherwise meet the requirements of on-site solar systems.

(h) Requirements to retain Standard Offer Rebates

(i) Each customer receiving an on-site solar system rebate shall receive the full amount of the rebate upon verified energization and connection to the QRU distribution facilities.

(ii) Each customer receiving an on-site solar system rebate that discontinues its generation equipment shall be required to refund back to the QRU one-half of the rebate if discontinuance occurs within the first ten years of operation.

3659 Renewable Energy Credits

The Commission seeks comment on two possible approaches to RECs.

OPTION #1 (Optional REC plan):

(a) It is the policy of the Commission that the renewable energy standard may be met with RECs. Eligible RECs acquired through a system of tradable renewable energy credits may be used by QRUs to comply with this standard. In conjunction with the utility-specific plans specified in rule 3657, a QRU may request that the Commission allow the use of other mechanisms to meet the standard.

OPTION #2 (Mandatory REC plan):

(a) Renewable Energy Credits will be used to comply with the renewable energy standard. Eligible RECs acquired through a system of tradable renewable energy credits may be used by QRUs to comply with this standard. In calculating compliance, the total RECs acquired from renewable energy systems during a compliance year may include:

(i) RECs generated by the QRU or by a QRU affiliated renewable energy system;

(ii) RECs acquired by the QRU pursuant to renewable energy 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 carried forward from previous compliance years, as authorized by the Commission;

(b) RECs representing electricity generated at renewable energy facilities located in the state of Colorado shall be counted as 1.25 the kilowatt-hours for the purpose of compliance with rule 3654.

(c) All contracts between QRUs and the owners of renewable energy facilities entered into after the effective day of these rules shall clearly specify the entity who shall own the RECs associated with the renewable energy facility.

(d) S-RECs and SO-RECs that are generated after December 31, 2003 shall expire four years after the calendar year in which they are generated for purposes of compliance with §40-2-124.

(e) Eligible renewable energy credits that are generated on or before December 31, 2003 shall not be eligible to meet the renewable energy standard established by §40-2-124. RECs shall expire three years after the compliance year in which the RECs are generated. Thus, a REC may be used in the compliance year in which it is generated and the three compliance years thereafter.

(f) RECs shall be used for a single purpose only, and shall expire or be retired upon use for that purpose. Ambiguities that may arise from time to time should be resolved, to the extent possible, by reference to the "Environmental Marketing Guidelines for Electricity" issued by the National Association of Attorneys General.

(g) RECs that are generated with fuel cell energy using hydrogen derived from solar energy, wind energy, geothermal energy, biomass, hydroelectricity with a nameplate rating of 10 megawatts or less are eligible for compliance only to the extent that the energy used to generate the hydrogen did not generate renewable energy credits used to comply with this or any other renewable energy standard, nor used for the purposes of making commercial environmental and/or renewable claims.

(h) If a renewable energy system uses fossil fuel as an energy source to generate electricity, only the proportion of the total electric output of the renewable energy system that results from the use of eligible renewable energy resources shall count toward compliance with the renewable energy standard. To be eligible under the conditions of this renewable energy system the system must be designed to produce either more than 1% of the system electrical output from renewable sources or more than 100 RECs per year.

(i) A QRU:

(i) Shall account for RECs by using General Instruction 21 as set forth in the Uniform System of Accounts of the Federal Energy Regulatory Commission in 18 C.F.R. Part 101, except that FERC Account No. 555 shall be substituted for FERC Account Nos. 411.8, 411.9 and 509;

(ii) Shall maintain sub-accounts for RECs that are separate from all other items in FERC Account No. 555; and

(iii) Shall apply for the inclusion of any losses or gains from the purchase or sale of RECs in the utility's next applicable rate proceeding.

The Commission seeks comment on two possible approaches to RECs accounting.

OPTION #1 (Required WREGIS plan):

Shall use the WREGIS for accounting of REC generation and disposition, or an equivalent system of tracking.

OPTION #2 (Optional WREGIS plan):

In conjunction with the utility-specific plans specified in rule 3657, a QRU may make a request that the Commission allow the use of some system other than WREGIS to account for RECs. If a QRU proposes to use some system of accounting for RECs other than WREGIS, the QRU must show that the alternative system can be readily audited to verify that the renewable energy standard is met and that the alternative system is cost effective.

3660 Cost Recovery

The Commission seeks comment on two possible approaches for cost recovery.

OPTION #1

(i) To be addressed as part of the utility plan under rule 3657, or

OPTION #2

(a) Cost Recovery Mechanism

(i) A QRU may elect to recover the investment costs for renewable energy technologies, the return on investment of renewable technologies, any extra profit, and the other costs associated with renewable energy technologies, as specified in this rule, in a rate case proceeding, through the establishment of a rider, or any other Commission approved method.

(b) Cost Recovery of Commission Approved Contracts

(i) If the Commission approves a renewable energy contract between a QRU and a third-party, the renewable energy contract shall be deemed a prudent investment by the QRU. The Commission shall approve retail rates at the next appropriate utility rate proceeding sufficient to recover all just and reasonable costs associated with procurement and execution of the contract.

(c) Calculation of Net Benefits

(i) Investments in renewable energy technologies are the direct capital costs associated with a project.

(ii) Other costs associated with renewable energy technologies include the: incentives or rebates paid to installers or customers of the eligible renewable technologies, payment for RECs, payments for purchased power, ancillary costs associated with integrating renewable resources, the loss of transmission and distribution revenues, and the program costs including, but not limited to, marketing, advertising, associated labor, measurement and verification, installation and inspection, and engineering & interconnection.

(iii) Benefits of renewable energy technologies include, but are not limited to: the value of displaced energy from non-renewable resources, the value of the associated capital costs of new resources which the renewable energy resources displaced, the value of deferred transmission and distribution maintenance and upgrades,

the value of load reductions during higher cost hours, and the value of avoided transmission and distribution line losses.

(iv) The net economic benefit will be determined on a net present value basis using the utility discount rate over a 20 year time period. The net economic benefit is calculated using investments in renewable energy technologies, the other costs in renewable energy technologies and the benefits of renewable energy technologies as set forth in these rules.

(d) Return on Investments in Renewable Energy Technologies

(i) For all prudently incurred investment costs in renewable energy technologies, the QRU shall earn a return at the QRU currently authorized rate of return on rate base.

(e) Extra Profit

(i) The QRU can earn an extra profit on their investment in renewable energy technologies if these investments provide net economic benefits to customers as calculated in rule 3660(c). The extra profit is limited to up to a maximum of 50% of the net economic benefit derived from the QRU's investment in renewable energy technologies.

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 $0.50 per month for the average residential consumer of that QRU.

(b) The net rate impact shall include the direct prudently-incurred costs of meeting the renewable energy standard including administration, rebates and performance-based incentives, and shall consider the offsetting benefits of renewable electricity utilized to comply with the standard including the costs that are avoided by the renewable energy systems.

The Commission seeks comment on the following additional language:

(c) The offsetting benefits of renewable electricity utilized to comply with the standard shall be calculated through the use of utility forecasting models which analyze the need for system resources, optimize system costs, and calculate residential rates. The QRU shall run the forecasting model for two scenarios, one including the costs and benefits of meeting the renewable energy standard and a second scenario that does not include renewable resources. For each year, the QRU shall calculate the difference between the results of the two model-runs for average residential customers and the result shall then be compared to the net maximum rate impact.

(d) If a QRU believes it will exceed the maximum retail rate impact in a future year, it shall state this in its annual compliance filing with the Commission pursuant to rule 3662. If a QRU believes that its actions in the current year will result in exceeding the net maximum rate impact, it shall file an application with the Commission. In any filing in which a QRU asserts that it will exceed the net maximum retail rate impact, the QRU shall provide the information on which it is relying. Interested parties shall be given reasonable access to the models relied upon by the utility to analyze the rate impact of renewable energy resources.

(e) If the Commission determines that the utility has exceeded or will exceed the maximum rate impact, the QRU is required to comply with the renewable energy standard to the extent practicable. If the maximum rate impact will be exceeded, the QRU shall acquire as much renewable energy credits as soon a possible, while not exceeding that amount. In this case, the Commission will not impose any administrative penalties or take any other enforcement action against the QRU.

3662 Annual Reports

The Commission seeks comment on two possible approaches concerning the contents of annual reports.

OPTION #1

To be addressed as part of the utility plan under rule 3657, or

OPTION #2 (Annual Compliance Report)

(a) Beginning with compliance year 2007, not later than April 1 of the following calendar year, the Administrator shall submit to the Commission an annual compliance report that sets forth all the information required by this rule including:

(i) The total number of megawatt-hours sold by the QRU to its retail customers in this State during the most recently completed compliance year and the associated on-site solar, solar and non-solar REC requirement required under this rule;

(ii) The total number and source of on-site solar, solar and non-solar RECs, as defined in rule 3659, acquired by the QRU;

(iii) The total number and source of solar, on-site solar and non-solar RECs the QRU proposes to carry forward from the most recently completed compliance year;

(iv) The costs and benefits of the QRU's expenditures for renewable energy considering fuel source diversity; environmental impacts; economic impacts; energy security; effects on water use for generation; fuel price volatility; plant size; risk mitigation; reliability; deferred transmission and distribution maintenance and upgrades; load reduction during higher cost hours, avoided transmission and distribution line losses, ancillary services and other factors as may be determined by the Commission. Methods and data used to compute costs and benefits under this rule will be available for public review as an appendix to the annual report.

(v) A list of all current renewable energy contracts including:

(1) Owner;

(2) Location;

(3) System developer;

(4) Type of system;

(5) Estimated annual energy production for those systems not separately metered;

(6) Actual annual energy production for all renewable systems greater than 10 kW; and

(7) Date of first commercial operation.

(vi) Whether, during the most recently completed compliance year, the QRU, its parent, or subsidiaries began construction on, acquired or placed into operation any eligible renewable energy system and, if so, the date of any such event.

(b) A description of the QRU's plans to meet the requirements of renewable portfolio standard for each of the next three years shall include the following:

(i) The forecasted quantity of RECs, SO-RECs, and S-RECs that the QRU expects that it will need to comply with the requirements of the renewable portfolio standard and a description of the method used by the QRU to develop these forecasts;

(ii) Description of the plans by which the QRU expects to obtain the forecasted quantity of RECs, SO-RECs, and S-RECs. This description shall include a discussion of plans for the use of RECs from previous periods, competitive solicitations, the construction of utility-owned renewable energy facilities, and expected RECs from standard offer contracts; and

(iii) The expected rate impact of the plans discussed in the previous section ii and approaches to ensure that the rate impact cap is not exceeded.

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

(d) In the annual compliance report, the QRU must make an affirmative showing that it complied with its renewable energy standard for the solar, on-site solar and non-solar components during the most recently completed compliance year. If the QRU did not comply with its renewable energy standard during the most recently completed compliance year for each of the solar, on-site solar and non-solar components, the QRU must provide a detailed explanation for its noncompliance.

(e) If, in its annual compliance report, the QRU did not comply with its renewable energy standard for each of the solar, on-site solar and non-solar components as a direct result of absolute limitations within a requirements contract from a wholesale electric supplier, then the QRU must show that 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.

(f) The annual compliance report must include an attestation from the owner or operator of all renewable energy systems utilized by the QRU to comply with the renewable energy standard that the RECs represented by those megawatt-hours:

(i) Have not been and will not be sold or otherwise exchanged with any other party, or in any other state or jurisdiction;

(ii) Have not been and will not be included within a blended energy product certified to include a fixed percentage of renewable energy in any other state or jurisdiction; and

(iii) Have not been used to make commercial environmental and/or renewable claims.

(g) For on-site solar systems that qualify for the standing SO-REC offer, the attestation need only be made once when the system is originally installed.

(h) If the Commission has approved an annual cost recovery mechanism for a QRU, that QRU shall make an application for the cost recovery at the same time that it files the annual compliance report. The contents of the annual cost recovery application will be in accordance with the requirements contained in the Commission order approving the QRU's utility plan.

The Commission seeks comment on two possible approaches concerning the review of annual reports.

OPTION #1 (Modeled after Rule 18)

(a) Interested persons shall have 30 days to send written comments to the Director of the Commission concerning the QRUs annual compliance filing. During this 30-day period, Staff of the Commission shall undertake its examination of the QRU's annual compliance report.

(b) At the conclusion of the 30-day comment period, the Staff of the Commission shall make a recommendation to the Commission concerning whether the QRU's annual compliance report needs to be investigated further. If the Commission decides to hold a hearing on the annual compliance report, the Commission will issue an order describing the components of the annual compliance filing that it believes should be investigated further. The utility shall file an application to be considered under the Commission's rules of practice and procedure addressing the areas described in the Commission order.

(c) If, at the conclusion of this process, the Commission finds that a QRU has not complied with the renewable energy standard, it shall consider enforcement action based on the requirements of rule 3663.

OPTION #2

(a) Not later than 30 days after the date on which a QRU submits its annual compliance report, the Commission will issue an order stating whether the QRU complied with the solar, on-site solar and non-solar components of its renewable energy standard during the most recently completed compliance year.

(b) 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 megawatt-hours which the QRU needed to comply with its renewable energy standard for that compliance year:

(i) The Commission will state in its order the number of excess solar, on-site solar and/or non-solar megawatt-hours or RECs which the QRU is authorized to carry forward from that compliance year; and

(ii) The QRU may use those excess solar, on-site solar and/or non-solar megawatt-hours or RECs to comply with its renewable energy standard for the three compliance years immediately following that compliance year.

(c) 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:

(i) 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

(ii) Issue a notice of noncompliance and schedule an evidentiary hearing on the matter.

(d) At the evidentiary hearing, the QRU has the burden to prove that it complied with the solar, on-site solar and non-solar components of its renewable energy standard during the most recently completed compliance year, or that compliance would have resulted in a retail rate impact exceeding 50 cents per month for the average residential customer and proportionally equivalent impacts for non-residential retail customers based upon then current ratemaking principles.

3663 Commission Actions

(a) Approvals

(i) If the Commission approves a renewable energy contract between a QRU and a third-party, the renewable energy contract shall be deemed a prudent investment by the QRU. The Commission shall approve retail rates at the next appropriate utility rate proceeding sufficient to recover all just and reasonable costs associated with procurement and execution of the contract.

(b) Compliance Reporting

(i) In the compliance report, the QRU must make an affirmative showing that 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 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 compliance report.

(iii) The Staff of the Commission shall review the compliance report and any comments received and make a recommendation as to whether no action should be taken by the Commission, whether any changes are needed to the compliance report, or whether a hearing is necessary.

(iv) 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 megawatt-hours which the QRU needed to comply with its renewable energy standard for that compliance year:

(1) The Commission will state the number of excess solar, on-site solar and/or non-solar megawatt-hours RECs. The QRU may carry the RECs forward from that compliance year or use for any other legal purpose.

(2) The QRU may use those excess solar, on-site solar and/or non-solar megawatt-hours or RECs to comply with its renewable energy standard for the three compliance years immediately following that compliance year.

(c) 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:

(1) State 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.

(ii) At the evidentiary hearing, the QRU shall have the burden of proof that it complied with the solar, on-site solar and non-solar components of its renewable energy standard during the most recently completed compliance year, or that compliance would have resulted in exceeding the retail rate cap. Such retail rate impact shall include only the direct prudently-incurred costs of acquisition including administration, rebates and performance-based incentives, and shall consider the offsetting benefits of renewable electricity utilized to comply with the standard including the costs that are avoided by the renewable energy systems.

(d) Compliance Penalties

The Commission seeks comment on two possible approaches regarding compliance penalties.

OPTION #1

(i) Any penalties will be determined on a case-by-case basis based on the record from the compliance report hearing.

OPTION #2

(i) If after the compliance report hearing, 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 or if the Commission determines that the QRU did not comply with any other provisions of the rules, the Commission shall take the following actions:

(1) 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 issue an order requiring the QRU to issue bill credits in such amounts to retail customers.

(2) Require the QRU to acquire over the next two compliance years an additional amount of renewable energy credits from the same component type for which there was noncompliance equal to two times the amount

to be refunded in (i) above. Such additional amount(s) shall not be eligible for the extra bonus, but shall otherwise be accounted for as if made pursuant to this rule.

(3) The Commission may also take other administrative action including imposition of administrative penalties against the QRU.

(ii) The cost of such bill credits or penalties shall not be recovered from retail customers.

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"SHORT FORM" APPLICATION FOR SINGLE PHASE ATTACHMENT OF PARALLEL GENERATION EQUIPMENT 20 kV OR SMALLER TO THE ELECTRIC SYSTEM OF

Interconnection Provider:_____

Interconnection Provider's Designated Contact Person: _____

Interconnection Provider's Address: _____

Interconnection Provider's Fax Number: (____)_____

Interconnection Provider's E-Mail Address: _____

An application is a Complete Application when it provides all applicable and correct information required below. (Additional information to evaluate a request for Interconnection may be required pursuant to the application process after the application is deemed complete.)

Processing Fee:

The Interconnection Provider may require a cost-based Processing Fee, approved by the State Commission, to be paid at the time of application.

Applicant Information:

Legal Name of the Interconnecting Applicant:

Name: _____ Phone: (___)_____
Address: _____ Municipality: _____
_____

Applicant's Electric Service Customer Account Number: _____

Name and Address of the Applicant as it appears on the Applicant's electric bill from the Electric Company:
Name: _____ Phone: (___)_____
Address: _____ Municipality: _____
_____

B. Consulting Engineer or Contractor:
Name: _____ Phone: (___)_____
Address: _____
_____

Estimated In-Service Date: _____

Existing Electric Service:
Capacity: _____Amperes Voltage: _____Volts
Service Character: ( )Single Phase ( )Three Phase

Location of Protective Interface Equipment on Property:
(Include address if different from customer address)
_____

Energy Producing Equipment/Inverter Information:
Manufacturer: _____
Model No. _____ Version No. _____
( )Synchronous ( )Induction ( )Inverter ( )Other_____
Rating: _____kW Rating: _____kVA
Interconnection Voltage: _____Volts
DG System Type Tested (Total System): ( )Yes ( )No; attach product literature
Equipment Type Tested (i.e. Inverter, Protection System):
( )Yes ( )No; attach product literature
One Line Diagram attached: ( )Yes
Installation Test Plan attached: ( )Yes

Signature:

CUSTOMER SIGNATURE: *TITLE:* *DATE:*

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STANDARIZED APPLICATION FOR ATTACHMENT OF PARALLEL GENERATION EQUIPMENT TO THE ELECTRIC SYSTEM OF

_____(Interconnection Provider)_____

Preamble and Instructions

An owner of a small distributed generator resource who requests interconnection to a State-regulated distribution or transmission facility, must submit an application by hand delivery, mail, e-mail or fax to the Interconnection Provider, as applicable as follows:

Interconnection Provider: _____

Interconnection Provider's Designated Contact Person: _____

Interconnection Provider's Address: _____

Interconnection Provider's Fax Number: _____

Interconnection Provider's E-Mail Address: _____

An application is a Complete Application when it provides all applicable and correct information required below. (Additional information to evaluate a request for Interconnection may be required pursuant to the application process after the application is deemed complete.)

Processing Fee:

The Interconnection Provider may require a cost-based Processing Fee, approved by the State Commission, to be paid at the time of application. The fee may vary, depending on the size and characteristics of the small resource generator (e.g., a single phase generator vs. a three phase generator).

Section 1. Applicant Information

A. Legal Name of Interconnecting Applicant (or, if an Individual, Individual's Name)

Name: _____

Mailing Address: _____

City: _____ State: _____ Zip Code: _____

Facility Location (if different from above): _____

Telephone (Daytime): Area Code _____ Number _____ (Evening) Area Code _____ Number _____

Facsimile Number: _____

E-Mail Address: _____

B. Alternative Contact Information (if different from Applicant)

Contact Name: _____
Contact Title: _____
Address: _____
_____
_____
Phone Number: _____
Facsimile Number: _____
E-mail address: _____

C. Will the small resource be used for any of the following:

Net Metering? Yes __ No __ To supply power to the Interconnection Customer? Yes __No __

To supply power to others? Yes ___ No ___

D. For generators installed at locations with existing electric service to which the proposed generator will interconnect, provide:

_____ _____
(Local Electric Service Provider*) (Existing Account Number*)

[*To be provided by Applicant if Local Electric Service Provider is different from Interconnection Provider]

Contact Name: _____
Contact Title: _____
Address: _____
_____
Phone Number: _____
Facsimile Number (if known): _____
E-mail address (if known): _____

E. Requested Point of Interconnection: _____

F. Interconnection Applicant's requested in-service date: _____

Section 2. Generator Qualifications

All data collected in Sections 2, 3, and 4 are applicable only to the generator facility, NOT the necessary interconnection facilities

Energy source: ___ Solar ___ Wind ___ Hydro ___ Hydro ___ Type (e.g. Run-of-River)_____ Diesel ___ Natural Gas ___ Fuel Oil Other (state type) _____

Type of Generator: ____Synchronous ____Induction ____ DC Generator or Solar with Inverter

Generator Nameplate Rating: _____kW (Typical)
Generator Nameplate KVAR: _____

Applicant or Customer-Site Load: _____kW (if none so state) (Typical);
_____ (Reactive Load, if known)

Maximum Physical Export Capability Requested: _____ kW

List components of the Generating Facility that are currently certified by a U.S. Department of Energy-approved laboratory and/or listed by the Underwriters Laboratory:

Equipment Type (Identify)	UL Listing or U.S. Lab Certification
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Section 3. Generator Technical Information

Generator (or solar collector) Manufacturer, Model Name & Number: _____
Version Number: _____
Nameplate Output Power Rating in kW: (Summer)_____ (Winter) _____
Nameplate Output Power Rating in kVA: (Summer)_____ (Winter) _____
Individual Generator Power Factor
Rated Power Factor Leading: _____
Rated Power Factor Lagging: _____
Total Number of Generators in Wind Farm to be interconnected pursuant to this application:
_____
Elevation: _____ _____Single phase _____Three phase
Inverter Manufacturer, Model Name & Number (if used): _____
List of Adjustable Set points the protective equipment or software: _____

Generator Characteristic Data (for rotating machines):

[Note: For Wind Generators, a completed General Electric Company Power Systems Load Flow (PSLF) data sheet must be supplied with the application.]

For Synchronous and Induction Generators:
Direct Axis Transient Reactance, X'd: _____P.U.
Direct Axis Unsaturated Transient Reactance, X'di: _____ P.U.
Direct Axis Subtransient Reactance, X"d: _____P.U.
Generator Saturation Constant (1.0): _____
Generation Saturation Constant (1.2): _____
Negative Sequence Reactance: _____ P.U.
Zero Sequence Reactance: _____ P.U.
KVA Base: _____
RPM Frequency: _____

Additional information for Induction Generators:

*Field Volts _____
*Field Amperes _____
*Motoring Power (kW) _____
*Neutral Grounding Resistor (If Applicable) _____
*I22t or K (Heating Time Constant) _____
*Rotor Resistance _____
*Stator Resistance *Stator Reactance _____
*Rotor Reactance*Magnetizing Reactance _____
*Short Circuit Reactance _____
*Exciting Current _____
*Temperature Rise _____
*Frame Size *Design Letter _____
*Reactive Power Required In Vars (No Load) _____
*Reactive Power Required In Vars (Full Load) _____
*Total Rotating Inertia, H: _____ Per Unit on kVA Base

[*Note: Please contact Interconnection Provider prior to submitting the Application, to determine if the specified information above is required.]

Excitation & Governor System Data for Synchronous Generators only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies.

A copy of the manufacturer's block diagram may not be substituted.

Section 4. Interconnection Equipment Technical Data Information

Will a transformer be used between the generator and the point of interconnection? ___Yes ___No

Will the transformer be provided by Interconnection Applicant? ____Yes ____No

Transformer Data (if applicable. for Interconnection Applicant-Owned Transformer):
Is the transformer: ____single phase_____three phase?
Size: _____kVA
Transformer Impedance: _____% on _____kVA Base

If Three Phase:
Transformer Primary: _____ Volts _____ Delta _____Wye _____ Wye Grounded
Transformer Secondary: _____ Volts _____ Delta _____Wye _____ Wye Grounded

Transformer Fuse Data (if applicable, for Interconnection Applicant-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt & Total Clearing Time-Current Curves)

Manufacturer: _____Type: _____ Size: _____Speed: _____

Interconnecting Circuit Breaker (if applicable):

Manufacturer: _____ Type: _____ Load Rating: _____ Interrupting Rating: _____ Trip Speed: _____

(Amps) (Amps)
(Cycles)

Interconnection Protective Relays (if applicable):

(Enclose copy of any proposed Time-Overcurrent Coordination Curves)

Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____
Manufacturer: _____ Type: _____ Style/Catalog No.: _____ Proposed Setting: _____

Current Transformer Data (if applicable):

(Enclose copy of Manufacturer's Excitation & Ratio Correction Curves)

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: ____

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: ____

Potential Transformer Data (if applicable):

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: ____

Manufacturer: _____ Type: _____ Accuracy Class: _____ Proposed Ratio Connection: ____

Section 5. General Technical Information

Enclose copy of site electrical One-Line Diagram showing the configuration of all generating facility equipment, current and potential circuits, and protection and control schemes.
Is One-Line Diagram Enclosed? _____Yes

[Note: This one-line diagram must be signed and stamped by a licensed Professional Engineer if the generating facility is larger than 50 kW.]

Enclose copy of any site documentation that indicates the precise physical location of the proposed generating facility (e.g., USGS topographic map or other diagram or documentation).

Proposed Location of Protective Interface Equipment on Property:
(Include Address if Different from Application Address) _____

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Any Available Documentation Enclosed? _____Yes

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).
Are Schematic Drawings Enclosed? _____Yes

Section 6. Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct.

Signature of Applicant: _____ Date: _____

MODEL AGREEMENT FOR INTERCONNECTION AND PARALLEL OPERATION OF SMALL DISTRIBUTED GENERATION RESOURCES

AGREEMENT FOR INTERCONNECTION AND PARALLEL OPERATION OF SMALL DISTRIBUTED GENERATION RESOURCES

This Interconnection Agreement ("Agreement") is made and entered into this _____ day of _____, 20__, by _____("Interconnection Provider"), and _____ ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties".

Interconnection Customer Information:	**Interconnection Provider Information:**
Name: _____	Name: _____
Address: _____	Address: _____
Telephone: _____	Telephone: _____

Interconnection Customer Application No. _____

In consideration of the mutual covenants set forth herein, the Parties agree as follows:

1.0 Scope and Purpose of Agreement:

This Agreement describes *only* the conditions under which the Interconnection Provider and the Interconnection Customer agree that the distributed generating facility or facilities ("Small Resource") described in Exhibit A may be interconnected to and operated in parallel with the utility Interconnection Provider's system. Other services that the Interconnection Customer may require from the Interconnection Provider will be covered under separate agreements. The technical terms used in this agreement are defined in Exhibit B.

The following exhibits are specifically incorporated into and made a part of this Agreement:

Exhibit A: Summary and Description of Interconnection
Exhibit B: Technical Definitions

2.0 Summary and Description of Interconnection Customer's Small Resource Equipment/Facility to be Included in Exhibit A:

A description of the Generating Facility, including a summary of its significant components and a diagram showing the general arrangement of Interconnection Customer's Small Resource and loads that are interconnected with Interconnection Provider's electric distribution system, is attached to and made a part of this Agreement as Exhibit A.

2.1 Interconnection Customer Application identification number: _____
(Assigned by the Interconnection Provider)

2.2 Interconnection Provider's Interconnection Customer electric service account number: _____ (assigned by Interconnection Provider)

2.3 Interconnection Customer's name and address as it appears on the Interconnection Customer's electric service bill from the Interconnection Provider:

_____
_____
_____

2.4 Capacity of the Small Resource is: _____ kW.

2.5 The expected annual energy production of the Small Resource is _____ kWh.

2.6 For the purpose of identifying eligibility of the Interconnection Customer's Small Resource for consideration under the federal Public Utility Regulatory Practices Act of 1978 ("PURPA"), and amendments, the Interconnection Customer hereby declares that the Small Resource _ does/ _ does not meet the requirements for "Cogeneration" as such term is used under applicable State rules or laws.

2.7 The expected date of Initial Operation of the Small resource is _____. The expected date of Initial Operation shall be within two years of the date of this Agreement.

3.0 Responsibilities of Distribution Interconnection Provider and Interconnection Service Interconnection Customer

Each Party will, at its own cost and expense, operate, maintain, repair, and inspect, and shall be fully responsible for, the facility or facilities which it now or hereafter may own or lease unless otherwise specified in Exhibit A. Maintenance of Interconnection Customer's Small Resource and interconnection facilities shall be performed in accordance with the applicable manufacturer's recommended maintenance schedule.

The Parties agree to cause their facilities or systems to be constructed in accordance with specifications provided by the National Electrical Safety Code, the National Electric Code, and as approved by the American National Standards Institute, and interconnected in accordance with Institute of Electrical and Electronics Engineers standards where applicable.

Interconnection Provider and Interconnection Customer shall each be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the Point Of Common Coupling. The Interconnection Provider or the Interconnection Customer, as appropriate, shall provide interconnection facilities that adequately protect the Interconnection Provider's distribution system, personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of the interconnection Facilities shall be made part of this agreement as Exhibit C.

4.0 Prior Authorization

For the mutual protection of the Interconnection Customer and the Interconnection Provider, the connections between the Interconnection Provider's service wires and the Interconnection Customer's service entrance conductors shall not be energized without prior authorization of the Interconnection Provider, which authorization shall not be unreasonably withheld.

5.0 Warranty Is Neither Expressed Nor Implied

Neither by inspection, if any, or non-rejection, nor in any other way, does the Interconnection Provider give any warranty, express or implied, as to the adequacy, safety, or other characteristics of any structures, equipment, wires, appliances or devices owned, installed or maintained by the Interconnection Customer or leased by the Interconnection Customer from third parties, including without limitation the Small Resource and any structures, equipment, wires, appliances or devices appurtenant thereto**.**

6.0 Liability Provisions:

6.1 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, special, consequential, or punitive damages of any kind whatsoever.

6.2 Indemnification

a. Notwithstanding Paragraph 6.1 of this Agreement, the Interconnection Provider shall assume all liability for and shall indemnify the Interconnection Customer for any claims, losses, costs, and expenses of any kind or character to the extent that they result from the Interconnection Provider's negligence in connection with the design, construction, or operation of its facilities as described on Exhibit A; provided, however, that the Interconnection Provider shall have no obligation to indemnify the Interconnection Customer for claims brought by claimants who cannot recover directly from the Interconnection Provider. Such indemnity shall include, but is not limited to, financial responsibility for

(i) the Interconnection Customer's monetary losses;

(ii) reasonable costs and expenses of defending an action or claim made by a third person;

(iii) damages related to the death or injury of a third person;

(iv) damages to the property of the Interconnection Customer;
(v) damages to the property of a third person;
(vi) damages for the disruption of the business of a third person.

In no event shall the Interconnection Provider be liable for consequential, special, incidental or punitive damages, including, without limitation, loss of profits, loss of revenue, or loss of production.

The Interconnection Provider does not assume liability for any costs for damages arising from the disruption of the business of the Interconnection Customer or for the Interconnection Customer's costs and expenses of prosecuting or defending an action or claim against the Interconnection Provider. This paragraph does not create a liability on the part of the Interconnection Provider to the Interconnection Customer or a third person, but requires indemnification where such liability exists. The limitations of liability provided in this paragraph, do not apply in cases of gross negligence or intentional wrongdoing.

b. Notwithstanding Paragraph 6.1 of this Agreement, the Interconnection Customer shall assume all liability for and shall indemnify the Interconnection Provider for any claims, losses, costs, and expenses of any kind or character to the extent that they result from the Interconnection Customer's negligence in connection with the design, construction, or operation of its facilities as described on Exhibit A; provided, however, that the Interconnection Customer shall have no obligation to indemnify the Interconnection Provider for claims brought by claimants who cannot recover directly from the Interconnection Customer. Such indemnity shall include, but is not limited to, financial responsibility for:

(i) the Interconnection Provider's monetary losses;

(ii) reasonable costs and expenses of defending an action or claim made by a third person;

(iii) damages related to the death or injury of a third person;

(iv) damages to the property of the Interconnection Provider;

(v) damages to the property of a third person;

(vi) damages for the disruption of the business of a third person.

In no event shall the Interconnection Customer be liable for consequential, special, incidental or punitive damages including, without limitation, loss of profits, loss of revenue, or loss of production. The Interconnection Customer does not assume liability for any costs for damages arising from the disruption of the business of the Interconnection Provider or for the Interconnection Provider's costs and expenses of

prosecuting or defending an action or claim against the Interconnection Customer. This paragraph does not create a liability on the part of the Interconnection Customer to the Interconnection Provider or a third person, but requires indemnification where such liability exists. The limitations of liability provided in this paragraph does not apply in cases of gross negligence or intentional wrongdoing.

6.3 Force Majeure

If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, such Party will promptly notify the other Party in writing, and will keep the other Party informed on a continuing basis of the scope and duration of the Force Majeure Event. The affected Party will specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the affected Party is taking to mitigate the effects of the event on its performance. The affected Party will be entitled to suspend or modify its performance of obligations under this Agreement, other than the obligation to make payments then due or becoming due under this Agreement, but only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of reasonable efforts. The affected Party will use reasonable efforts to resume its performance as soon as possible.

7.0 Insurance

The Interconnection Customer is not required to provide general liability insurance coverage as part of this Agreement, or any other Interconnection Provider requirement**.** Due to the risk of incurring damages, the State regulatory commission may recommend that every Interconnection Customer protect itself with insurance or other suitable financial instrument sufficient to meet its construction, operating and liability responsibilities pursuant to this Agreement. At no time shall the Interconnection Provider require that the Interconnection Customer negotiate any policy or renewal of any policy covering any liability through a particular insurance Interconnection Provider, agent, solicitor, or broker.

8.0 Effect

The inability of the Interconnection Provider to require the Interconnection Customer to provide general liability insurance coverage for operation of the Small Resource is not a waiver of any rights the Interconnection Provider may have to pursue remedies at law against the Interconnection Customer to recover damages.

9.0 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction, such portion or provision shall be deemed separate and independent, and the remainder of this Agreement shall remain in full force and effect.

10.0 Notices

Any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person or sent by first class mail, postage prepaid, to the person specified below:

If to Interconnection Customer:

Interconnection Customer Name
Attention: _____
Address:_____
City:_____, State:___
Zip Code:_____
Phone: ( ) _____
FAX: ( ) _____

If to Interconnection Provider:

Interconnection Provider Name
Attention: _____
Address: _____
City:_____, State:___
Zip Code:_____
Phone: ( ) _____
FAX: ( ) _____

10.1 Notices

A Party may change its address for Notices at any time by providing the other Party Notice of the change in accordance with Section 10.0.

10.2 Communications

The Parties may also designate operating representatives to conduct the daily communications which may be necessary or convenient for the administration of this Agreement. Such designations, including names, addresses, and phone numbers may be communicated or revised by one Party's Notice to the other in accordance with Section 10.0.

11.0 Right of Access, Equipment Installation, Removal and Inspection

Upon reasonable notice, the Interconnection Provider may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Resource first produces energy to inspect the interconnection, and observe the commissioning of the Small Resource (including any required testing), startup, and operation for a period of up to no more than three days after initial start-up of the unit. In

addition, the Interconnection Customer shall notify the Interconnection Provider at least seven days prior to conducting any on-site Verification Testing of the Small Resource.

Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, Interconnection Provider shall have access to Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its Interconnection Customers.

12.0 Disconnection of Unit

Interconnection Customer retains the option to temporarily disconnect from Interconnection Provider's Interconnection Provider system at any time. Such temporary disconnection shall not be a termination of the Agreement unless Interconnection Customer exercises its termination rights under Section 13.0.

Subject to any State regulatory authority rule for routine maintenance and repairs on Interconnection Provider's system, the Interconnection Provider shall provide the Interconnection Customer with seven days' notice of service interruption. The Interconnection Provider shall have the right to disconnect service to Interconnection Customer without notice to eliminate conditions that constitute a potential hazard to Interconnection Provider personnel or the general public. The Interconnection Provider shall notify the Interconnection Customer of the emergency as soon as circumstances permit.

The Interconnection Provider may disconnect the Small Resource, after notice to the Interconnection Customer has been provided and a reasonable time to correct, consistent with the conditions, has elapsed, if the Small Resource adversely affects the quality of service of adjoining Interconnection Customers.

If, after the Small Resource has been commissioned, the operations of the Interconnection Provider are adversely affecting the performance of the Small Resource or the Interconnection Customer's premises, the Interconnection Provider shall immediately take appropriate action to eliminate the adverse effect. If the Interconnection Provider determines that it needs to upgrade or reconfigure its system the Interconnection Customer will not be responsible for the cost of new or additional equipment on the Interconnection Provider's side of the Point Of Common Coupling between the Interconnection Customer and the Interconnection Provider.

13.0 Effective Term and Termination Rights

This Agreement becomes effective when executed by both parties and shall continue

(a) Interconnection Customer may terminate this Agreement at any time, by giving the Interconnection Provider sixty days' written notice;

(b) Interconnection Provider may terminate upon failure by the Interconnection Customer to generate energy from the Facility in parallel with the Interconnection Provider's system by the later of two years from the date of this agreement or twelve months after completion of the interconnection;

(c) either party may terminate by giving the other party at least sixty days prior written notice that the other Party is in default of any of the material terms and conditions of the Agreement, so long as the notice specifies the basis for termination and there is reasonable opportunity to cure the default; or

(d) Interconnection Provider may terminate by giving Interconnection Customer at least sixty days notice in the event that there is a material change in an applicable rule or statute concerning interconnection and parallel operation of the Small Resource, unless the Interconnection Customer's installation is exempted from the change or the Interconnection Customer complies with the change in a timely manner. Nothing in this provision shall limit the ability of the Interconnection Provider to disconnect the Interconnection Customer without providing notice as specified herein if necessary to address a hazardous condition.

Upon termination of this Agreement, the Small Resource will be disconnected from the Interconnection Provider's electric system. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

14.0 Governing [Law/Regulatory Authority]

This Agreement was executed in the State of [name of State] and must in all respects be governed by, interpreted, construed, and enforced in accordance with the laws thereof. This Agreement is subject to, and the parties' obligations hereunder include, maintaining and operating in full compliance with all valid, applicable federal, State, and local laws or ordinances, and all applicable rules, regulations, orders of, and tariffs approved by, duly constituted regulatory authorities having jurisdiction.

15.0 Assignments:

15.1 Assignment to Corporate Party

At any time during the term, the Interconnection Customer may assign this Agreement to a corporation or other entity with limited liability, provided that the Interconnection Customer obtains the consent of the Interconnection Provider. Such consent will not be withheld unless the Interconnection Provider can demonstrate that the corporate entity is not reasonably capable of performing the obligations of the assigning Interconnection Customer under this Agreement.

15.2 Assignment to Individuals

At any time during the term, an Interconnection Customer may assign this Agreement to another person, other than a corporation or other entity with limited liability, provided that the assignee is the owner, lessee, or is otherwise responsible for the Small Resource.

16.0 Confidentiality

[Provisions to be worked out between the Parties consistent with State law, regulatory rules and procedures for protecting critical infrastructure data, proprietary information or trade secrets.]

17.0 Dispute Resolution

Each Party agrees to attempt to resolve all disputes arising hereunder promptly, equitably and in a good faith manner, consistent with applicable State regulatory commission rules regarding resolution of disputes.

18.0 Amendment and Notification

This Agreement can only be amended or modified by a writing signed by both Parties**.**

19.0 Entire Agreement

This Agreement constitutes the entire Agreement between the Parties and supersedes all prior agreements or understandings, whether verbal or written. It is expressly acknowledge that the Parties may have other agreements covering other services not expressly provided for herein, which agreements are unaffected by this Agreement.

20.0 Non-Waiver

None of the provisions of this Agreement shall be considered waived by a Party unless such waiver is given in writing. The failure of a Party to this agreement to insist, on any occasion, upon strict performance of any provision of this agreement will not be considered to waive the obligations, rights, or duties imposed on the Parties.

21.0 No Third Party Beneficiaries

This agreement is not intended to and does not create rights, remedies, benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of Parties, their successors in the interest and, where permitted, their assigns.

22.0 Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be signed by their respective duly authorized representatives.

[Interconnection Provider Name]	[Interconnection Customer Name]
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____

EXHIBIT A

Definitions for Terminology Used in the Agreement

- **Agreement** – means this Interconnection and Parallel Operation Agreement for Small Distributed Generation Resources by and between the Interconnection Provider and the Interconnection Customer.

- **Applicable Laws and Regulations** – means all duly promulgated applicable federal, State and local laws regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits, and other duly authorized actions of any Governmental Authority.

- **Interconnection Provider -** An electric Interconnection Provider operating a distribution system, as ascribed to in the first paragraph of this Agreement, and its agents or permitted successors and assigns.

- **Interconnection Customer –** Any entity interconnected to the Utility Interconnection Provider system for the purpose of receiving [or exporting] electric power from [or to] the Interconnection Provider system as ascribed to in the first paragraph of this Agreement, and its agents or permitted successors and assigns.

- **Party** or **Parties** – means either the Interconnection Provider or the Interconnection Customer or both.

- **Small Resource –** An electrical generating installation consisting of one or more on-site generating units. The total capacity of the aggregated generating units to be interconnected at any Point of Common Coupling under this Agreement shall not exceed the amount referenced in the Interconnection Customer's Application Form, as modified by written consent of both the Interconnection Provider and the Interconnection Customer..

- **Force Majeure Event** - For purposes of this Agreement, a "Force Majeure Event" means any event: (a) that is beyond the reasonable control of the affected Party; and (b) that the affected Party is unable to prevent or provide against by exercising reasonable diligence, including the following events or circumstances, but only to the extent they satisfy the preceding requirements: acts of war, public disorder, insurrection, or rebellion; floods, hurricanes, earthquakes, lightning, storms, and other natural calamities; explosions or fires; strikes, work stoppages, or labor disputes; embargoes; and sabotage.

- **Indemnification –** Protection against or being kept free from loss or damage.

- **Interconnection** – The physical connection of Small Resource to the Interconnection Provider system in accordance with the requirements of this Agreement so that parallel operation can occur.

- **Interconnection Agreement ("Agreement")** – The standard form of agreement, which has been approved by the [State Regulatory Commission]. The Agreement sets forth the contractual conditions under which the Interconnection Provider and the Interconnection Customer agree that Small Resource may be interconnected with the Interconnection Provider's system.

- **Interconnection Provider System –** A Interconnection Provider's distribution system to which the Interconnection Customer's Small Resource equipment is interconnected.

- **On-site Generating Units (or Small Resource)** – For purposes of this Agreement, an electrical generating facility located on the Interconnection Customer's premises, generally, on the Interconnection Customer's side of the point of delivery, which may be connected in parallel operation with the Interconnection Provider's system.

- **Standardized Application –** The standard application for interconnection and parallel operation with the Interconnection Provider system, as approved by the State regulatory authority.

- **Term** – means the duration of this Agreement as specified in provision 12.0 of the Agreement.

EXHIBIT B

Allocation of Responsibility for the Design, Installation, Operation, Maintenance and Ownership of the Interconnection Facilities

[NOTE: *There can be significant State policy issues involved in the allocation of responsibilities that may vary from State to State. Exhibit C will allow each State to adopt its policy preferences on these issues.]*