ORIGINAL

INDIANA UTILITY REGULATORY COMMISSION
Approval of Adoption of Rule Concerning
Customer-generator Interconnection Standards
170 IAC 4-4.3

Approval of Amendment of Rule Concerning
Cogeneration and Alternate Energy Production Facilities and Net Metering
170 IAC 4-4.1 and 170 IAC 4-4.2

LSA Document #05-130(F)
IURC RM #05-02

Upon prior publication of notice, and public hearing having been held on September 1, 2005, at 10:00 a.m. as required by the provisions of I.C. 4-22-2-1, *et seq.*, the Indiana Utility Regulatory Commission, on November 22, 2005, at 2:30 p.m., EST in Room E306, Indiana Government Center-South, Indianapolis, Indiana at which time a majority of members of said Commission were present, adopted the foregoing rule.

The Secretary is hereby directed to submit five (5) copies of the aforesaid rules to the Attorney General of Indiana, for his approval of same, and thereafter file one (1) duplicate approved copy with the Secretary of State.

David Lott Hardy, Chairman

David W. Hadley, Commissioner

Larry S. Landis, Commissioner

Gregory D. Server, Commissioner

David E. Ziegner, Commissioner

ATTEST:

Pamela K. White, Acting Secretary to the Commission

Date: NOV 2 2 2005

Approval of the Adoption of Rule

170 IAC 4-4.3

Approval of the Amendment of Rule

170 IAC 4-4.1 and 170 IAC 4-4.2

LSA Document #05-130 (F)
IURC RM #05-02

Approved as to legality,

today: 2/15/06

Steve Carter
Attorney General of Indiana

Approved,

today: 3/2/2006

M E Daniels, Jr.
Mitch E. Daniels
Governor of Indiana

Filed, today: 3/6/06 9:45

Todd Rokita
Secretary of State

TITLE 170 INDIANA UTILITY REGULATORY COMMISSION

Final Rule
LSA Document #05-130(F)

DIGEST

Amends 170 IAC 4-4.1 and 170 IAC 4-4.2 regarding cogeneration and alternate energy production facilities and net metering. Adds 170 IAC 4-4.3 concerning interconnection standards between a public utility and a customer-generator facility. Effective 30 days after filing with the secretary of state.

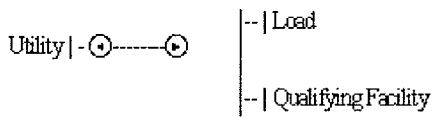
170 IAC 4-4.1-7
170 IAC 4-4.2-5
170 IAC 4-4.3

SECTION 1. 170 IAC 4-4.1-7 IS AMENDED TO READ AS FOLLOWS:

170 IAC 4-4.1-7 Interconnections; metering; costs
Authority: IC 8-1-1; IC 8-1-2; IC 8-1-2.4
Affected: IC 8-1-2; IC 8-1-2.4

Sec. 7. (a) The qualifying facility shall:
(1) install, operate, and maintain in good order such:
(A) relays;
(B) locks and seals;
(C) breakers;
(D) automatic synchronizers; and
(E) other control and protective apparatus;
as shall be designated by the electric utility for safe, efficient, and reliable operation in parallel to the electric utility's system; ~~The qualifying facility shall~~ **and**
(2) bear full responsibility for the installation and safe operation of this equipment.
Breakers **and/or switches** capable of isolating the qualifying facility from the electric utility shall at all times be immediately accessible to the electric utility. The electric utility may isolate any qualifying facility at its own discretion if the electric utility believes continued parallel operation with the qualifying facility creates or contributes to a system emergency. System emergencies causing discontinuance of parallel operation are subject to verification by the commission. The facilities installed by the qualifying facility shall comply with 170 IAC 4-1-26(a) and the electric utility's rules and regulations for electric service in effect from time to time. **The qualifying facility shall comply with the applicable requirements of 170 IAC 4-4.3.**

(b) To properly record the number of kilowatt hours being purchased or sold by the electric utility or qualifying facility, the following configurations shall be the basis for metering:
(1) When purchases by the electric utility from the qualifying facility are intended to be less than one thousand (1,000) kilowatt hours per month and the qualifying facility agrees, a single, bidirectional meter may be placed between the electric utility's system and the qualifying facility.
(2) When the qualifying facility will not be simultaneously selling to and purchasing from the electric utility, two (2) monodirectional meters shall be placed in a series arrangement between the electric utility's electric system and the qualifying facility, as shown ~~below:~~ **as follows:**



(3) When the qualifying facility will simultaneously sell to and purchase from the electric utility, two (2) monodirectional meters shall be placed in a series arrangement between the electric utility's system and the qualifying facility, and a single,

monodirectional meter shall be placed between the electric utility's system and the on-site load of the qualifying facility that will be served by the electric utility, as shown ~~below:~~ **as follows:**

```
                |------(>)-------        |Load
Utility |--      |-(<)--------(>)         |QualifyingFacility
```

(4) The metering equipment installed by the electric utility may be designed to recognize the different ~~rating~~ **rate** periods.
(5) The electric utility and the qualifying facility may agree to other metering arrangements.
(6) The electric utility may, solely at its option, install additional metering equipment at its own expense.

~~(c) The qualifying facility shall reimburse the electric utility for all interconnection costs the utility has reasonably incurred. The extent to which interconnection costs associated with selling energy and capacity may be assessed against a qualifying facility shall be determined in accordance with general tariff provisions and appropriate rate schedules governing extensions and connection of electric service to the retail customers of the electric utility with similar load characteristics.~~ *(Indiana Utility Regulatory Commission; 170 IAC 4-4.1-7; filed Mar 7, 1985, 10:04 a.m.: 8 IR 762; filed Jun 8, 1989, 2:00 p.m.: 12 IR 1836; filed Oct 15, 1990, 3:28 p.m.: 14 IR 419; readopted filed Jul 11, 2001, 4:30 p.m.: 24 IR 4233)*

SECTION 2. 170 IAC 4-4.2-5, AS ADDED AT 28 IR 787, SECTION 1, IS AMENDED TO READ AS FOLLOWS:

170 IAC 4-4.2-5 Interconnection
Authority: IC 8-1-1-3
Affected: IC 8-1-2-4

Sec. 5. (a) A net metering interconnection agreement between the investor-owned electric utility and the eligible net metering customer must be executed before the net metering facility may be interconnected with the investor-owned electric utility's system.

(b) The net metering facility shall comply with the technical interconnection requirements approved by the commission as outlined in section 9(a) of this rule. Inverter based systems listed by Underwriters Laboratories (UL) to UL standard 1741, published May 7, 1999, as revised January 17, 2001 (UL 1741), shall be accepted by the investor-owned electric utility as meeting the technical interconnection requirements tested by UL 1741. **The net metering facility shall comply with the applicable requirements of 170 IAC 4-4.3.**

~~(c) The eligible net metering customer shall provide the investor-owned electric utility proof of qualified installation of the net metering facility. Certification by a licensed electrician shall constitute acceptable proof.~~

~~(d) An investor-owned electric utility shall not require an eligible net metering customer, whose net metering facility meets the standards of this rule, to do any of the following:~~
~~(1) Install additional controls.~~
~~(2) Perform or pay for additional tests.~~
~~(3) Pay for inspections by the utility or the utility's representative.~~

~~(e) The eligible net metering customer shall install, operate, and maintain the net metering facility in accordance with the manufacturer's suggested practices for safe, efficient, and reliable operation in parallel to the investor-owned electric utility's system.~~

~~(f) The investor-owned electric utility may isolate any net metering facility if the investor-owned electric utility believes continued interconnection with the net metering facility creates or contributes to a system emergency. System emergencies causing discontinuance of interconnection shall be subject to verification by the commission upon a complaint made by the net metering customer in accordance with section 10 of this rule.~~

~~(g) The investor-owned electric utility may perform reasonable on-site inspections to verify the proper installation and continuing safe operation of the net metering facility and interconnection facilities, at reasonable times and upon reasonable advance notice to the net metering customer.~~ *(Indiana Utility Regulatory Commission; 170 IAC 4-4.2-5; filed Oct 22, 2004, 11:00 a.m.: 28 IR 787)*

SECTION 3. 170 IAC 4-4.3 IS ADDED TO READ AS FOLLOWS:

Rule 4.3. Customer-Generator Interconnection Standards

170 IAC 4-4.3-1 Definitions
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2-1

Sec. 1. (a) The definitions in this section apply throughout this rule.

(b) "Area network" means a type of electric distribution system served by multiple transformers interconnected in an electrical network circuit that is generally used in large metropolitan areas, which are densely populated, in order to provide high reliability of service.

(c) "Commission" means the Indiana utility regulatory commission.

(d) "Customer-generator facility" means an arrangement of equipment for the production of electricity that is owned and operated by:
(1) an eligible customer; or
(2) a third party at the eligible customer's site.

(e) "Eligible customer" means any:
(1) person;
(2) firm;
(3) corporation;
(4) municipality; or
(5) other government agency;
that has agreed, orally or otherwise, to pay for electric service received from an investor-owned electric utility and is in good standing with that utility.

(f) "Equipment package" means a group of components connecting an electric generator with an electric distribution system and includes all interface equipment including any of the following:
(1) Switchgear.
(2) Inverters.
(3) Other interface devices.
The term includes an integrated generator or electric source.

(g) "Interconnection" or "interconnected" means the physical, parallel connection of a customer-generator facility with a distribution facility of an investor-owned electric utility.

(h) "Investor-owned electric utility" or "utility" means a public utility, as defined in IC 8-1-2-1:
(1) that provides electricity;
(2) that is financed by the sale of securities; and
(3) whose business operations are overseen by a board representing the utility's shareholders.

(i) "Nameplate capacity" means the full-load continuous rating of a generator under specified conditions as designated by the manufacturer.

(j) "Parallel" means the designed operation of the:
(1) customer-generator facility;
(2) interconnection equipment; and
(3) investor-owned electric utility's system;
where the instantaneous flow of electrical energy may automatically occur in either direction across the interconnection point between the customer-generator facility and the electrical utility's distribution system.

(k) "Spot network" means a type of electric distribution system that uses two (2) or more intertied 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.

(l) "System emergency" means a condition on a utility's system reasonably likely to result in any of the following:
(1) A significant disruption of service to a customer.
(2) A substantial deviation from a normal service standard.
(3) An endangerment to life or property.
(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-1)

170 IAC 4-4.3-2 Applicability
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2

Sec. 2. This rule shall apply to any investor-owned electric utility, subject to the jurisdiction of the commission, that may now or hereafter be engaged in the:
(1) production;
(2) transmission;
(3) sale; or
(4) distribution;
of electric service and all customer-generator facilities that apply for interconnection with such utilities on or after the effective date of this rule. *(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-2)*

170 IAC 4-4.3-3 Exemptions
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2

Sec. 3. (a) Customer-generator facilities shall be exempt from revenue requirements and associated regulation under IC 8-1-2 as administered by the commission, except that the commission shall have authority over rates charged by electric utilities to customer-generator facilities.

(b) Upon agreement of an eligible customer and the utility, the customer-generator facility interconnection may be exempt from the requirements of this rule, except for the provisions of section 4(f) and 4(g) of this rule. *(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-3)*

170 IAC 4-4.3-4 General interconnection provisions
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2

Sec. 4. (a) Each investor-owned electric utility shall provide each of the following three (3) procedures for applications for interconnection of customer-generator facilities and use:
(1) The Level 1 review procedure described in section 6 of this rule for applications to connect inverter-based customer-generator facilities that:
(A) have a nameplate capacity of ten (10) kilowatts or less; and
(B) meet the certification requirements of section 5 of this rule.
(2) The Level 2 review procedure described in section 7 of this rule for applications to connect customer-generator facilities:
(A) with a nameplate capacity of two (2) megawatts or less; and
(B) that meet the certification requirements of section 5 of this rule.
(3) The Level 3 review procedure described in section 8 of this rule for applications to connect customer-generator facilities to its distribution system that do not qualify for either Level 1 or Level 2 interconnection review procedures.

(b) Each utility shall designate a contact person or office from which an eligible customer can obtain basic application forms and information through an informal process.

(c) Each utility shall use commission-approved interconnection application and interconnection agreement forms.

(d) The utility may require the applicant to include a disconnect switch as a supplement to the equipment package.

(e) Application and interconnection review fees shall be set as follows:
(1) A utility 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 the:
(A) application does not meet the requirements for Level 1 interconnection review; and
(B) applicant resubmits the application under another review procedure;
the utility may impose a fee for the resubmitted application, consistent with this section.
(2) For a Level 2 interconnection review, the utility may charge fees up to fifty dollars ($50) plus one dollar ($1) per kilowatt of the customer-generator facility's nameplate capacity, plus the cost of any minor modifications to the electric distribution system or additional review, if required under section 7(q)(3) of this rule. Costs for minor modifications or additional review shall be:
(A) based on utility estimates; and
(B) subject to review by the commission or its designee.
Costs for engineering work done as part of any additional review shall not exceed one hundred dollars ($100) per hour.
(3) For a Level 3 interconnection review, the utility may charge fees up to one hundred dollars ($100) plus two dollars ($2) per kilowatt of the customer-generator facility's nameplate capacity, as well as charges for actual time spent on any impact or facilities studies required under section 8 of this rule. Costs for engineering work done as part of any impact or facilities study shall not exceed one hundred dollars ($100) per hour. If the utility 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 applicant.

(f) The interconnection and operation of any customer-generator facility is secondary to and shall not interfere with the ability of the utility to meet its primary responsibility of furnishing reasonably adequate service to all customers.

(g) All the customer-generator facility electrical installations shall conform to the following:
(1) The requirements of local ordinances and inspection authorities.
(2) The applicable requirements of this rule.
(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-4)

170 IAC 4-4.3-5 Certification of customer-generator facilities
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2

Sec. 5. (a) In order to qualify for the Level 1 and the Level 2 interconnection review procedures described in sections 6 and 7 of this rule, 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 amended and supplemented, which is incorporated by reference herein. IEEE 1547 can be obtained through the IEEE at 445 Hoes Lane, P.O. Box 1331, Piscataway, New Jersey 08855-1331 or at www.ieee.org.
(2) Underwriters Laboratories (UL) Standard 1741 on Inverters, Converters, and Controllers for Use in Independent Power Systems (January 2001), as amended and supplemented, which is incorporated by reference herein. UL Standards can be obtained through Underwriters Laboratories at 333 Pfingsten Road, Northbrook, Illinois 60062-2096 or at www.ul.com.

(b) An equipment package shall be considered certified for interconnection operation if it has been tested and listed by a nationally recognized testing and certification laboratory in compliance with subsection (a)(1).

(c) If the equipment package has been tested and listed in accordance with this section as an integrated package that includes a generator or other electric source, the:
(1) equipment package shall be deemed certified; and
(2) utility shall not require:
(A) further design review;
(B) testing; or
(C) additional certification;
of the listed equipment package.

(d) If the equipment package includes only the interface components, an interconnection applicant must show that the generator or other electric source being utilized with the equipment package is:
(1) compatible with the equipment package; and
(2) consistent with the testing and listing performed by the nationally recognized testing and certification laboratory.
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 utility shall not require further design review, testing, or additional certification of the listed equipment package.
(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-5)

170 IAC 4-4.3-6 Level 1 interconnection review
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2

Sec. 6. (a) Each investor-owned electric utility shall adopt a Level 1 interconnection review procedure. The utility shall use the Level 1 review procedure for an application to interconnect a customer-generator facility that:
(1) is inverter-based;
(2) has a nameplate capacity of ten (10) kilowatts or less; and
(3) is certified in accordance with section 5 of this rule.

(b) For a customer-generator facility described in subsection (a), the utility shall approve interconnection under the Level 1 review if all of the applicable requirements in subsections (c) though (h) are met. A utility shall not impose additional requirements not specifically authorized under this section.

(c) If a customer-generator facility is to be connected to a radial distribution circuit, the aggregate generation name plate capacity connected to the circuit, including the proposed name plate capacity, shall not exceed five percent (5%) of the circuit annual peak load as most recently measured at the substation; the aggregate generation name plate capacity connected to a line section, including the proposed name plate capacity, shall not exceed ten percent (10%) of the line section annual peak load as most recently measured or estimated based on the most recently measured circuit load at the substation.

(d) The aggregate generation nameplate capacity on the distribution circuit to which the customer-generator facility will interconnect, including its nameplate capacity, shall not contribute more than ten percent (10%) to the circuit's maximum fault current at the point on which the primary level that is nearest the proposed point of common coupling.

(e) If a customer-generator facility is to be connected to a single-phase shared secondary, the aggregate generation nameplate capacity connected to the shared secondary, including the proposed nameplate capacity, shall not exceed the lesser of twenty (20) kVA or the nameplate rating of the service transformer.

(f) If a single-phase customer-generator facility is to be interconnected on a center tap neutral of a two hundred forty (240) volt service, the addition of the customer-generator facility shall not create an imbalance between the two (2) sides of the two hundred forty (240) volt service more than twenty percent (20%) of the nameplate rating of the service transformer.

(g) The customer-generator facility point of common coupling shall not be on:
(1) a transmission line;
(2) a spot network; or
(3) an area network.

(h) The customer-generator facility shall not violate any applicable provisions of IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, as identified by the utility.

(i) The utility shall notify the applicant within ten (10) business days after receiving an application for Level 1 interconnection review as to whether the application is complete. If the application is incomplete, the notification shall include a list detailing the information needed to complete the application.

(j) Within fifteen (15) business days after the utility notifies the applicant that the application is complete, the utility shall

notify the applicant that the customer-generator facility:

(1) meets all of the criteria in subsections (c) through (h) that apply to the facility, and the interconnection will be finally approved upon completion of the process set forth in subsections (k) though (m); or

(2) has failed to meet one (1) or more of the applicable criteria in subsections (c) through (h), and the interconnection application is denied.

(k) If approved, the utility shall, within ten (10) business days after sending the notice of approval under subsection (j)(1), do the following:

(1) Notify the applicant if the utility will require inspection of the customer-generator facility for compliance with this rule before starting operation of the facility.

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

(l) An applicant that receives an interconnection agreement under subsection (k) shall do the following:

(1) Execute the agreement.

(2) Return the agreement to the utility at least ten (10) business days before starting operation of the customer-generator facility.

(3) Indicate the anticipated start date for operation of the customer-generator facility.

If the utility requires an inspection of the customer-generator facility, the applicant shall not begin operating the facility until completion of the inspection.

(m) Upon:

(1) receipt of the executed interconnection agreement; and

(2) satisfactory completion of any required inspection;

the utility shall approve the interconnection, conditioned on approval by the electric code officials with jurisdiction over the interconnection.

(n) If an application for Level 1 interconnection review is denied because it does not meet one (1) or more of the applicable requirements of this section, an applicant may resubmit the application under Level 2 or Level 3 interconnection review procedure as appropriate. *(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-6)*

170 IAC 4-4.3-7 Level 2 interconnection review

Authority: IC 8-1-1-3; IC 8-1-2.4

Affected: IC 8-1-2

Sec. 7. (a) Each investor-owned electric utility shall adopt a Level 2 interconnection review procedure. The utility shall use the Level 2 review procedure for an application to interconnect a customer-generator facility that:

(1) has a nameplate capacity of two (2) megawatts or less; and

(2) is certified in accordance with section 5 of this rule.

(b) For a customer-generator facility described in subsection (a), the utility shall approve interconnection under the Level 2 review if all of the applicable requirements in subsections (c) through (o) are met. A utility shall not impose additional requirements not specifically authorized under this section.

(c) If a customer-generator facility is to be connected to a radial distribution circuit, the aggregate generation nameplate capacity connected to the circuit, including the proposed nameplate capacity, shall not exceed fifteen percent (15%) of the line section annual peak load as most recently measured or estimated based on the most recently measured circuit load at the substation.

(d) The aggregate generation capacity on the distribution circuit to which the customer-generator facility will interconnect, including its capacity, shall not contribute more than ten percent (10%) to the circuit's maximum fault current at the point on which the primary level that is nearest the proposed point of common coupling.

(e) If a customer-generator facility is to be connected to a single-phase shared secondary, the aggregate generation capacity connected to the shared secondary, including the proposed capacity, shall not exceed the lesser of twenty (20) kVA or the nameplate rating of the service transformer.

(f) If a single-phase customer-generator facility is to be interconnected on a center tap neutral of a two hundred forty (240) volt service, its addition will not create an imbalance between the two (2) sides of the two hundred forty (240) volt service more than twenty percent (20%) of the nameplate rating of the service transformer.

(g) The aggregate generation capacity on the distribution circuit to which the customer-generator facility will interconnect, including its capacity, shall not cause any:
(1) distribution protective equipment; or
(2) customer equipment on the distribution system;
to exceed ninety percent (90%) 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 ninety percent (90%) of the short circuit interrupting capability.

(h) If there are known or posted transient stability limits to generating units located in the general electrical vicinity of the proposed point of common coupling, for example, three (3) or four (4) transmission voltage level busses, the aggregate generation capacity, including the proposed 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 ten (10) megawatts.

(i) If a customer-generator facility is to be connected to three-phase, three (3) wire primary utility distribution lines, a three-phase or single-phase generator shall be connected phase to phase.

(j) If a customer-generator facility is to be connected to three-phase, four (4) wire primary utility distribution lines, the generator shall appear to the primary utility distribution line as an effectively grounded source.

(k) The customer-generator facility point of common coupling shall not be on a transmission line.

(l) If a customer-generator facility is to be connected to the load side of spot network protectors, the proposed facility shall:
(1) utilize an inverter-based equipment package; and
(2) together with the aggregated other inverter-based generation, not exceed the smaller of five percent (5%) of a spot network's maximum load or fifty (50) kilowatts.

(m) If a customer-generator facility is to be connected to any network, the proposed facility must utilize a protective scheme that will ensure that its current flow will not affect the network protective devices including reverse power relays or a comparable function. Synchronous customer-generator facilities shall not be interconnected to a secondary network.

(n) If a customer-generator facility that:
(1) is an induction generator; or
(2) utilizes inverter-based protective functions;
both of which include reverse power relays functions, the proposed facility, in aggregate with other generation interconnected on the load side of the network protective devices, will not exceed the lesser of ten percent (10%) of the minimum load on the network or fifty (50) kilowatts.

(o) The customer-generator facility shall not violate any applicable provisions of IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems, as identified by the utility.

(p) The utility shall notify the applicant within ten (10) business days after receiving an application for Level 2 interconnection review as to whether the application is complete. If the application is incomplete, the notification shall include a list detailing all of the information needed to complete the application.

(q) Within fifteen (15) business days after the utility notifies the applicant that the application is complete, the investor-owned electric utility shall perform an initial review to determine if the applicable requirements of subsections (c) through (o) are met. During the initial review the utility 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 (1) of the following determinations:
(1) The customer-generator facility meets the applicable requirements in subsections (c) through (o). In this case, the utility shall:

(A) notify the applicant that the interconnection will be finally approved upon completion of the process set forth in subsections (r) through (t); and

(B) within ten (10) business days after this notice, provide the applicant with an executable interconnection agreement.

(2) The customer-generator facility has failed to meet one (1) or more of the applicable requirements in subsections (c) through (o); however, the utility has determined that the customer-generator facility can be interconnected consistent with safety, reliability, and power quality. In this case, the utility shall:

(A) notify the applicant that the interconnection will be finally approved upon completion of the process set forth in subsections (r) through (t); and

(B) within ten (10) business days after this notice, provide the applicant with an executable interconnection agreement.

(3) The customer-generator facility has failed to meet one (1) or more of the applicable requirements in subsections (c) through (o); however, the initial review indicates that additional review may enable the utility to determine that the customer-generator facility can be interconnected consistent with safety, reliability, and power quality. In such a case, the utility shall:

(A) offer to perform additional review to determine whether minor modifications to the electrical distribution system would enable the interconnection to be made consistent with safety, reliability, and power quality;

(B) provide to the applicant a nonbinding, good faith estimate of the costs of the additional review or the minor modifications, or both; and

(C) undertake the additional review or modifications in accordance with subsection (u).

(4) The customer-generator facility has failed to meet one (1) or more of the applicable requirements of subsections (c) through (o), and the initial review indicates that additional review would not enable the utility to determine that the customer-generator facility can be interconnected consistent with safety, reliability, and power quality. In such a case, the utility shall:

(A) notify the applicant that the interconnection application has been denied; and

(B) provide an explanation of the reason or reasons for the denial, including a list of additional information or modifications, or both, to the customer-generator's facility that would be required in order to obtain an approval under Level 2 interconnection procedures.

(r) An applicant that receives an interconnection agreement under subsection (q)(1) or (q)(2) shall do the following:

(1) Execute the agreement.

(2) Return the agreement to the utility at least ten (10) business days before starting operation of the customer-generator facility.

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

(s) The utility may:

(1) require an inspection of a customer-generator facility for compliance with this section before operation; and

(2) require and arrange for witness of commissioning tests as set forth in IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems.

The utility shall schedule any inspections or tests under this section promptly and within a reasonable time after submittal of the application. The applicant shall not begin operating the customer-generator facility until after the inspection and testing is completed.

(t) For an applicant that receives an interconnection agreement under subsection (q)(1) or (q)(2), approval of interconnected operation of the customer-generator facility shall be conditioned on all of the following:

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

(2) Any utility inspection or witnessing of commissioning tests arranged under subsection (s) are successfully completed.

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

(u) For an applicant that pays for additional review under subsection (q)(3), within ten (10) business days from the receipt of payment, the utility shall perform any additional review and notify the applicant of the results. If the additional review determines that the customer-generator facility can be interconnected without adversely affecting safety, reliability, and power quality upon the completion of utility system modifications, the utility shall provide a cost estimate of the modifications with the results. Within twenty (20) business days after receipt of the cost estimate, the applicant will either:

(1) send payment to the utility for the estimated cost; or

(2) notify the utility in writing that it does not wish to proceed with the project.

Upon receipt of payment, the utility shall proceed to schedule and complete the required modifications or new construction.

Within five (5) business days after the completion the modifications or new construction, the utility shall provide the applicant with an executable interconnection agreement and notification that the interconnection will finally be approved upon completion of the process set forth in subsections (r) through (t).

(v) If an application for Level 2 interconnection review is denied because it does not meet one (1) or more of the applicable requirements in this section, an applicant may resubmit the application under the Level 3 interconnection review procedure as appropriate. *(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-7)*

170 IAC 4-4.3-8 Level 3 interconnection review
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2

Sec. 8. (a) Each investor-owned electric utility shall adopt a Level 3 interconnection review procedure. The utility shall use the Level 3 review procedure for an application to interconnect a customer-generator facility that:
(1) is connected to its distribution system; and
(2) does not meet the requirements of section 6 or 7 of this rule.

(b) The utility shall do the following:
(1) Conduct an initial review of the application.
(2) Offer the applicant the opportunity to meet with utility staff to discuss the application.

(c) The utility shall provide an impact study agreement to the applicant, which shall include a good faith estimate of the cost for an impact study to be performed by the utility.

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

(e) After the applicant has executed the impact study agreement and has paid the utility the amount of the good faith estimate required under subsection (c), the utility shall conduct the impact study and notify the applicant of the results as follows:
(1) If the impact study indicates that only insubstantial modifications to the utility's electric distribution system are necessary to accommodate the proposed interconnection, the utility shall send the applicant an interconnection agreement that details the following:
(A) The scope of the necessary modifications.
(B) An estimate of their cost.
(2) If the impact study indicates that substantial modifications to the utility's electric distribution system are necessary to accommodate the proposed interconnection, the utility shall do the following:
(A) Provide a good faith estimate of the cost of the modifications.
(B) 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.

(f) If the applicant requests a facilities study under subsection (e)(2), the utility 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 execution by the applicant of the facilities study agreement, the utility shall conduct a facilities study, which shall identify the following:
(1) The facilities necessary to safely interconnect the customer-generator facility with the utility's electric distribution system.
(2) The cost of those facilities.
(3) The time required to build and install those facilities.
(g) Upon completion of the facilities study, the utility shall provide the applicant with the results of the study and an executable interconnection agreement. The agreement shall list the following:
(1) The conditions and facilities necessary to safely interconnect the customer-generator facility with the utility's electric

distribution system.
(2) The cost of those facilities.
(3) The time required to build and install those facilities.

(h) If the applicant wishes to interconnect, the applicant shall do the following:
(1) Execute the interconnection agreement.
(2) Provide a deposit of the cost of the facilities identified in the facilities study.
(3) Complete installation of the customer-generator facility.
(4) Agree to pay the utility the amount required for the facilities needed to interconnect as identified in the facilities study.

(i) Within fifteen (15) business days after notice from the applicant that the customer-generator facility has been installed, the utility shall do the following:
(1) Inspect the customer-generator facility.
(2) Arrange to witness any commissioning tests required under IEEE 1547, Standard for Interconnecting Distributed Resources with Electric Power Systems.
The utility and the applicant shall select a date by mutual agreement for the utility to witness commissioning tests.

(j) Provided the customer-generator facility passes any required commissioning tests satisfactorily, the utility shall notify the applicant in writing, within five (5) business days after the tests, of one (1) of the following:
(1) The interconnection is approved and the customer-generator facility may begin operation.
(2) The facilities study identified necessary construction that has not been completed, the date upon which the construction will be completed, and the date when the customer-generator facility may begin operation.

(k) If the commissioning tests are not satisfactory, the customer-generator shall repair or replace the unsatisfactory equipment and reschedule a commissioning test under subsection (i). *(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-8)*

170 IAC 4-4.3-9 Requirements for ongoing operation of customer-generator facilities
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2

Sec. 9. (a) The investor-owned electric utility may perform reasonable on-site inspections to verify the proper installation and continuing safe operation of the customer-generator facility and interconnection facilities:
(1) at reasonable times; and
(2) upon reasonable advance notice to the customer.
The cost of the inspection or inspections shall be at the utility's expense; however, the utility shall not be responsible for any other cost the customer may incur as a result of the inspection or inspections.

(b) The customer shall install, operate, and maintain the customer-generator facility in accordance with the manufacturer's suggested practices for safe, efficient, and reliable operation in parallel to the utility's system.

(c) The utility may isolate any customer-generator facility if the utility believes continued interconnection with the customer-generator facility creates or contributes to a system emergency. System emergencies causing discontinuance of interconnection shall be subject to verification by the commission upon a complaint made by the customer in accordance with the commission's consumer complaint rules.

(d) If the utility finds that the customer-generator's facility is not in compliance with the requirements of this rule, and the noncompliance adversely affects the safety, reliability, or power quality of the electric distribution system, the utility may require the customer-generator to disconnect the customer-generator facility until compliance is achieved. *(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-9)*

170 IAC 4-4.3-10 Liability insurance and indemnity
Authority: IC 8-1-1-3; IC 8-1-2.4
Affected: IC 8-1-2-33; IC 8-1-2-34

Sec. 10. (a) The liability insurance and indemnification requirements of a customer-generator facility that is also a net

metering facility, as defined at 170 IAC 4-4.2-1, shall be in accordance with 170 IAC 4-4.2-8.

(b) The liability insurance and indemnification requirements of a customer-generator facility that is not also a net metering facility, as defined at 170 IAC 4-4.2-1, shall be as follows:

(1) Insurance provisions shall require a party to obtain only reasonable amounts of insurance against risks for which there is a reasonable likelihood of occurrence.

(2) The utility and the customer shall indemnify and hold each other harmless from and against all claims, liability, damages, and expenses, including attorney's fees, based on any injury to any person, including loss of life or damage to any property, including loss of use thereof, arising out of, resulting from, or connected with, or that may be alleged to have arisen out of, resulted from, or connected with an act or omission by the other party or its:

(A) employees;

(B) agents;

(C) representatives;

(D) successors; or

(E) assigns;

in the construction, ownership, operation, or maintenance of the party's facilities.

(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-10)

170 IAC 4-4.3-11 Tariff and reporting requirements

Authority: IC 8-1-1-3; IC 8-1-2.4

Affected: IC 8-1-2

Sec. 11. (a) Within sixty (60) days of the effective date of this rule, all investor-owned electric utilities shall submit for approval via the commission's thirty (30) day filing process generic interconnection application and interconnection agreement forms for each of the three (3) levels of review.

(b) To assist the commission in monitoring the effectiveness of this rule over time, each investor-owned utility shall file a report with the commission's electricity division before March 2 of each year following the effective date of this rule. The report shall contain the number, size, and type of the following:

(1) Customer-generator facilities detailed in all applications received during the pervious calendar year and the resolution, for example, granted, denied, withdrawn, of the applications. The report shall include the following:

(A) The application procedure (Level 1, 2, or 3) for all applications.

(B) The reason or reasons for any denied application or applications.

(2) The number, size, and type of customer-generator facilities interconnected, pursuant to Rule 4.3 as of December 31 of the previous calendar year.

(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-11)

170 IAC 4-4.3-12 Customer complaints

Authority: IC 8-1-1-3; IC 8-1-2.4

Affected: IC 8-1-2-34.5

Sec. 12. In the event an investor-owned electric utility and an eligible customer are unable to agree on matters relating to customer-generator facility interconnection, either party may raise a customer complaint to the commission in accordance with the commission's consumer complaint rules. *(Indiana Utility Regulatory Commission; 170 IAC 4-4.3-12)*