

LEVELS OF CO-GENERATION

Level 1

Level 1 Application and Agreement shall be used for all interconnection requests to connect a distributed generation facility when:

- a. The applicant has filed a Level 1 application; and
- b. The distributed generation facility has a nameplate capacity rating of 10 kVA or less; and
- c. The distributed generation facility is inverter-based; and
- d. The member-consumer interconnection equipment proposed for the distributed generation facility is lab-certified; and
- e. No construction of facilities by the cooperative or CIPCO shall be required to accommodate the distributed generation facility.

To remain in Level 1, the following screens must be met:

- For interconnection to a radial distribution circuit, the total of all distributed generation connected may not exceed 15% of the maximum load normally supplied by the circuit
- For interconnection on a single-phase shared secondary line, the aggregate generation capacity on the line will not exceed 20 kVA
- When the distributed generation facility is single-phase and proposes to interconnect on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the 2 sides of the 240 volt service of more than 20% of nameplate rating of the service transformer
- Utility shall not be required to construct any facilities on its own system to accommodate the distributed generation facility's interconnection
- For interconnection to a spot network, distributed generation will use protective equipment to ensure power imported from utility to the network will remain above 1% of the network's maximum load over the last year

Level 2

Level 2 Application and Agreement shall be used for evaluating interconnection requests when:

- a. The applicant has filed a Level 2 application; and
- b. The nameplate capacity rating is 150 kVA or less; and
- c. The interconnection equipment proposed for the distributed generation facility is lab-certified; and
- d. The proposed interconnection is to a radial distribution circuit or a spot network limited to serving one member-consumer; and
- e. No construction of facilities by the cooperative or CIPCO shall be required to accommodate the distributed generation facility, other than minor modifications permitted by the Cooperative.

To remain in Level 2, the following screens must be met:

- For interconnection to a radial distribution circuit, the total of all distributed generation connected may not exceed 15% of the maximum load normally supplied by the circuit
- The proposed distributed generation, in aggregation with other distributed generation on the distribution circuit, may not contribute more than 10% to the circuit's maximum fault current at the point on the primary line nearest the point of interconnection
- The proposed distributed generation, in aggregation with other distributed generation on the circuit, shall not cause any electric utility distribution devices to be exposed to fault currents exceeding 90% of their short-circuit interrupting capability
- When a distributed generation facility is to be connected to a 3-phase, 3 wire primary line, a 3-phase or single phase generator shall be connected phase-to-phase
- When a distributed generation facility is to be connected to a 3-phase, 4 wire primary line, a 3-phase or single phase generator shall be connected line-to-neutral and shall be grounded
- For interconnection on a single-phase shared secondary line, the aggregate generation capacity on the line will not exceed 20 kVA
- When the distributed generation facility is single-phase and proposes to interconnect on a center tap neutral of a 240 volt service, its addition may not create an imbalance between the 2 sides of the 240 volt service of more than 20% of nameplate rating of the service transformer
- A distributed generation facility, in aggregate with other distributed generation facilities interconnected to the distribution side of a substation transformer feeding the circuit where the facility proposed to interconnect, may not exceed 10 MVA in an area where there are transient stability limitations
- Utility shall not be required to construct any facilities on its own system to accommodate the distributed generation facility's interconnection, except minor modifications following agreed upon additional review
- For interconnection to a spot network, distributed generation will use protective equipment to ensure power imported from utility to the network will remain above 1% of the network's maximum load over the last year.

Level 3

Level 3 Application and Agreement shall be used for evaluating interconnection requests to area networks and radial distribution circuits where power will not be exported based on the following criteria.

- a. For interconnection requests to the load side of an area network, the following criteria shall be satisfied to qualify for a Level 3 expedited review:
 - (1) The applicant has filed a Level 3 application; and
 - (2) The nameplate capacity rating of the distributed generation facility is 50 kVA or less; and
 - (3) The proposed distributed generation facility uses a lab-certified inverter-based equipment package; and
 - (4) The distributed generation facility will use reverse power relays or other protection functions that prevent the export of power into the area network; and
 - (5) The aggregate of all generation on the area network does not exceed the lower of 5 percent of an area network's maximum load or 50 kVA; and
 - (6) No construction of facilities by the cooperative or CIPCO shall be required to accommodate the distributed generation facility.
- b. For interconnection requests to a radial distribution circuit, the following criteria shall be satisfied to qualify for a Level 3 expedited review:
 - (1) The applicant has filed a Level 3 application; and
 - (2) The aggregated total of the nameplate capacity ratings of all of the generators on the circuit, including the proposed distributed generation facility, is less than 150 kVA; and
 - (3) The distributed generation facility will use reverse power relays or other protection functions that prevent power flow onto the electric distribution system; and
 - (4) The distributed generation facility is not served by a shared transformer; and
 - (5) No construction of facilities by the cooperative or CIPCO on their own systems shall be required to accommodate the distributed generation facility.

To remain in Level 3, the following screens must be met:

- Utilize the same screens as are applicable for level 2 interconnections; except for the one prohibiting the total distributed generation connected to a radial distribution circuit from exceeding 15% of the maximum load normally supplied by the circuit.

Level 4

Level 4 Application and Agreement shall be used for evaluating interconnection requests when:

- a. The applicant has filed a Level 4 application; and
- b. The nameplate capacity rating of the small generation facility is 10 MVA or less; and
- c. Not all of the interconnection equipment or distributed generation facilities being used for the application are lab-certified, or
- d. Applicant is unable to comply with level 1 through 3 screens.