III. Rules and Regulations - Standard Service for Purchase of Power, Energy, or Both from Qualifying Facilities of 100 kW or Less Maximum Generating Capacity

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IV. Rules and Regulations - Generator Interconnection Procedure

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A. GENERAL:

(1) Purpose of Generator Interconnection Procedure

The purpose of this Generator Interconnection Procedure ("GIP") is to assist interested parties in evaluating, determining the requirements for, and applying for the interconnection of generation facilities, whether owned by the Association or not, to the Association's distribution or subtransmission facilities within Association's certificated service territory. This GIP sets forth the policies of the Association as to the interconnection of consumer-owned generation as well as the requirements and regulations that the consumer's interconnecting generation will be subject to.

(2) Dispute Resolution

The utility and consumer shall agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this subparagraph.

In the event of a dispute, either party shall provide the other party with a written notice of dispute. Such notice shall describe in detail the nature of the dispute. If the dispute has not been resolved within five business days after receipt of the notice, either party may contact a mutually agreed upon third party dispute resolution service for assistance in resolving the dispute.

The dispute resolution service will assist the parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the parties in resolving their dispute.

Each party shall conduct all negotiations in good faith and will be responsible for one-half of any costs paid to neutral third-parties.

If neither party elects to seek assistance from the dispute resolution service, or if the attempted dispute resolution fails, then either party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of the agreements between the parties or it may seek resolution at the Colorado Public Utilities Commission (the "Commission"), pursuant to the Rules of Practice and Procedure, 4 Code of Colorado Regulations 723-1. Notwithstanding anything to the contrary herein, before exercising any rights or remedies it may have, including seeking resolution at the Commission, consumer shall comply with the Association's then applicable regulation(s) governing consumer complaints.

(3) Definitions

For the purposes of this GIP, and not necessarily for any other part of the Association's Rules, Regulations, Rates, and Policies, the following terms are defined thusly:

i. Generator: Any piece of electrical equipment which converts any non-electrical form of energy (such as mechanical energy, whether kinetic or potential, chemical energy, or thermal energy) into electrical energy. This includes but is not limited to wind generators of all sorts, photovoltaic solar panels, turbines or internal combustion engines coupled to electric motors, and batteries.

ii. Generating Resource: A Generator designed to interface with and synchronize to an area electric power system, generally owned by a utility, and deliver energy into it. For the purposes of this GIP, any rectifier or inverter that forms part of the interface between the Generator itself and the area electric power system is included as a part of the Generating Resource. Transformers, circuit breakers, fuses, and power relays are not part of the Generating Resource.

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iii. Distributed Energy Resource (DER): the interconnection customer's source of electric power connected to the Association's distribution grid, including retail renewable distributed generation, other small generation facilities for the production of electricity, energy storage systems, or combination of any of these elements, as identified in the interconnection request, but shall not include the interconnection facilities not owned by the interconnection customer. DER includes an interconnection system or a supplemental DER device that is necessary for compliance with IEEE 1547-2018, until January 1, 2022, or until such time new DERs applying for interconnection will comply with IEEE 1547 2018. This rule does not include any later amendments or editions of this standard. This standard is available for public inspection at the Commission's office, 1560 Broadway, Suite 250, Denver, CO 80202.

iv. Mainline: That portion of the Association's electric distribution system that is designated by the Association's engineers as a main feeder. This will generally be the main trunk line section(s), excluding all taps, being bounded by the main feeder recloser at the distribution substation and either the end of the distribution feeder or a normally-open tie with an adjacent feeder. In limited cases, a feeder may proceed one or two miles out from the substation before separating into two principal branches with loads more or less equally divided between them and each continuing onwards to the end of the line or to normally-open ties with adjacent feeders. These principal branches may both be designated as mainlines if the Association's engineers designate them as such. Mainlines typically carry a higher order of precedence during outage restoration, as they feed more customers and also restore operational flexibility to the Association's distribution system. In many cases, mainlines are capable of emergency backfeeding during the off-season parts of the year. In no case shall any feeder have more than two designated mainlines.

v. Interconnection Agreement: The agreement between the interconnection customer and the Association which establishes the terms and conditions under which the interconnection customer is permitted to interconnect a Generating Resource to the Association's electric system and operate it in conjunction therewith. For an interconnection under the Association's Level 1 Process, contained in Part C of this GIP, the Interconnection Application form is consolidated with the terms and conditions and so becomes the Interconnection Agreement upon the Association's approval of the interconnection and execution of the form. For interconnections following the Association's other interconnection processes, or where the Level 1 Process requires supplemental review or facilities changes to the Association's electric system at the interconnection customer's expense, the Interconnection Agreement will consist of the fully executed Agreement for Interconnection of Distributed Generation document together with all appendices, addendums, exhibits, and amendments contained therein or made thereto. This document will generally follow the format posted on the Association's website in accordance with paragraph A(6) of this GIP as an example form of agreement, but may be modified for each individual interconnection in accordance with the particular requirements and characteristics of that interconnection.

(4) Applicability

This GIP is applicable to all Generating Resources interconnecting to and operating in parallel with the Association's subtransmission or distribution systems at any voltage. Voltages available for Generator Interconnection service are the same as voltages available for electric services as defined in I. Rules and Regulations, Part B. Delivery and Consumers' Facilities, Section (2) Standard Voltages and Frequency. This GIP is applicable whether the Generating Resource is a synchronous machine, an induction machine, or an inverter-based resource and whether the Generating Resource is intended to connect under net metering service (as defined in I. Rules and Regulations, Part L. Net Metering), medium distributed generation metering (as defined in I. Rules and Regulations, Part M. Medium Distributed Generation Metering), non-exporting electric service with or without standby service, or wheeling service for delivery and sale to another entity outside the Association's certificated service territory. The installation of

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standby generators is covered in I. Rules and Regulations, Part B. Delivery and Consumers' Facilities, Section 6. Standby Generator Installation.

(5) Availability
Subject to the terms of this GIP, Generator Interconnection service is available as follows:

i. Net Metering Generator Interconnection service is available to DERs under the terms and conditions defined in I. Rules and Regulations, Part L. Net Metering on any service location normally connected through a wholesale delivery point from the Association's power provider where that delivery point's minimum load, with the anticipated maximum output of the proposed DER deducted, does not fall below the greater of:
(a) 50 kW, or
(b) 10% of the combined capacity ratings of all Generating Resources connected through that same wholesale delivery point, with wheeling and non-exporting services excluded.

ii. Wheeling Generator Interconnection service, whether the total output of the Generating Resource is wheeled to an outside entity or only the output above the connected service location's consumption is wheeled, is available on any service location, provided that a power purchase agreement is kept continuously in effect between the owner of the Generating Resource and a purchaser of the generator output.

iii. Non-exporting Generator Interconnection service is available on any service location, provided that protection is installed to trip the Generating Resource off-line if the instantaneous metered demand at that service location drops below 0 kW, and provided that any generating resources larger than the threshold defined in Rate 61 - Standby and Reserve Power Service be continuously served under Rate 61.

iv. Medium Distributed Generation Interconnection service is available under the terms and conditions of I. Rules and Regulations, Part M. Medium Distributed Generation Metering as approved on an individual basis by the Association's Board of Directors, provided that any generating resources larger than the threshold defined in Rate 61 - Standby and Reserve Power Service be continuously served under Rate 61 or be covered under a power purchase or other operating or dispatching agreement with the Association.

(6) Additional Information

i. The Association will also publish on its website, on the same page as this GIP, blank copies of all forms which may be required for an interconnection application (hereinafter "Interconnection Application") as it goes through the application process. Each form will be available in a separate file.

iii. Questions regarding this GIP or regarding interconnections in general may be asked of the Association's Director of Member Services or System Engineers. These personnel may be reached by phone at (970) 345-2291 or by email at interconnections@ywelectric.coop. In order to ensure the timeliest response, all electronic correspondence should always include the interconnections@ywelectric.coop email account so that the message is sent to all relevant personnel in case the one person that a particular party may have been working with is not available at that time.

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(7) Enforcement of Generator Interconnection Procedure
Any service location with an applicable interconnected Generator operating in violation of this GIP or Interconnection Agreement may be disconnected by the Association. Disconnections under this section shall be carried out in accordance with the Association's applicable procedures.

(8) Types of Interconnections
Interconnection applications will be processed pursuant to one of three levels based on the

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characteristics of the Generating Resource:

i. Level 1 Interconnection Process—GIP Part C
   (a) Inverter-based Generating Resources up to 25 kW AC.
   (b) May be paired with a non-exporting energy storage system no larger than 25 kW AC.

ii. Level 2 Interconnection Process—GIP Part D
   (a) Generating Resources generally up to 2 MW AC, but up to 3 MW in certain cases, as defined in Part D herein.
   (b) Interconnections that failed the screens of the Level 1 Interconnection Process (as set forth in Part C (2)(vi)(a) herein) .

iii. Level 3 Interconnection Process—GIP Part E
   (a) Any interconnection not meeting the requirements of the Level 1 or Level 2 Interconnection Processes.
   (b) Interconnections that failed the screens and supplemental review analyses of the Level 2 Interconnection Process.

The capacity of an interconnection shall be equal to the size of the generating resource and shall be determined by the nameplate rating of the most constraining element of the Generating Resource. For photovoltaic solar generating systems, this shall be either the nameplate rating of the inverter (or the sum of the nameplate ratings of the inverters, if multiple inverters are grouped together) or the sum of the nameplate ratings of the solar panels, whichever is smaller. For an inverter-connected wind generating system, this shall be either the nameplate rating of the inverter or the nameplate rating of the generator, whichever is smaller. For induction or synchronous machines, this shall be the nameplate rating of the generator.

(9) Engineering and Planning Practices for Interconnection Processes
The following Engineering and System Planning data, as used in this GIP, will be determined according to the following procedures and analysis:

i. Generating Resource Capacity: This is the maximum power capacity, in kilowatts, that a proposed Generating Resource can deliver into the Association's electric power system averaged over a period of fifteen minutes. This capacity shall be equal to the most constraining element of the Generating Resource. For inverter-connected Generators, this is generally the nameplate capacity of the inverter, though some photovoltaic solar Generating Resources may be limited by the combined ratings of the solar panels used. For example, if a proposed solar Generating Resource consists of a total of 12 kW of solar panels connected through a 10 kW inverter, then the capacity of this Generating Resource is 10 kW. If that same 12 kW set of solar panels were to be connected through a 15 kW inverter, the Generating Resource capacity would be 12 kW. A Generating Resource may also be capacity-limited by settings in a protective relay that is connected to its control equipment with the capability of throttling or shutting down the Generating Resource if the generating limit is exceeded.

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ii. Capacity of the Association's system: The Association's distribution and subtransmission systems do not carry specific fixed capacity ratings. Due to the long distances over which electric power must be transmitted, the manufacturer's nameplate rating on any given piece of equipment situated on the Association's electric system is not necessarily the limiting factor in how much electricity can be reliably transferred from the wholesale delivery points at which the Association purchases power from its wholesale power provider to the Association's service locations where the consumers purchase power from the

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Association. The adequacy of the Association's electric system is not determined by any particular circuit element's conduction of less than a pre-determined rated capacity, but rather by the overall ability of the system to serve known loads while maintaining voltage levels within the Association's acceptable criteria and without causing the operation of any protection devices. This adequacy is determined by a study process, normally conducted system-wide every few years, but occasionally also performed on a smaller basis from time to time. Therefore, for the purposes of this GIP, the rated capacity of each circuit element of the Association's distribution and subtransmission systems will be obtained as follows:

(a) The peak load of each distribution feeder shall be the highest fifteen-minute average demand as measured and recorded by the profiling meter installed on that feeder at the Association's substation (if available) or the load snapshot value on that feeder as captured by the Association's SCADA system that most closely approximates the highest fifteen-minute average demand. Values that occurred during abnormal switching configurations or that are known to be invalid are excluded from this calculation.

(b) The peak load of each substation shall be the highest fifteen-minute average demand as measured and recorded by the profiling meter installed on the main distribution bus at that substation (if available) or by the Association's SCADA system.

(c) The peak load of the Association's electric system shall be the billing average demand as stored in the meter data management system of the Association's wholesale power provider.

(d) The load of each service location shall be the fifteen-minute average demand (if available) or the sixty-minute average demand as metered and stored in the Association's meter data management system coincident to the peak load of the distribution feeder or substation serving that delivery point or coincident to the peak load of the Association's electric system, whichever is most reasonably available for study purposes.

(e) Once the loads for each service location have been imported into the Association's electric system engineering model, the resulting load on each distribution feeder or substation may be increased by scaling up the total service location loads to the maximum historic load level for each substation or feeder. If the study is being performed for the proposed addition of any new loads or for any load switches between adjacent feeders, these system changes will also be added into the engineering model at this point.

(f) The Association's engineers will then determine all improvements required to allow the system to adequately serve these finalized service location loads consistent with the Association's system design criteria and with the most current Economic Conductor Analysis.

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(g) When this final recommended system design is determined, consisting of all necessary system improvements and meeting the Association's voltage and protection criteria for all service locations, the modeled demand served through each overhead, underground, protective device, and voltage regulator element on the Association's electric system shall become the rated capacity of that element. This capacity shall be retained and used until the affected portion of the system is studied again as described above. The capacity of each element shall be contingent upon all planned improvements on facilities connected to the same substation having been constructed.

iii. Sectionalizing Equipment Directional Operating Capability: The Association's distribution and subtransmission systems are designed to operate radially and

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without energy sources other than at the substations that serve each distribution or transmission line. Due to the substantial cost difference between simple sectionalizing equipment without directional operating capabilities and digital sectionalizing equipment that also has directional operating capabilities, the vast majority of the Association's protective sectionalizing equipment is and will continue to be designed and installed utilizing simple, non-directional equipment. There are limited locations on the Association's distribution system where advanced protective equipment with better fault coordination capabilities and/or additional ground-fault sensing capabilities are needed. In these cases, the Association's routine planning processes will prioritize the replacement of existing simple equipment with advanced protective equipment as the Association is able to handle this expense. Other locations where reverse power flow exceed the capabilities of simple sectionalizing devices to operate correctly will require device upgrades, with that cost being borne by the interconnecting customers necessitating the advanced protective system.

iv. Voltage Regulating Equipment Directional Operating Capability: The Association's distribution system is designed to operate radially and without energy sources other than at the substations that serve each distribution or transmission line. Voltage regulation that correctly accommodates bidirectional power flow, particularly from cogeneration sources and not just from backfed lines, is a fairly recent development. As such, much of the Association's voltage regulating equipment cannot tolerate reverse power flow without causing quality-of-service problems to facilities downline of the voltage regulators. New voltage regulators being procured by the Association have bidirectional power flow capabilities, but most of the Association's existing voltage regulators do not have this capability and cannot be upgraded to have it, yet this equipment has a great deal of serviceable life remaining. Locations where reverse power flow would impact a voltage regulator that does not currently have the bidirectional power flow capability will require equipment upgrades, with that cost being borne by the interconnecting customers necessitating the bidirectional-capable voltage regulation.

v. Daytime Minimum Loading: For the evaluation of solar DER interconnections, the daytime minimum loading on each feeder is calculated by finding the lowest 15-minute average demand as measured and recorded by the profiling meter installed on that feeder at the Association's substation (if available) or the lowest load snapshot value on that feeder as captured by the Association's SCADA system where the end-of-interval time or the snapshot time occurs two or more hours after the calculated sunrise time for that day and two or more hours before the calculated sunset time for that day. Values that occur during abnormal switching configurations, that are known to be invalid, or that correspond to outages are excluded from this calculation. The sunrise and sunset times are calculated at 40.0°N, 102.8°W, which is the approximate geographic center of the Association's service territory.

vi. Line Section Data: All generation capacities, and maximum and minimum loads for a line section, as defined in the PUC regulations for interconnections, shall be determined by first calculating these values for the feeder serving that line section and then multiplying these values by the ratio of the line section's peak load to the feeder's peak load, both as calculated within the Association's electric system model.

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(10) General Application Requirements
In addition to any requirements specific to each type of Interconnection Application, the following requirements apply to all applications made to the Association:

i. Interconnections require an agreement between the Association and its customer of record at a particular service location, as there is no particular business arrangement between the Association and any Generating Resource installer, designer, or reseller. Therefore, the customer of record for that location must execute all applications and agreements. The interconnection customer or a duly authorized power of attorney agent with contractual capacity must sign all Pre-

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Application Interconnection Data Request forms, Interconnection Applications, and Interconnection Agreements in the locations noted. Signatures must be authentic as follows:

(a) Documents being submitted in hardcopy must be original documents wet-ink signed.
(b) Documents being submitted in electronic form must be digitally signed in a manner approved by the Association.

ii. Payments for Pre-Application Interconnection Data Request forms and for Interconnection Applications must be received together with the respective request or application form before the request or application will be considered to have been received. Payments may be made by the interconnection customer or by their installer, designer, or reseller as follows:

(a) Payment may be made in person at the Association's headquarters and must be identified as being for an interconnection process.
(b) Payment may be mailed to the Association's regular mailing address and must be clearly marked on the outside of the envelope and on the check or money order as being for an interconnection process.
(c) Payment may be made electronically through a miscellaneous receivables account, billed out at the paying party's request. If payment is made electronically in this manner, the interconnection customer must notify the Association via email to interconnections@ywelectric.coop. Data Requests and Interconnection Applications are not complete until notice of payment is received.

iii. Other parties that the interconnection customer authorizes the Association to interact with and release data to pertaining to their electric service account must be identified on the Pre-Application Interconnection Data Request form and the Interconnection Application. Consistent with its consumer privacy practices, the Association will not discuss customer premises, services, or usage with third parties without that third party being identified in a document from the Association's customer. This includes engineering firms, designers, installers, and system resellers.

iv. All Interconnection Applications must be accompanied by a site plan showing any buildings on the premises, the Association's meters (and transformer, if not at the same location as the service meter), the Generator, any inverters or other control equipment, any batteries or other energy storage equipment, and the disconnect switches and circuit breaker panels feeding the Generating Resource. All Interconnection Applications must also include a circuit schematic showing the Association's transformer and meters, all disconnect switches and circuit breakers feeding the Generating Resource, at least a block representation of the loads connected to the service, any inverters, and any batteries or energy storage devices. Some levels of Interconnection Applications may require additional drawings and/or other information to be submitted with the application.

v. All Generating Resources interconnecting and operating in parallel with the Association's electric system at any level shall be metered by one or more production meters, provided and owned by the Association, which do not also meter any connected load that can be served from the Association's electric system. In the case of any type of energy storage resource (such as batteries), the energy storage resource may only be connected downstream of the production meter if it can only be charged from the Generating Resource and not from the Association's electric system. If the energy storage resource can be charged from the Association's electric system, it must not be connected downstream of any production meter. The Association will provide, at no additional charge, a meter base (consisting of a meter socket and a wiring enclosure) to be installed by the interconnecting customer in conjunction with the Generating Resource. The production meter base will be Form 2S with no breaker, Form 9S with test switches, Form 12S with no breaker, or Form 16S with no breaker, depending upon the circuit configuration feeding the Generating Resource. The Association-provided meter base is required to be

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used for the production meter, and the Association retains ownership of this meter base and the same ongoing maintenance and replacement responsibilities for it as for the meter bases used for service metering. The source or incoming terminals of the meter shall be connected to wires leading towards the Association's electric system, and the load or outgoing terminals of the meter shall be connected to wires leading towards the Generating Resource. If instrument transformers are required for the production meter, they will also be provided and owned by the Association, but shall be installed by the interconnecting customer in conjunction with the Generating Resource installation. Once the interconnection is finalized, inspected, approved, and commissioned, the Association will install all production meters required for the interconnection, the production meter bases will be sealed, and the customer will not have access to the inside of these enclosures.

vi. All Generating Resources interconnecting and operating in parallel with the Association's electric system at any level shall be equipped with one or more padlockable disconnect switches with means of providing a visual open air gap in the electrical circuit feeding the Generating Resource. This disconnect switch must be accessible by the Association at all times without prior notice. This switch will be used as the Association's lockout-tagout point whenever necessary for the Association's performance of maintenance or repairs on its electric system.

vii. Commissioning tests of the Generating Resource shall be performed pursuant to applicable codes and standards including IEEE Standard 1547.1-2020. The Association must be given at least five business days' notice via email or mail of such tests and may be present to witness the commissioning tests at its sole discretion. If the Association witnesses the commissioning tests on any Level 2 or Level 3 Interconnection, the interconnection customer shall reimburse the Association for all labor, overhead, and transportation costs associated therewith. The IC shall perform a safety test, in the presence of an Association representative, that ensures that the Generating Resource ceases to energize the Association's electric system when power is interrupted. No final operating approval will be issued for any interconnection until this test has been witnessed by the Association. Within three business days of the Association witnessing the successful completion of commissioning and safety tests, the Association shall sign and return the certificate of completion (hereinafter the "Certificate of Completion") to the interconnection customer and all designated contacts, which serves as final operational approval.

viii. Reverse Power Flow Capacity: The Association is not a transmission provider, does not purchase or offer ancillary services (including but not limited to scheduling, system control and dispatch service, reactive supply and voltage control, regulation and frequency response service, energy imbalance service, spinning or supplemental operating reserve, or generator imbalance service), and does not secure energy and transmission service to serve the electrical demand and energy requirements of its end-use customers. As a result, the Association is not equipped to backfeed any wholesale electric service delivery point, and the Association does not have the ability to use any transmission facilities upstream of its distribution and subtransmission systems. No interconnection may be authorized that would cause reverse power flow through any wholesale electric service delivery point unless the Generating Resource(s) causing such reverse power flow have their own transmission service in place through a power purchase or wheeling arrangement with a transmission provider and/or another purchasing entity. If sufficient load is not present at all times to offset the Generating Resources connected to any of the Association's wholesale electric service delivery points and receiving Net Metering Generator Interconnection service or Medium Distributed Generation Interconnection service, then those Generating Resources may be required to convert to Wheeling Generator Interconnection service or Non-exporting Generator Interconnection service.

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ix. All interconnected Generating Resources shall be designed and operated to

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maintain a combined load and generation power factor at the Point of Delivery within the range of 0.95 leading to 0.95 lagging.

x. The Association will notify the Interconnection Customer as soon as practicable if operation of the Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Generating Facility could cause damage to the Association's subtransmission or distribution system or affected systems. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect, the Association may disconnect the Generating Facility in accordance with the procedures contained in I. Rules and Regulations, Part C. Beginning and Ending Service (Cash Deposits), Section 6. Disconnection for Cause.

xi. Any modification to the Generating Resource data or equipment configuration or to the interconnection site that is a material modification may be deemed to be a withdrawal of the interconnection request and may require submission of a new interconnection request. However, the Association shall not require a new interconnection request for minor modifications to Generating Resource data, to equipment configuration, or to the interconnection site, or when such changes were made at the Association's advice or request.

(11) Short-Term Limitations of Service to Interconnected Generating Resources
The following conditions may from time to time limit the Association's ability to provide interconnection service to Generating Resources normally interconnected to the Association's system. In these instances, the Association may take the prescribed actions below.

i. Operation during Contingency, Disturbances, Major Maintenance or Emergency: The Association, in its sole judgment may interrupt interconnection service during contingencies, system disturbances, or emergency conditions on its subtransmission and distribution systems. Emergency condition means a condition or situation: (1) that in the judgment of the Association is imminently likely to endanger life or property; or (2) that in the case of the Association, is imminently likely to cause a material adverse effect on the security of, or damage to its subtransmission or distribution systems or to the transmission systems of others to which the Association's subtransmission or distribution system is directly connected; (3) that, in the case of the interconnection customer, is imminently likely to cause a material adverse effect on the security of, or damage to, the Generating Facility or the interconnection customer's interconnection facilities. The Association or any of the transmission providers that the Association's system is connected to may, at their sole judgment during system disturbances and power outages, temporarily reconfigure transmission or distribution lines to restore service to the affected customers. This may necessitate the interruption of interconnection service for Generating Resources in the area of the reconfigured facilities. Interconnection service will be restored or reconfigured to a normal operating state as soon as reasonably practicable following removal of contingency, disturbance, or emergency conditions and restoration of a normal operating state in the affected transmission or distribution lines. There shall be no liability on the part of the Association to any party for interconnection services so interrupted.

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The interconnection customer shall notify the Association promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the Association's subtransmission or distribution system or any affected systems. To the extent information is known, the notification shall describe the emergency condition, the extent of the damage or deficiency, the expected effect on the operation of both parties' facilities and operations, its anticipated duration, and the necessary corrective action.

ii. Routine Maintenance, Construction, and Repair: The Association may interrupt

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interconnection service or curtail the output of the generating facility and temporarily disconnect the generating facility from the Association's subtransmission or distribution system when necessary for routine maintenance, construction, and repairs on the Association's subtransmission or distribution system.

iii. Forced Outages: During any forced outage, the Association may suspend interconnection service to effect immediate repairs on its subtransmission or distribution system.

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B. PRE-APPLICATION INTERCONNECTION DATA REQUESTS:

(1) Informal Pre-Application Requests
Informal Pre-Application Requests may be made to the Association, but the responses for these will be limited to whether or not the Association has any facilities at the particular location being asked about, whether these facilities are at single-phase or three-phase secondary, single-phase or three-phase primary distribution, or transmission voltages, and, if known, what other entities own electric facilities at that same location. Operating characteristics, study results, and system properties and capabilities are nonpublic in nature and are kept confidential to protect the security of the Association's electric system as well as the electric systems of the transmission providers in the area.

(2) Formal Pre-Application Interconnection Data Requests
The Association recommends that all prospective interconnection customers complete a formal Pre-Application Interconnection Data Request prior to submitting an Interconnection Application and especially before purchasing or contracting to purchase and install any Generating Resource equipment. The Pre-Application Interconnection Data report includes information necessary for the customer or their designer to do a quick check of the feasibility of installing a Generating Resource at the proposed location, which can save considerable cost and effort if it is learned early in the design process that a specific location will not accommodate the proposed Generating Resource without significant and costly improvements to the Association's electric system, the cost of which typically makes small interconnections infeasible. Formal Pre-Application Interconnection Data Requests may be made to the Association as follows:

i. Parts 1, 4, and 5 of the Pre-Application Interconnection Data Request Form shall be completed. If applicable to the project, Parts 2 and/or 3 shall also be completed. If additional parties are participating in the proposed interconnection and the Association is authorized to correspond with them, additional sheets listing these parties and their roles in the project may be attached to the form. For proposed interconnections for Wheeling Generator Interconnection service where there is also load on-site which is not auxiliary to the Generating Resource itself, Net Metering Generator Interconnection service, Non-exporting Generator Interconnection service, or Medium Distributed Generation Interconnection service, Part 1 must be signed by the Association's customer that owns the service and consistent with the signing requirements detailed within A.(10).i of this GIP. Either the customer or one of the designated contacts from Parts 2 or 3 of the form may sign Part 5.

ii. Payment of $125 shall accompany the Pre-Application Interconnection Data Request consistent with the payment requirements detailed within A.(10).ii of this GIP. The Association's receipt of this payment is the key determinant for separating a courtesy notice that a party intends to interconnect to the Association's system from a formal Pre-Application Interconnection Data Request. If the proposed interconnection progresses to a full Interconnection Application, the amount paid for the Pre-Application Interconnection Data Request shall be deducted from the Application Fee as long as the Interconnection Application (including payment) is received by the Association no more than six months after the date of that the Pre-Application Interconnection Data Request Form was completed by the Association and returned to the customer.

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iii. Within 20 business days of the receipt of the Pre-Application Interconnection Data Request, including payment, the Association's System Engineer shall complete the Pre-Application Interconnection Data Request Form and return it to the interconnection customer and all designated contacts. This report shall contain the following data, as available, for the proposed interconnection:

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(a) Type of facilities present at the site.

(b) If the site is a service location at secondary voltage, the transformer(s)' nameplate kVA, phase, voltage, and impedance ratings as well as the connection type if the service is a polyphase account. This allows the interconnection customer or their designer to ensure that the proper voltage is available for the Generating Resource being designed.

(c) The maximum fault current available at the site. This allows the interconnection customer or their designer to properly design the Generating Resource within the harmonics control requirements of IEEE Standard 519.

(d) The Association's identifier, the capacity rating, and the DER capacity for the substation feeding the site, the feeder feeding the site, the nearest downline recloser feeding the site (if any), and the transformer feeding the site, if the site is a secondary service location; the statutory limit for net metering for the type of account at the site; and the existing DER capacities already connected to and currently queued for the substation, feeder, Line section, and transformer serving the site. This information gives the interconnection customer and their designer some insight into the capabilities of the Association's electric system at that location as well as a better idea of the ease or difficulty of interconnecting the Generating Resource.

(e) If the proposed Generating Resource is to be interconnected under Net Metering Generator Interconnection service, a 120%-rule compliance analysis consisting of the site's three-year average annual energy consumption, the average capacity factor of all like-designed DERs (these are separated into three categories: ground-mounted solar, roof-mounted solar, and wind) interconnected to the Association's electric system, the estimated annual energy production for the proposed DER based on the specified DER size and the previously-determined capacity factor, and whether or not this estimated production is less than 120% of the site's average annual energy consumption. This allows the interconnection customer or their designer to determine if the proposed DER is actually eligible for net metering.

(f) The distance from the site to the substation that feeds it, given in miles of electric power lines. This also helps the interconnection customer or their designer determine the "strength" of the Association's electric system at the site, as locations that are fed through more miles of line tend to be weaker and less resilient than sites that are very near the substation.

(g) The peak load, minimum daytime load, absolute minimum load, off-season peak load, the ratio of the peak load to the off-season peak load for the line section serving the site, and whether or not this line section is Highly Seasonal. This information gives the interconnection customer and their designer a better understanding of potential reverse power flow problems that could arise as a result of the proposed interconnection.

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(h) The maximum current or kVA rating and the directional operating capability of all protective devices and voltage regulating devices situated between the substation (including the feeder recloser and the main voltage regulation located at the substation) and the site. This information gives the interconnection customer and their designer a better understanding of potential reverse power flow problems that could arise as a result of the proposed interconnection, particularly through voltage regulation equipment.

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(i) The connection characteristics of the electric facilities present at the site. If the facilities are not owned by the Association, almost none of the preceding information will be available. As with the informal Pre-Application Requests, the owners and voltages of such other facilities will be provided if the Association knows this information. Contact information for such other entities will also be given if it is known to the Association.

(j) Any other known constraints that the System Engineer feels could or are likely to impact the Association's ability to interconnect with the proposed Generating Resource while still retaining the ability to provide safe, reliable, and adequate power supply to the interconnection customer and their neighbors.

Some of the data above may not be applicable to some locations, depending on the facilities present at that site and on the type of Generating Resource being proposed, and some of the data above may not be available. In particular, system capacity ratings have not been established or maintained previous to this GIP's adoption in 2022, and it may take some time for the Association to generate these values. As the Association establishes these ratings, they will be provided on Pre-Application Interconnection Data reports.

iii. For the purposes of completing Part 4 of the Pre-Application Interconnection Data Request Form, the Proposed Generator Size should be as determined in A.(9).i of this GIP. Specifically for solar DERs, this should be the minimum of: the inverter's nameplate continuous power rating, or the sum of the nameplate power ratings of the connected solar panels.

iv. No more than ten business days after the date the System Engineer returns the report to the interconnection customer, all location and customer information will be redacted from the report in order to protect the customer's confidentiality and the Association's system security and the report will be posted on the Association's website.

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C. LEVEL 1 INTERCONNECTION PROCESS—INVERTER RESOURCES UP TO 25 kW:

(1) Introduction

Inverter-based Generating Resources that are UL 1741 certified and that are up to 25 kW in size are generally straightforward to integrate into the Association's distribution system, which simplifies the analysis required to determine any potential impacts on the Association's system. Because these systems will typically be net-metered, the necessity for arrangements for purchase and transport of the Generating Resource's output is generally negated. For these reasons, the Level 1 Interconnection Process essentially combines the Feasibility Study, System Impact Study, and Facilities Study that are typically performed with larger interconnection requests under the standard Level 3 Study Process. The Level 1 Interconnection Process also combines a simplified Interconnection Application and the Interconnection Agreement into one single form. Reflecting the simplified study process that these smaller interconnections necessitate, this process contains a standardized set of "screens" that determine the suitability of the Association's electric system to handle the interconnected Generating Resource.

(2) Eligibility and Process

Inverter-based Generating Resources certified to comply with UL 1741 and either UL 1741 SA or IEEE Standard 1547-2018 and not exceeding 25 kW continuous output rating are eligible to apply under the Level 1 Interconnection Process. The capacity of Generating Resources that are installed with an energy storage system shall be the sum of the Generating Resource plus the amount of power that the energy storage system is designed to be able to inject back onto the Association's electric system, which may or may not be the full output rating of the energy storage system. The application and interconnection process is as follows:

i. The Association recommends, but does not require, that the interconnection customer initially complete the Formal Pre-Application Interconnection Data Request process found in GIP Part B.

ii. The interconnection customer submits an Interconnection Application, consisting of the following:

(a) The Short-Form Interconnection Application and Agreement form, signed in accordance with Part A.(10).i of this GIP.
(b) Payment of the $750 application fee in accordance with Part A.(10).ii of this GIP. If a Formal Pre-Application Interconnection Data Request was paid for and completed within six months of the date that the Application is received by the Association, the application fee is reduced to $625. If the interconnection customer intends to pay electronically, they may request an electronic miscellaneous receivables invoice be sent prior to submission of the application.
(c) The site plan and circuit schematic drawings as specified in Part A.(10).4 of this GIP.
(d) Manufacturer's cut sheets clearly showing what OSHA Nationally Recognized Testing Laboratory certified the Generating Resource equipment, specifically the inverter and any backup interface module used with an energy storage system. See Part 4 of the Short-Form Interconnection Application and Agreement for additional information.

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iii. Upon receipt of an electronic Application by the Association, the Application and all additional supporting documents will be printed. When the Application together with payment have both been received, regardless of the method either was submitted, the Application will be date and time stamped. This stamp denotes that time that a bona fide Application was received by the Association.

iv. Within three business days of the date and time of receipt of the Application, the Association will notify the interconnection customer and all listed contacts that the application has been received.

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v. Within ten business days of the date and time of receipt of the Application, the Association will evaluate the Application for completeness. and notify the interconnection customer and all listed contacts either that the application was complete or that the application was incomplete and what additional information is required to make the application complete. These evaluations will be performed in the order in which the Applications were received, according to the applied received stamp.

(a) Within ten business days of receipt of the notice that the Application is incomplete, the interconnection customer must either provide the missing information or request a time extension. If neither occurs before ten days, or if an extension is requested and the information still is not provided by the time the extension expires, the Application is deemed to have been withdrawn. The Association will hold the project for that Application open for one year from the withdrawal date and the interconnection customer may reapply within that time without paying an additional application fee, other than the $125 credit for the Pre-Application Interconnection Data Request must be paid if this credit was received and more than six months elapses between the Pre-Application Interconnection Data report date and the reapplication date.

(b) When the Application is deemed to be complete, it shall be date and time stamped and entered into the interconnection queue. Interconnection Applications will be processed by the Association in the order in which they entered the queue. Each substation shall have its own queue.

vi. Within ten business days of the Application completion date, the Association will perform Level 1 screening process as follows:

(a) All Applications will be analyzed against the following basic screens:

1. The proposed Generating Resource's point of interconnection must be on a portion of the Association's electric system that is subject to the tariffs. If the proposed point of interconnection is on a Highly Seasonal Circuit, the Application must also be evaluated under the Supplemental Review screens in addition to the rest of the basic Level 1 screens.
2. For interconnection of a proposed Generating Resource on a radial distribution circuit, the aggregated generation capacity of all Generating Resources including the proposed resource connected to the same circuit shall not exceed 15 percent of the circuit's annual peak load, and the aggregated generation capacity of all Generating Resources including the proposed resource connected to the same line section shall not exceed 15% of the line section's annual peak load.
3. The aggregated fault current contributions of all Generating Resources, including the proposed resource, on the distribution circuit feeding the proposed point of interconnection must not exceed 10% of the system's fault current level at the primary voltage point nearest the point of interconnection.
4. The aggregated fault current contributions of all Generating Resources, including the proposed resource, on the distribution circuit feeding the proposed point of interconnection plus the system fault current of the same circuit must not cause any of the Association's protective devices installed on that same circuit to exceed 87.5% of the device's short circuit interrupting rating, nor shall any Generating Resource be proposed on a circuit where the maximum fault current already exceeds 87.5% of any device's short circuit interrupting rating.
5. If the proposed Generating Resource is to be interconnected on a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed resource, shall not exceed 25 kW.
6. If the proposed Generating Resource is single-phase and is to be interconnected on a center-tapped neutral of a 240 VAC service, its

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addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.

7. No construction of facilities by the utility on its own system shall be required to accommodate the proposed Generating Resource.
8. The nameplate capacity of a proposed Generating Resource, in combination with the nameplate capacity of any previously interconnected Generating Resource, shall not exceed the capacity of the customer's existing electrical service unless there is a simultaneous request for a service upgrade under the terms and provisions of the Association's normal Line Extension Policy.

(b) If the Application passes all of the screens, unless the Generating Resource cannot be safely and reliably interconnected without upgrades to the Association's electric system, the Association shall approve and execute the Application, which also becomes the Interconnection Agreement, and return it to the customer and all designated contacts within ten business days of such determination. Upon the recommendation of the System Engineer completing the screening analysis for approval of the Application, the Association's General Manager is designated as the primary person authorized to execute the Application. In the absence of the General Manager, the System Engineer may make this recommendation to the Operations Manager, the Office Manager, or the Manager of Information Technology, who are authorized as backup persons to execute the Application.

(c) If the Application fails any of the screens, or if Screen 1 indicates that the Application must also be evaluated under the Supplemental Review screens, or if the Association otherwise demonstrates that the proposed Generating Resource cannot be safely and reliably interconnected without upgrades to the Association's electric system, the Association shall inform the interconnection customer and all designated contacts of such results in writing, provide detailed information on the reason for the failure, and invite the customer to a customer options meeting to be held within 10 days of the Association's determination. The Association shall then prepare a non-binding good faith estimate of the cost required to analyze the Supplemental Review screens. If the Association determines from its initial review that minor modifications such as changing meters, fuses, transformers, voltage regulators, reclosers, or relay or regulator settings can remedy the failure at minimal cost, the Association shall also prepare a non-binding good faith estimate of the costs to perform this work. If the customer elects to attend a customer options meeting, the Association shall present these options together with the options of continuing under the Level 3 Study Process or withdrawing the application. If the customer elects not to attend a customer options meeting, then the Association shall present these same options in writing to the customer and all designated contacts. The interconnection customer shall notify the Association of their decision within 15 business days of the meeting, or, if the customer does not attend the meeting, receipt of the written notice of options, or the Application shall be deemed to have been withdrawn.

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(d) If the interconnection customer elects to accept the Association's offer for a supplemental review, the customer shall sign the Association's estimate and return it to the Association together with a deposit in the amount of the estimate. At that same time, the customer may also specify the order in which the Association will analyze the Supplemental Review screens. If the customer does not specify a particular order, then the screens shall be evaluated in the order described below. The interconnection customer shall be responsible for the Association's actual costs in analyzing the Supplemental Review screens and shall pay any invoiced amount for such charges that may exceed the estimate within 20 business days of the invoice without interest. The Supplemental Review screens shall be analyzed by the Association within 30 business days of the customer's acceptance and are as follows:

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1. The proposed Generating Resource capacity shall be less than 100% of the daytime minimum load (for solar Generating Resources without associated energy storage systems) or the absolute minimum load (for all other Generating Resources) of the line section and circuit feeding the proposed Generating Resource, except that reverse power flow of a substation, circuit, or line section will be allowed under the following conditions:
   A. No substation that is a wholesale power delivery point shall experience reverse power flow at any time.
   B. Voltage Regulation on distribution lines that are capable of being backfed from an alternate source during some part of the year may experience reverse power flow if the regulator(s) is/ are capable of operating in Bias Co-generation Mode regulation.
   C. Voltage Regulation on distribution lines that are not capable of being backfed from any alternate source or in substations may experience reverse power flow if the regulator(s) is/ are capable of operating in Co-generation Mode regulation.
   D. The aggregate fault current contribution of all Generating Resources, including the proposed resource, does not exceed 5% of the system minimum fault current seen by any ground-fault -sensing recloser or circuit breaker located between the proposed Generating Resource and the high side of the associated substation. The system minimum fault current shall be calculated as the system fault current, with all Generating Resources disconnected, present at each ground-fault-sensing recloser in question with the Association's engineering standard 40Ω single line-to-ground fault impedance placed at the last line segment before either the end of the line or the next downline ground-fault-sensing recloser.
   E. The aggregate fault current contribution of all Generating Resources, including the proposed resource, does not exceed 10% of the continuous current rating of all hydraulic reclosers located between the proposed Generating Resource and the associated substation.
   F. The aggregate fault current contribution of all Generating Resources, including the proposed resource, does not exceed 15% of the minimum trip setting on any electronically-controlled recloser or circuit breaker located between the proposed Generating Resource and the high side of the associated substation.
2. In aggregate with any existing Generating Resources on the circuit, the voltage regulation on the substation and circuit must be maintained in compliance with the Association's standard voltage criteria under all system conditions with the proposed Generating Resource added to the system, and no harmonic levels in violation of IEEE Standard 519-2014 shall occur as a result of the proposed Generating Resource's addition.
3. The location of the proposed Generating Resource and the aggregate generating capacity on that line section shall not create impacts to safety or reliability that cannot be adequately addressed without application of the Level 3 Study Process and shall not reduce the operational flexibility of the area facilities such that transfer of the line section, circuit, or substation's feed to an alternate source during any part of the year could trigger overloads or voltage issues.

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(e) If the Application fails a Supplemental Review screen under the process above, the Association shall notify the customer of such failure and extend the following options to the customer:
   1. Continue the Supplemental Review analysis with the Application as-proposed.
   2. Continue the Supplemental Review analysis assuming the implementation of any minor modifications that the Association may have identified through its screening analysis which could potentially resolve the screening failure(s), such as increases in service capacity, service transformer replacement, settings changes on Association or customer equipment, or changes in the type, size, or connection of the

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customer's proposed Generating Resource equipment. If, during the course of the analysis, the Association has identified any such minor modifications which could be made to its system, it shall also notify the customer of the estimated cost and lead time to implement such changes.

3. Terminate the Supplemental Review analysis and convert the Application to the Level 3 Study Process.
4. Withdraw the Application.

If the customer has not responded to these options within ten business days of notification from the Association, the Application shall be deemed withdrawn.

(f) If the Application passes the Supplemental Review analysis screens, or if the Association determines that the proposed Generating Resource can nevertheless be safely and reliably interconnected, or if the Association determined that minor modifications would allow the Application to pass the basic screens and the customer elected to pursue this option at the customer options meeting, the Association shall forward an executable Interconnection Agreement to the customer and all designated contacts, including a non-binding good faith estimate of the cost and lead time for any minor modifications identified during the analysis as being required for the Application to pass the screens. The executable Interconnection Agreement and estimate, if applicable, shall be forwarded to the customer and all designated contacts within five business days of this determination via Certified Mail with Return Receipt Requested. The customer shall execute and return the Agreement to the Association together with payment for any necessary improvements to the Association's electric system within 30 business days of the date they received it, as shown on the Return Receipt card. The Association shall execute and return one copy of the Interconnection Agreement to the customer within two business days of its receipt thereof. The Association's General Manager is designated as the primary person authorized to execute the Agreement. In the absence of the General Manager, the Operations Manager, the Office Manager, or the Manager of Information Technology, are authorized as backup persons to execute the Agreement.

vii. Whether the Interconnection Agreement is executed under the terms of subparagraph (b) or (f) of this part, once the Interconnection Agreement is executed and returned to the customer, the customer and their designated contacts may install the Generating Resource.

(a) After the Interconnection Agreement has been executed and returned to the customer, the customer or its Generating Resource installer may make arrangements with the System Engineers or the Director of Member Services to pick up the Production Meter base at the Association's headquarters during regular business hours.

(b) Upon the customer's request, the Association may install a meter pedestal to which the lockable visible disconnect switch may also be mounted

(c) Upon the request of the interconnection customer or one of their designated contacts, the Association shall bypass the Production Meter socket for a period of not more than 24 hours to allow for the testing and configuration of the Generating Resource's inverter(s). If the customer or their Generating Resource installer bypasses the Production Meter socket and energizes the Generating Resource without receiving the Association's advance authorization to do so, the service location shall be subject to immediate disconnection as a safety hazard under the terms of A.(7) of this GIP.

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viii. Once the Generating Resource has been installed and has been inspected by the State Electrical Inspector in accordance with applicable law, the interconnection customer or one of the designated contacts shall complete the Interconnection Customer and Sign Off Area sections of the Certificate of Completion and forward the signed document to the Association. The Certificate of Completion must be received by the Association within one year of the date that the

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Interconnection Agreement was fully-executed or the Application shall be deemed to have been withdrawn and the Interconnection Agreement shall expire. Before the expiration of this one-year time period, the customer may request a time extension. The Association will review any such requests and may allow such an extension if no additional Interconnection Applications have been filed which are or could be affected by the DER capacity being held in reserve for the customer and if, at the Association's sole discretion, the operating conditions of its electric system have not substantially changed since the original evaluation was completed. The Association shall notify the customer and all designated contacts in writing of its approval or rejection of any time extension requests.

ix. Notwithstanding the Association's right to observe Commissioning Tests as specified in Part A.(10).vii of this GIP, within ten days of its receipt of both the Certificate of Completion from the customer or one of its designated contacts and the meter release from the State Electrical Inspector, the Association shall schedule an inspection and safety test of the Generating Resource along with the installation of the Production Meter and replacement of the service meter with a Master Meter. The safety test and metering changes will generally be carried out in the following manner:

(a) The Association will briefly examine the Generating Resource and ascertain the locations of the inverter, disconnect switch, Production Meter, and any circuit breaker(s) feeding the Generating Resource, and will ensure it has no objections to the safety of the installation.
(b) The Association will ensure that the Production Meter socket appears to be wired correctly, in particular so that power flows the correct direction through the meter as specified in A.(10).v of this GIP.
(c) The Association will install the Production Meter in its socket.
(d) The customer or one of the designated contacts will power up the Generating Resource. At the customer's request, the Association may perform this step if it requires no action further than closing a disconnect switch or turning on a power switch on an inverter and/or interface panel.
(e) After the Generating Resource begins producing electricity, the Association will interrupt power to the service location. This will allow the Association's personnel to both replace the service meter with the new master meter and to verify that the Generating Resource stops energizing the load side of the master meter socket. This tests the anti-islanding capability of the Generating Resource and verifies that it will safely cease energizing the Association's facilities in the case of an outage.
(f) The Association will re-energize the service and wait for the Generating Resource to begin producing electricity again.

x. If any part of the inspection and test in subpart ix. above fails, the Association will notify the customer and all designated contacts within two business days of such failure. The customer and their designated contacts shall remediate any failures of this test and notify the Association of such remediation in writing within 30 business days of receipt of the notice of failure. Subpart ix. above will then be repeated.

xi. Upon successful completion of the inspection and test in subpart ix. above, the Association will sign and return the Certificate of Completion to the customer and all designated contacts, which formally indicates completion of the Interconnection Process, approval of the installation, and authorization to operate. Upon the recommendation of the System Engineer witnessing the successful testing in subpart ix. above, the Association's General Manager is designated as the primary person authorized to execute the Certificate of Completion. In the absence of the General Manager, the System Engineer may make this recommendation to the Operations Manager, the Office Manager, or the Manager of Information Technology, who are authorized as backup persons to execute the Certificate of Completion. The fully-signed Certificate of Completion shall be returned to the customer within three business days of the successful completion of subpart ix. above.

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xii. If the customer paid any deposit above and beyond the Interconnection Application fee for additional analysis or improvements to the Association's system, the Association shall refund any unused portion of such deposits within 60 business days of the return of the fully-signed Certificate of Completion. If such deposits were insufficient, the Association shall, within 60 business days of the return of the fully-signed Certificate of Completion, invoice the customer for the difference between the deposit(s) received and the actual cost of completing the additional work. The customer shall pay the amount due within 20 business days.

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D. LEVEL 2 INTERCONNECTION PROCESS—RESOURCES UP TO 2-4 MW:

(1) Introduction

Generating Resources that are up to 2-4 MW in size are, in some cases, somewhat easier to integrate into the Association's distribution system than larger commercial power production resources, which can simplify the analysis required to determine any potential impacts on the Association's system. Because these systems are not net-metered, either non-exporting protection equipment or arrangements for purchase and transport of the Generating Resource's output are generally necessary. The Level 2 Interconnection Process essentially combines the Feasibility Study, System Impact Study, and Facilities Study that are typically performed with larger interconnection requests under the standard Level 3 Study Process. This process also includes a standardized set of "screens" that determine the suitability of the Association's electric system to handle the interconnected Generating Resource, though these screens are somewhat more in-depth than those used with the Level 1 Interconnection Process

(2) Eligibility and Process

Any Generating Resources meeting the certification requirements below and not exceeding 2 MW continuous output rating are eligible to apply under the Level 2 Interconnection Process. Inverter-based Generating Resources certified to comply with UL 1741 and either UL 1741 SA or IEEE Standard 1547-2018, interconnecting along a Mainline within 2.5 miles of a substation, and not exceeding 4 MW continuous output rating are also eligible to apply under the Level 2 Interconnection Process. The capacity of Generating Resources that are installed with an energy storage system shall be the sum of the Generating Resource plus the amount of power that the energy storage system is designed to be able to inject back onto the Association's electric system, which may or may not be the full output rating of the energy storage system. Although the Colorado PUC mandates these size thresholds for application of the Level 2 Interconnection Process, a very small percentage of the Association's rural electric distribution system has the capability of dealing with power flow at the upper limits of the Level 2 Interconnection Process's eligibility thresholds, making it difficult for many Generating Resource at these sizes to successfully complete review under this process. Any applicants with this type of request are advised to be prepared to enter the Level 3 Study Process. The Level 2 application and interconnection process is as follows:

i. Any Generating Resource, whether induction, synchronous, or inverter-based, interconnecting under the Level 2 Interconnection Process must be certified under the following codes and standards:
   (a) ANSI C84.1-2016 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)
   (b) ANSI/NEMA MG 1--2016, Motors and Generators
   (c) IEEE Std 519-2014, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems
   (d) IEEE Std 1453-2015 IEEE Recommended Practice for the Analysis of Fluctuating Installation on Power Systems
   (e) IEEE Std 1547-2018, IEEE Standard for Interconnection and Interoperability of Distributed Energy Resources with Associated Electric Power Systems Interfaces
   (f) NFPA 70 (2017), National Electrical Code
   (g) UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems
   (h) UL 1741 SA, until January 1, 2022, or until such time new DERs applying for interconnection will comply with IEEE 1547-2018, IEEE Standards for Inverters, Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy Resources

ii. The Association recommends, but does not require, that the interconnection customer initially complete the Formal Pre-Application Interconnection Data

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Request process found in GIP Part B.

iii. The interconnection customer submits an Application, consisting of the following:

(a) The Application for Operation of Customer-Owned Generation form signed in in accordance with Part A.(10).i of this GIP.

(b) Payment of the $12,500 application deposit for Generating Resources up to 400 kW continuous output rating or payment of the $25,000 application deposit for Generating Resources in excess of 400 kW continuous output rating, in accordance with Part A.(10).ii of this GIP. If a Formal Pre-Application Interconnection Data Request was paid for and completed within six months of the date that the Application is received by the Association, the application fee is reduced by $125. If the interconnection customer intends to pay electronically, they may request an electronic miscellaneous receivables invoice be sent prior to submission of the application. The application deposit will be used to pay the Association's actual expenses in evaluating the Application as well as being applied toward the actual cost of the ultimate system improvements and/or metering changes and additions required on the Association's system in order to accommodate the proposed Generating Resource. If the Application does not successfully complete the Level 2 screening analysis below and the Application converts to the Level 3 Study Process, the deposit already paid here is credited against the Level 3 deposit requirement.

(c) The site plan and circuit schematic drawings as specified in Part A.(10).4 of this GIP in addition to a comprehensive set of AC 3-line drawings and control schematics (AC and DC) detailing the entire Generating Resource and all switchgear and all of their control and protection elements.

(d) Manufacturer's cut sheets clearly showing what OSHA Nationally Recognized Testing Laboratory certified the Generating Resource equipment.

(e) Demonstration of site control by one of the following means:

1. Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Resource, as demonstrated by a copy of such deed, lease, or development agreement.
2. An option to purchase or acquire a leasehold site for such purpose which may include a letter of intent, as demonstrated by a copy of such option purchase agreement or letter of intent.
3. An exclusivity or other business relationship between the interconnection customer and the entity having the right to sell, lease, or grant the interconnection customer the right to possess or occupy a site for such purpose, as demonstrated by a copy of the contract establishing such a relationship.

iv. Upon receipt of an electronic Application by the Association, the Application and all additional supporting documents will be printed. When the Application together with payment have both been received, regardless of the method either was submitted, the Application will be date and time stamped. This stamp denotes the time that a bona fide Application was received by the Association.

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v. Within three business days of the date and time of receipt of the Application, the Association will notify the interconnection customer and all listed contacts that the application has been received.

vi. Within ten business days of the date and time of receipt of the Application, the Association will evaluate the Application for completeness and notify the interconnection customer and all listed contacts either that the application was complete or that the application was incomplete and what additional information is required to make the application complete. These evaluations will be performed in the order in which the Applications were received, according to the

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applied received stamp.

(a) Within ten business days of receipt of the notice that the Application is incomplete, the interconnection customer must either provide the missing information or request a time extension. If neither occurs before ten days, or if an extension is requested and the information still is not provided by the time the extension expires, the Application is deemed to have been withdrawn. The Association will hold the project for that Application open for one year from the withdrawal date. The interconnection customer may reapply within that one-year period without paying an additional application fee; except that the $125 credit for the Pre-Application Interconnection Data Request must be paid if this credit was received and more than six months elapses between the Pre-Application Interconnection Data report date and the reapplication date.

(b) When the Application is deemed complete, it shall be date and time stamped and entered into the interconnection queue. Interconnection Applications will be processed by the Association in the order in which they entered the queue. Each substation shall have its own queue.

vii. Within 15 business days of the Application completion date, the Association will perform Level 2 screening process as follows:

(a) All Applications will be analyzed against the following basic screens. The Colorado PUC regulation regarding the Level 2 Interconnection Process includes two additional screens, one dealing with spot network protectors and the other dealing with area network protectors; however, the Association does not operate any networked facilities, so these screens are not included in this process. The Level 2 basic screens are as follows:

1. The proposed Generating Resource's point of interconnection must be on a portion of the Association's electric system that is subject to the tariffs. If the proposed point of interconnection is on a Highly Seasonal Circuit, the Application must also be evaluated under the Supplemental Review screens in addition to the rest of the basic Level 2 screens.
2. For interconnection of a proposed Generating Resource on a radial distribution circuit, the aggregated generation capacity of all Generating Resources including the proposed resource connected to the same circuit shall not exceed 15 percent of the circuit's annual peak load, and the aggregated generation capacity of all Generating Resources including the proposed resource connected to the same line section shall not exceed 15% of the line section's annual peak load.
3. The aggregated fault current contributions of all Generating Resources, including the proposed resource, on the distribution circuit feeding the proposed point of interconnection must not exceed 10% of the system's fault current level at the primary voltage point nearest the point of interconnection.
4. The aggregated fault current contributions of all Generating Resources, including the proposed resource, on the distribution circuit feeding the proposed point of interconnection plus the system fault current of the same circuit must not cause any of the Association's protective devices installed on that same circuit to exceed 87.5% of the device's short circuit interrupting rating, nor shall any Generating Resource be proposed on a circuit where the maximum fault current already exceeds 87.5% of any device's short circuit interrupting rating.
5. The proposed Generating Resource shall meet the rapid voltage change and flicker requirements of IEEE Standard 1547-2018. Note that the PUC requirements for this screen also require compliance with IEEE Standard 1453-2015. However, this standard does not contain any provisions for calculating compliance ahead of installation, but only contains provisions for measuring compliance on in-service equipment,

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so it is excluded by the Association from consideration under this screen.

6. The proposed Generating Resource must be connected line-to-neutral for a single-phase Generating Resource or for an effectively-grounded three-phase Generating Resource.
7. If the proposed Generating Resource is to be interconnected on a single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed resource, shall not exceed 25 kW.
8. If the proposed Generating Resource is single-phase and is to be interconnected on a center-tapped neutral of a 240 VAC service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of the nameplate rating of the service transformer.
9. No construction of facilities by the utility on its own system shall be required to accommodate the proposed Generating Resource.
8. The nameplate capacity of a proposed Generating Resource, in combination with the nameplate capacity of any previously interconnected Generating Resource, shall not exceed the capacity of the customer's existing electrical service unless there is a simultaneous request for a service upgrade under the terms and provisions of the Association's normal Line Extension Policy.

(b) If the Application fails any of the screens, or if Screen 1 indicates that the Application must also be evaluated under the Supplemental Review screens, or if the Association otherwise demonstrates that the proposed Generating Resource cannot be safely and reliably interconnected without upgrades to the Association's electric system, the Association shall inform the interconnection customer and all designated contacts of such results in writing, provide detailed information on the reason for the failure, and invite the customer to a customer options meeting to be held within 10 days of the Association's determination. The Association shall then prepare a non-binding good faith estimate of the cost required to analyze the Supplemental Review screens. If the Association determines from its initial review that minor modifications such as changing meters, fuses, transformers, voltage regulators, reclosers, or relay or regulator settings can remedy the failure, the Association shall also prepare a non-binding good faith estimate of the costs to perform this work. If the customer elects to attend a customer options meeting, the Association shall present these options together with the options of continuing under the Level 3 Study Process or withdrawing the application. If the customer elects not to attend a customer options meeting, then the Association shall present these same options in writing to the customer and all designated contacts. The interconnection customer shall notify the Association of their decision within 15 business days of the meeting, or, if the customer does not attend the meeting, receipt of the written notice of options, or the Application shall be deemed to have been withdrawn.

(c) If the interconnection customer elects to accept the Association's offer for a supplemental review, the customer shall sign the Association's estimate and return it to the Association together with a deposit in the amount of the estimate. At that same time, the customer may also specify the order in which the Association will analyze the Supplemental Review screens. If the customer does not specify a particular order, then the screens shall be evaluated in the order described below. The interconnection customer shall be responsible for the Association's actual costs in analyzing the Supplemental Review screens and shall pay any invoiced amount for such charges that may exceed the estimate within 20 business days of the invoice without interest. The Supplemental Review screens shall be analyzed by the Association within 30 business days of the customer's acceptance and are as follows:

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1. The proposed Generating Resource capacity shall be less than 100% of the daytime minimum load (for solar Generating Resources without associated energy storage systems) or the absolute minimum load (for all other Generating Resources) of the line section and circuit feeding the

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proposed Generating Resource, except that reverse power flow of a substation, circuit, or line section will be allowed under the following conditions:

A. No substation that is a wholesale power delivery point shall experience reverse power flow at any time.
B. Voltage Regulation on distribution lines that are capable of being backfed from an alternate source during some part of the year may experience reverse power flow if the regulator(s) is/ are capable of operating in Bias Co-generation Mode regulation.
C. Voltage Regulation on distribution lines that are not capable of being backfed from any alternate source or in substations may experience reverse power flow if the regulator(s) is/ are capable of operating in Co-generation Mode regulation.
D. The aggregate fault current contribution of all Generating Resources, including the proposed resource, does not exceed 5% of the system minimum fault current seen by any ground-fault -sensing recloser or circuit breaker located between the proposed Generating Resource and the high side of the associated substation. The system minimum fault current shall be calculated as the system fault current, with all Generating Resources disconnected, present at each ground-fault-sensing recloser in question with the Association's engineering standard 40Ω single line-to-ground fault impedance placed at the last line segment before either the end of the line or the next downline ground-fault-sensing recloser.
E. The aggregate fault current contribution of all Generating Resources, including the proposed resource, does not exceed 10% of the continuous current rating of all hydraulic reclosers located between the proposed Generating Resource and the associated substation.
F. The aggregate fault current contribution of all Generating Resources, including the proposed resource, does not exceed 15% of the minimum trip setting on any electronically-controlled recloser or circuit breaker located between the proposed Generating Resource and the high side of the associated substation.

2. In aggregate with any existing Generating Resources on the circuit, the voltage regulation on the substation and circuit must be maintained in compliance with the Association's standard voltage criteria under all system conditions with the proposed Generating Resource added to the system, and no harmonic levels in violation of IEEE Standard 519-2014 shall occur as a result of the proposed Generating Resource's addition.
3. The location of the proposed Generating Resource and the aggregate generating capacity on that line section shall not create impacts to safety or reliability that cannot be adequately addressed without application of the Level 3 Study Process and shall not reduce the operational flexibility of the area facilities such that transfer of the line section, circuit, or substation's feed to an alternate source during any part of the year could trigger overloads or voltage issues.

(d) If the Application fails a Supplemental Review screen under the process above, the Association shall notify the customer of such failure and extend the following options to the customer:

1. Continue the Supplemental Review analysis with the Application as-proposed.
2. Continue the Supplemental Review analysis assuming the implementation of any minor modifications that the Association may have identified through its screening analysis which could potentially resolve the screening failure(s), such as increases in service capacity, service transformer replacement, settings changes on Association or customer equipment, or changes in the type, size, or connection of the customer's proposed Generating Resource equipment. If, during the course of the analysis, the Association has identified any such minor modifications which could be made to its system, it shall also notify the customer of the estimated cost and lead time to implement such changes.

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3. Terminate the Supplemental Review analysis and convert the Application to the Level 3 Study Process.
4. Withdraw the Application.

If the customer has not responded to these options within ten business days of receipt of notice from the Association, the Application shall be deemed withdrawn.

(e) If the Application passes the basic or Supplemental Review analysis screens, or if the Association determines that the proposed Generating Resource can nevertheless be safely and reliably interconnected, or if the Association determined that minor modifications would allow the Application to pass the basic screens and the customer elected to pursue this option at the customer options meeting, the Association shall forward an executable Interconnection Agreement to the customer and all designated contacts, including a non-binding good faith estimate of the cost and lead time for any minor modifications identified during the analysis as being required for the Application to pass the screens. The executable Interconnection Agreement and estimate, if applicable, shall be forwarded to the customer and all designated contacts within five business days of this determination via Certified Mail with Return Receipt Requested. The customer shall execute and return the Agreement to the Association together with payment for any necessary improvements to the Association's electric system within 30 business days of the date they received it, as shown on the Return Receipt card. The Association shall execute and return one copy of the Interconnection Agreement to the customer within two business days of its receipt thereof. The Association's General Manager is designated as the primary person authorized to execute the Agreement. In the absence of the General Manager, the Operations Manager, the Office Manager, or the Manager of Information Technology, are authorized as backup persons to execute the Agreement.

viii. Once the Interconnection Agreement is executed and returned to the customer, the customer may install the Generating Resource.

(a) After the Interconnection Agreement has been executed and returned to the customer, the customer or its Generating Resource installer may make arrangements with the System Engineers or the Director of Member Services to pick up the Production Meter base(s) at the Association's headquarters during regular business hours.

(b) Upon the request of the interconnection customer or one of their designated contacts, the Association may authorize the customer or their installer to energize the Generating Resource for a period of not more than 48 hours to allow for the testing and configuration of the Generating Resource's inverter(s) and/or controller(s), if the Association determines that this can be done safely and without adverse impacts to the Association's reliable delivery of electricity to its other customers. If the customer or their Generating Resource installer should energize the Generating Resource without receiving the Association's advance authorization to do so, the service location shall be subject to immediate disconnection as a safety hazard under the terms of A.(7) of this GIP.

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ix. Once the Generating Resource has been installed and has been inspected by the State Electrical Inspector in accordance with applicable law, the interconnection customer or one of the designated contacts shall complete the Interconnection Customer and Sign Off Area sections of the Certificate of Completion and forward the signed document to the Association. The Certificate of Completion must be received by the Association within one year of the date that the Interconnection Agreement was fully-executed or the Application shall be deemed to have been withdrawn and the Interconnection Agreement shall expire. Before the expiration of this one-year period, the customer may request a time extension. The Association will review any such requests and may allow such an extension if no additional Interconnection Applications have been filed which are or could be affected by the DER capacity being held in reserve for the customer

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and if, at the Association's sole discretion, the operating conditions of its electric system have not substantially changed since the original evaluation was completed. The Association shall notify the customer and all designated contacts in writing of its approval or rejection of any time extension requests.

x. Notwithstanding the Association's right to observe Commissioning Tests as specified in Part A.(10).vii of this GIP, within ten days of its receipt of both the Certificate of Completion from the customer or one of its designated contacts and the meter release from the State Electrical Inspector, the Association shall schedule an inspection and safety test of the Generating Resource along with the installation of the Production Meter and replacement of the service meter with a Master Meter. The safety test and metering changes will generally be carried out in the following manner:

(a) The Association will briefly examine the Generating Resource and ascertain the locations of any inverters, disconnect switches, Production Meters, and circuit breaker(s) feeding the Generating Resource, and will ensure it has no objections to the safety of the installation.
(b) The Association will ensure that the Production Meter socket appears to be wired correctly, in particular so that power flows the correct direction through the meter as specified in A.(10).v of this GIP.
(c) The Association will install the Production Meter(s) in its/their socket(s).
(d) The customer or one of the designated contacts will power up the Generating Resource.
(e) After the Generating Resource begins producing electricity, the Association will interrupt power to the service location if such interruption is acceptable to the customer. If the customer does not approve service interruption, the Association will interrupt power to the Generating Resource's voltage measurement inputs, simulating a power outage. This will allow the Association's personnel to verify that the Generating Resource stops energizing the Production Meter socket. This tests the anti-islanding capability of the Generating Resource and verifies that it will safely cease energizing the Association's facilities in the case of an outage.
(f) The Association will replace the service meter with a new master meter.
(g) The Association will re-energize the service and wait for the Generating Resource to begin producing electricity again.

xi. If any part of the inspection and test in subpart x. above fails, the Association will notify the customer and all designated contacts within two business days of such failure. The customer and their designated contacts shall remediate any failures of this test and notify the Association of such remediation in writing within 30 business days. Subpart x. above will then be repeated.

xii. Upon successful completion of the inspection and test in subpart x. above, the Association will sign and return the Certificate of Completion to the customer and all designated contacts, which formally indicates completion of the Interconnection Process, approval of the installation, and authorization to operate. Upon the recommendation of the System Engineer witnessing the successful testing in subpart x. above, the Association's General Manager is designated as the primary person authorized to execute the Certificate of Completion. In the absence of the General Manager, the System Engineer may make this recommendation to the Operations Manager, the Office Manager, or the Manager of Information Technology, who are authorized as backup persons to execute the Certificate of Completion. The fully-signed Certificate of Completion shall be returned to the customer within three business days of the successful completion of subpart x. above.

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xiii. The Association shall refund any unused portion of such deposits within 60 business days of the return of the fully-signed Certificate of Completion. If such deposits were insufficient to complete the project, the Association shall, within 60 business days of the return of the fully-signed Certificate of Completion, invoice

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the customer for the difference between the deposit(s) received and the actual cost of completing the additional work. The customer shall pay the amount due within 20 business days.

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E. LEVEL 3 STUDY PROCESS—ALL OTHER RESOURCES:

(1) Introduction

Generating Resources that are too large for the Level 2 Interconnection Process or that fail the basic screens and Supplemental Review screens of the Level 1 or Level 2 Interconnection Processes require detailed studies prior to interconnection in order to ensure that they can be interconnected to the Association's subtransmission or distribution systems safely, without creating adverse impacts on the quality of service experienced by other nearby Association customers, without causing damage to the Association's subtransmission and distribution lines, equipment, and substations, and without causing reliability impact to regulated transmission providers in the region.

(2) Process

The Level 3 Study Process is as follows:

i. The Association recommends, but does not require, that the interconnection customer initially complete the Formal Pre-Application Interconnection Data Request process found in GIP Part B.

ii. The interconnection customer submits an Application, consisting of the following:

(a) The Application for Operation of Customer-Owned Generation form signed in accordance with Part A.(10).i of this GIP.
(b) Payment of the $50,000 application deposit in accordance with Part A.(10).ii of this GIP. If a Formal Pre-Application Interconnection Data Request was paid for and completed within six months of the date that the Application is received by the Association, the application fee is reduced by $125. If the interconnection customer intends to pay electronically, they may request an electronic miscellaneous receivables invoice be sent prior to submission of the application. The application deposit will be used to pay the Association's actual expenses in evaluating the Application as well as being applied toward the actual cost of the studies and ultimate required system improvements to the Association's system in order to accommodate the proposed Generating Resource.
(c) The site plan and circuit schematic drawings as specified in Part A.(10).4 of this GIP in addition to a comprehensive set of AC 3-line drawings and control schematics (AC and DC) detailing the entire Generating Resource and all switchgear and all of their control and protection elements.
(d) Manufacturer's cut sheets clearly showing what OSHA Nationally Recognized Testing Laboratory certified the Generating Resource equipment.
(e) Demonstration of site control by one of the following means:
1. Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Generating Resource, as demonstrated by a copy of such deed, lease, or development agreement.
2. An option to purchase or acquire a leasehold site for such purpose which may include a letter of intent, as demonstrated by a copy of such option purchase agreement or letter of intent.
3. An exclusivity or other business relationship between the interconnection customer and the entity having the right to sell, lease, or grant the interconnection customer the right to possess or occupy a site for such purpose, as demonstrated by a copy of the contract establishing such a relationship.

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iii. Upon receipt of an electronic Application by the Association, the Application and all additional supporting documents will be printed. When the Application together with payment have both been received, regardless of the method either

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was submitted, the Application will be date and time stamped. This stamp denotes that time that a bona fide Application was received by the Association.

iv. Within three business days of the date and time of receipt of the Application, the Association will notify the interconnection customer and all listed contacts that the application has been received.

v. Within ten business days of the date and time of receipt of the Application, the Association will evaluate the Application for completeness. and notify the interconnection customer and all listed contacts either that the application was complete or that the application was incomplete and what additional information is required to make the application complete. These evaluations will be performed in the order in which the Applications were received, according to the applied received stamp.

(a) Within ten business days of receipt of the notice that the Application is incomplete, the interconnection customer must either provide the missing information or request a time extension. If neither occurs before ten days, or if an extension is requested and the information still is not provided by the time the extension expires, the Application is deemed to have been withdrawn. The Association will hold the project for that Application open for one year from the withdrawal date. The interconnection customer may reapply within that one-year period without paying an additional application fee; except that the $125 credit for the Pre-Application Interconnection Data Request must be paid if this credit was received and more than six months elapses between the Pre-Application Interconnection Data report date and the reapplication date.

(b) When the Application is deemed complete, it shall be date and time stamped and entered into the interconnection queue. Interconnection Applications will be processed by the Association in the order in which they entered the queue. Each substation shall have its own queue.

vi. Within 10 business days of the Application completion date, the Association will contact the interconnection customer to arrange a scoping meeting at a time agreeable to both parties. The Association's wholesale power provider and additional area transmission providers may also be involved in the scoping meeting and subsequent studies. The major topics for discussion at the scoping meeting will be to discuss whether a feasibility study is necessary, if the feasibility study can be omitted and the Application can proceed directly to a system impact study, or if a consolidated study process can be used combining the functions of the feasibility, system impact, and facilities studies into one shortened study.

vii. If the interconnection customer elects not to attend a scoping meeting, the Association will offer the following options:
(a) Proceed with a feasibility study.
(b) Proceed with a transmission and/or distribution system impact study.
(c) If mutually agreed upon by the interconnection customer and the Association, the option to proceed with a combined study fulfilling the roles of the feasibility, system impact, and facilities studies may be offered. This option will generally only be available to proposed Generating Resources at the smaller end of the output rating range covered by this process.
(d) Withdraw the application.
The customer shall inform the Association in writing within ten business days or the Application shall be deemed to have been withdrawn.

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viii. The Association shall make a good-faith effort to forward an executable feasibility study agreement and cost estimate, system impact study agreement and cost estimate, or consolidated study agreement and cost estimate to the interconnection customer within five business days of either the scoping meeting

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or the Association's receipt of the interconnection customer's election under subpart viii. above. The Association will need to retain a consulting engineering firm to assist with some of the studies used throughout this process, which may make it difficult or impossible to meet the five-day deadline here, which deadline is established by the Colorado PUC's Level 3 Process requirements under 4 CCR 723-3 §3856.

ix. In order to remain under consideration for interconnection, the interconnection customer must return the executed agreement, together with payment of any required deposit, within 30 business days of receipt of the executable agreement from the Association.

x. The results of the feasibility study or the system impact study will determine whether the evaluation needs to continue to a transmission system impact study, a distribution system impact study, or a facilities study. The Association shall make a good-faith effort to forward executable study agreement(s) and a cost estimate for the next identified stage of the study process to the interconnection customer within 15 business days of the completion of the feasibility study or the system impact study and receipt of any payment due from the preceding study. The Association will likely need to retain a consulting engineering firm to assist with these studies and there is a strong possibility that the Association will need to involve and coordinate with at least one transmission provider. This may make it impossible to meet the 15-day requirement here. Subparts ix. and x. here may be repeated over multiple iterations as the study process carries on to completion. Some studies may, depending on the characteristics of the system being interconnected to and of the proposed Generating Resource, identify additional studies that need to be carried out before the process culminates in a final facilities study.

xi. Within five business days of the completion of the facilities study or the combined study, the Association will forward the interconnection customer a report containing the facilities changes that will need to be made to the Association's electric system and to any upline transmission providers' systems together with a cost estimate for such work and an executable interconnection agreement. The estimate shall identify itemized costs that could exceed the estimated cost by 125%.

xii. Within 45 business days of receipt of the interconnection agreement, system improvement list, and cost estimate, the interconnection customer shall return the executed agreement together with payment for the estimated cost of the improvements to the Association, or the Application shall be deemed to have been withdrawn.

xiii. Once the Interconnection Agreement is executed and returned to the customer, the customer may begin construction of the Generating Resource.

(a) Upon the request of the interconnection customer or one of their designated contacts, the Association may authorize the customer or their installer to energize the Generating Resource for a period of not more than 48 hours to allow for the initial testing and configuration of the Generating Resource's equipment, if the Association determines that this can be done safely and reliably and without adverse impacts to the Association. If the customer or their Generating Resource installer energizes the Generating Resource without receiving the Association's advance authorization to do so, the service location shall be subject to immediate disconnection as a safety hazard under the terms of A. (7) of this GIP.

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xiv. Once the Generating Resource has been installed and has been inspected by the State Electrical Inspector in accordance with applicable law if so required, the interconnection customer shall complete the Interconnection Customer and Sign Off Area sections of the Certificate of Completion and forward the signed

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document to the Association. The Certificate of Completion must be received by the Association within the required timeframe as contained in the Interconnection Agreement or the Application shall be deemed to have been withdrawn and the Interconnection Agreement shall expire. Before the expiration of this one -year period, the customer may request a time extension. The Association will review any such requests and may allow such an extension if no additional Interconnection Applications have been filed which are or could be affected by the DER capacity being held in reserve for the customer and if, at its sole discretion and that of any involved transmission providers, the operating conditions of the area electric system have not substantially changed since the original evaluation was completed. The Association shall notify the customer and all designated contacts in writing of its approval or rejection of any time extension requests.

xv. Notwithstanding the Association's right to observe Commissioning Tests as specified in Part A.(10).vii of this GIP, within ten days of its receipt of the Certificate of Completion from the customer and the completion of the Association's installation and commissioning of its own facilities or improvements relating to the interconnection, the Association shall schedule an inspection of the Generating Resource.

xvi. If any part of the inspection in subpart xv. above fails, the Association will notify the customer within two business days of such failure. The customer shall remediate any failures of this test and notify the Association of such remediation in writing within 30 business days. Subpart xv. above will then be repeated.

xvii. Upon successful completion of the inspection in subpart xv. above and acceptable operation of the complete system, the Association will sign and return the Certificate of Completion to the customer and all designated contacts, which formally indicates completion of the Interconnection Process, approval of the installation, and authorization to operate. Upon the recommendation of the System Engineer witnessing the successful testing in subpart xvi. above, the Association's General Manager is designated as the primary person authorized to execute the Certificate of Completion. In the absence of the General Manager, the System Engineer may make this recommendation to the Operations Manager, the Office Manager, or the Manager of Information Technology, who are authorized as backup persons to execute the Certificate of Completion. The fully-signed Certificate of Completion shall be returned to the customer within three business days of the successful completion of subpart xvi. above.

xviii. At each stage of the process above where the interconnection customer is required to pay a deposit, the project balance of actual costs incurred by the Association to-date will be evaluated and any unused funds remaining from the application deposit and all study deposits previously paid shall be carried forward and applied against the new deposit amount due.

xix. The Association shall refund any unused portion of such deposits within 60 business days of its receipt of final invoices from all collaborating consultants, transmission providers, material suppliers, and contractors on the project. If such deposits were insufficient to complete the project, the Association shall, within 60 business days of its receipt of final invoices from all collaborating consultants, transmission providers, material suppliers, and contractors on the project, invoice the customer for the difference between the deposit(s) received and the actual cost of completing the project. The customer shall pay the amount due within 20 business days.

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xx. Feasibility Study:

(a) Based on its familiarity with the operating characteristics of its own system and the upline systems of its transmission providers, the Association may or

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may not recommend that a feasibility study be completed for any Level 3 Study Process Application. The interconnection customer may, at their own discretion, elect to have a feasibility study completed in order to gain preliminary insight into the basic practicality of trying to integrate their Generation Resource into the Association's electric system. This section describes the basic content of and process for completing the feasibility study. Due to conflict of interest considerations, neither the interconnection customer nor any engineering firm associated with their project will be allowed to carry out any portion of the feasibility study.

(b) Within 30 business days of its receipt of the executed feasibility study agreement and payment of a deposit for the lesser of 50% of the estimated cost of the feasibility study or $1,000.00, the Association shall complete the feasibility study. The feasibility study agreement will contain the full scope of the feasibility study, which should include at least the following:

1. Integration of existing transmission and distribution system models together with a model of the proposed Generating Resource, which shall be modeled such that its maximum possible impact is measured regardless of the stated purpose of the Generating Resource. This prevents additional cost and time delays to repeat this study if the interconnection customer later changes the purpose for which the Generating Resource is being installed.
2. Initial identification of any circuit breaker short circuit capability limits exceeded as a result of the interconnection.
3. Initial identification of any thermal overload or voltage limit violations resulting from the interconnection.
4. Initial review of grounding requirements and electric system protection.
5. Initial description of and non-binding cost estimates for facilities required to interconnect the proposed Generating Resource and to address the identified short circuit and power flow issues.

(c) Once the feasibility study is completed, the Association shall prepare and forward a feasibility study report to the interconnection customer together with an invoice for the actual cost of the feasibility study, less the deposit paid. Any amount due shall be paid by the interconnection customer within 20 business days.

xxi. Distribution System Impact Study:

(a) If potential distribution system adverse impacts are identified during the discussion at the scoping meeting, or if a feasibility study indicates potential adverse distribution system impacts, a distribution system impact study may be required. Or, the interconnection customer may, at their own discretion, elect to proceed directly to the distribution system impact study. The distribution system impact study is to identify and analyze potential adverse impacts to the Association's electric distribution system, whether these impacts were identified during the scoping meeting, the feasibility study, or this distribution system impact study, and to identify means of mitigating these impacts in order to facilitate the completion of a facilities study. This section describes the basic content of and process for completing the distribution system impact study. Due to conflict of interest considerations, neither the interconnection customer nor any engineering firm associated with their project will be allowed to carry out any portion of the distribution system impact study.

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(b) The Association shall make a good-faith effort to complete the distribution system impact study within 30 business days of its receipt of the executed distribution system impact study agreement and payment of a deposit for the estimated cost of the distribution system impact study from the interconnection customer. The Association will likely need to retain a

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consulting engineer to assist with parts of this study and may need to involve area transmission providers in the process, both of which can foreseeably take additional time. The distribution system impact study agreement will contain the full scope of the study, which should include at least the following:

1. Integration of existing transmission and distribution system models together with a model of the proposed Generating Resource, which shall be modeled such that its maximum possible impact is measured regardless of the stated purpose of the Generating Resource. This prevents additional cost and time delays to repeat this study if the interconnection customer later changes the purpose for which the Generating Resource is being installed.
2. Analysis of steady state simulation, short circuit analysis, protective device coordination, automatic restoration coordination, area electric system grounding, synchronization, unintentional islanding, and arc flash hazards.
3. Verification that the proposed Generating Resource is using certified or listed equipment.
4. Analysis of the potential for creating unintended islands on the Association's distribution system.
5. Determination of the impact on the Association's distribution system loading under all steady state conditions.
6. Determination of the impacts on the Association's distribution system protection, fault conditions, and arc flash rating.
7. Determination of the impacts on voltage regulation within the Association's distribution system under steady state conditions.
8. Determination of the impacts on the Association's distribution system power quality.
9. Identification of any facilities on the Association's distribution system that will need to be modified, replaced, or installed in order to mitigate the above impacts, together with a non-binding estimate of the cost to implement these system changes.
10. Preliminary identification of any upstream transmission equipment that may also experience the above system impacts.

(c) Once the distribution system impact study is completed, the Association shall prepare and forward a distribution system impact study report to the interconnection customer together with an invoice for the actual cost of the study, less the deposit paid. Any amount due shall be paid by the interconnection customer within 20 business days.

xxii. Transmission System Impact Study:

(a) If potential transmission system adverse impacts are identified during the discussion at the scoping meeting, or if a feasibility study or a distribution system impact study indicates potential adverse transmission system impacts, a transmission system impact study may be required. The transmission system impact study is to clearly identify and analyze potential adverse impacts to transmission systems upstream of the Association's electric distribution system, whether these impacts were identified during the scoping meeting or during the feasibility or distribution system impact studies or directly within this transmission system impact study, and identify means of mitigating these impacts in order to facilitate the completion of a facilities study. This section describes the basic content of and process for completing the transmission system impact study. Transmission providers to which the Association's distribution system is connected and which have been brought into the process by the Association will largely govern the specific terms of the transmission system impact study.

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(b) The Association shall make a good-faith effort to compel the associated transmission provider(s) to complete the transmission system impact study

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within 30 business days of its receipt of the executed transmission system impact study agreement and, if the remaining balance from the initial deposit is not sufficient to pay the estimated cost of the transmission system impact study, payment of an additional deposit for the estimated cost of the transmission system impact study. The transmission system impact study agreement will contain the full scope of the study, which should include at least the following:

1. Integration of existing transmission and distribution system models together with a model of the proposed Generating Resource, which shall be modeled such that its maximum possible impact is measured regardless of the stated purpose of the Generating Resource. This prevents additional cost and time delays to repeat this study if the interconnection customer later changes the purpose for which the Generating Resource is being installed.
2. Short circuit analysis, stability analysis, power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews.
3. Determine the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in the above analyses and implement the interconnection
4. Identification of any facilities on the transmission system that will need to be modified, replaced, or installed in order to mitigate the above impacts, together with a non-binding estimate of the cost to implement these system changes.

(c) Once the transmission system impact study is completed, the Association shall forward the transmission system impact study report to the interconnection customer together with an invoice for the actual cost of the study, less the deposit paid. Any amount due shall be paid by the interconnection customer within 20 business days.

xxiii. Facilities Study:

(a) After a feasibility and/or a system impact study is completed, a facilities study will be required. The facilities study is to clearly specify and provide a means of contracting for the installation of all equipment necessary to interconnect the proposed Generating Resource with the Association's electric system. This can range in complexity from specifying little more than metering requirements for a medium-sized Generating Resource all the way up to new transmission and distribution lines and substations. Area transmission providers and balancing authorities with which the Association's distribution system interacts may also be involved in this study. This section describes the basic content of and process for completing the facilities study. Due to conflict of interest considerations, neither the interconnection customer nor any engineering firm associated with their project will be allowed to carry out any portion of the facilities study.

(b) The Association shall make a good-faith effort to complete the facilities study within 45 business days of its receipt of the executed facilities study agreement and, if the remaining balance from the initial deposit is not sufficient to pay the estimated cost of the facilities study, payment of an additional deposit for the estimated cost of the facilities study. The facilities study agreement will contain the full scope of the study, which should include at least the following:

1. Specify, estimate the cost of, and prepare a basic design for the equipment, engineering, procurement, and construction work (including overheads) needed to implement the conclusions of the system impact study(s), including facilities that may be required by any transmission provider or balancing authority.
2. Specify and estimate the cost of all metering equipment related to the interconnection of the Generating Resource, including communications

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equipment that may be required by the transmission provider or the balancing authority.

3. Specify and estimate the cost of any real property and/or right-of-way that may be required to accommodate the facilities specified above. Cost of any such real property rights and/or right-of-way shall be paid for by the interconnection customer.
4. Prepare an estimate of the time required to completely engineer, procure, and construct the facilities, real property, and/or right-of-way specified above.
5. If no major construction is required to accommodate the Generating Resource's interconnection, complete the design of any facilities specified above. If major construction is required, prepare a preliminary design package for release to a consulting engineering firm to use as a take-off point in a full design.

(c) Once the facilities study is completed, the Association shall prepare and forward a facilities study report to the interconnection customer together with an invoice for the actual cost of the study, less the deposit paid. Any amount due shall be paid by the interconnection customer within 20 business days.

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