

Schedule 6

SMALL GENERATOR INTERCONNECTION AGREEMENT (SGIA)

This Small Generator Interconnection Agreement ("Agreement") is made and entered into this 27th day of February, 2019, by Virginia Electric and Power Company d/b/a Dominion Energy ("Utility"), and Flaggy Run Solar 1, LLC ("Interconnection Customer") each hereinafter sometimes referred to individually as "Party" or both referred to collectively as the "Parties."

Utility Information

Utility: Dominion Energy Virginia
Attention: Mike Nester, Manager
Address: 200 W Vepco Street
City, State, Zip: Roanoke Rapids, NC 27870
Phone: 252-308-1077 Email: mike.nester@dominionenergy.com

Interconnection Customer Information

Interconnection Customer: Flaggy Run Solar 1, LLC
Attention: Dan Shaffer/Tim Barker - NCRE
Address: Flaggy Run Road
City, State, Zip: Courtland, VA 23857
Phone: 423-341-7873 Email: dan@ncre-usa.com

Interconnection Customer Application No: **VA18071**

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

Article 1. Scope and Limitations of Agreement

1.1 This Agreement shall be used for all Interconnection Requests for generators in excess of 500 kW submitted pursuant to the Commission's Regulations Governing Interconnection of Small Electrical Generators, Chapter 314 of the Virginia Administrative Code.

1.2 This Agreement governs the terms and conditions under which the Interconnection Customer's ("IC") Small Generating Facility ("SGF") will interconnect with, and operate in parallel with, the utility system.

1.3 This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services, including station service or backup power, that the IC may require will be covered under separate agreements, possibly with other parties. The IC will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable utility and provider of transmission service.

1.4 Nothing in this Agreement is intended to affect any other agreement between the utility and the IC.

1.5 Responsibilities of the Parties

1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all applicable laws and regulations, operating requirements, and Good Utility Practice.

1.5.2 The IC shall construct, interconnect, operate and maintain its SGF and construct, operate, and maintain its Customer's Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, in accordance with this Agreement, and with Good Utility Practice.

1.5.3 The utility shall construct, operate, and maintain its distribution and transmission system and attachment facilities in accordance with this Agreement, and with Good Utility Practice.

1.5.4 The IC agrees to construct its facilities in accordance with applicable specifications that meet or exceed those provided by the National Electrical

Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and operating requirements in effect at the time of construction and other applicable national and state codes and standards. The IC agrees to design, install, maintain, and operate its SGF so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the utility or affected systems and to otherwise maintain and operate its SGF in accordance with the specifications and certifications under which the SGF was initially installed and interconnected.

1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The utility and the IC, as appropriate, shall provide Attachment Facilities and Customer's Interconnection Facilities that adequately protect the utility's personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Attachment Facilities and Customer's Interconnection Facilities shall be delineated in the Attachments to this Agreement. The design, installation, operation, and maintenance of such facilities shall be the responsibility of the owner except as otherwise provided for in this Agreement.

1.5.6 The utility shall coordinate with all affected systems to support the interconnection.

1.6 Parallel operation obligations

Once the SGF has been authorized to commence parallel operation, the IC shall abide by all rules and procedures pertaining to the parallel operation of the SGF including, but not limited to the rules and procedures concerning the operation of generation set forth in the tariff.

1.7 Metering

The IC shall be responsible for the utility's reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachments 2 and 3 of this Agreement. The IC's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and operating requirements.

1.8 Reactive power

1.8.1 The IC shall design its SGF to maintain a composite power delivery at continuous rated power output at the point of interconnection at a power factor within the range of 0.95 leading to 0.95 lagging, unless the utility has established different requirements that apply to all similarly situated generators in the control area on a comparable basis. The requirements of this paragraph shall not apply to wind generators.

1.8.2 The utility is required to pay the Interconnection Customer for reactive power that the IC provides or absorbs from the SGF when the utility requests the IC to operate its SGF outside the range specified in article 1.8.1. In addition, if the utility pays its own or affiliated generators for reactive power service within the specified range, it must similarly pay the IC.

1.8.3 Payments shall be in accordance with the IC's applicable rate schedule as may be in effect and accepted by the appropriate government authority. To the

extent that no rate schedule is in effect at the time the Interconnection Customer is required to provide or absorb reactive power under this Agreement, the IC may expeditiously file such rate schedule with the appropriate government authority, and the utility agrees to support any request for waiver of any prior notice requirement of such authority in order to permit compensation to the IC from the time service commenced.

1.9 Capitalized terms used herein shall have the meanings specified in the definitions in Attachment 1 to Schedule 6 or in the body of this Agreement.

Article 2. Inspection, Testing, Authorization, and Right of Access

2.1 Equipment testing and inspection

2.1.1 The Interconnection Customer shall test and inspect its small generating facility and interconnection facilities prior to interconnection. The IC shall notify the utility of such activities no fewer than five business days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a business day. The utility may, at its own expense, send qualified personnel to the SGF site to inspect the interconnection and observe the testing. The IC shall provide the utility a written test report when such testing and inspection is completed.

2.1.2 The utility shall provide the IC written acknowledgment that it has received the IC's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the utility of the safety, durability, suitability, or reliability of the SGF or any associated control, protective, and safety devices owned or controlled by the IC or the quality of power produced by the SGF.

2.2 Authorization required prior to parallel operation

2.2.1 The utility shall use reasonable efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the utility shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The utility shall make reasonable efforts to cooperate with the IC in meeting requirements necessary for the IC to commence parallel operations by the in-service date.

2.2.2 The IC shall not operate its SGF in parallel with the utility's system without prior written authorization of the utility. The utility will provide such authorization once the utility receives notification that the IC has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of access

2.3.1 Upon reasonable notice, the utility may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the SGF first produces energy to inspect the interconnection, and observe the commissioning of the SGF (including any required testing), startup, and operation for a period of up to three business days after initial start-up of the unit. In addition, the IC shall notify the utility at least five business days prior to conducting any on-site verification testing of the SGF.

2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the utility shall have access to the Interconnection Customer's premises for any reasonable purpose in connection

with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.

2.3.3 Each Party shall be responsible for its own costs associated with this article.

Article 3. Effective Date, Term, Termination, and Disconnection

3.1 Effective date

This Agreement shall become effective upon execution by the Parties. The utility shall promptly file this Agreement with the Commission's Division of Energy Regulation upon execution.

3.2 Term of Agreement

This Agreement shall remain in effect for a period of 21 years from the effective date or such other longer period as the Interconnection Customer may request and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

3.3 Termination

No termination shall become effective until the Parties have complied with all applicable laws and regulations applicable to such termination, including the filing with the Commission's Division of Energy Regulation of a notice of termination of this Agreement.

3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the utility 20 business days written notice.

3.3.2 Either Party may terminate this Agreement after default pursuant to article 7.6.

3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the utility system. The termination of this Agreement shall not relieve either Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.4 Temporary disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions - "Emergency Condition" shall mean a condition or situation: (i) that in the judgment of the Party making the claim is imminently likely to endanger life or property; or (ii) that, in the case of the utility, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the utility system, the Attachment Facilities or the electrical facilities of others to which the utility system is directly connected; or (iii) that, in the case of the Interconnection Customer, is imminently likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Customer's Interconnection Facilities. Under emergency conditions, the utility may immediately suspend interconnection service and temporarily disconnect the SGF. The utility shall notify the IC promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the IC's operation of the SGF. The IC shall notify the utility promptly when it becomes aware of an emergency condition that may reasonably be expected to affect the utility system or other 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.

3.4.2 Routine maintenance, construction, and repair

The utility may interrupt interconnection service or curtail the output of the SGF and temporarily disconnect the SGF from the utility's system when necessary for routine maintenance, construction, and repairs on the utility system. The utility shall provide the IC with at least five business days notice prior to such interruption unless circumstances require shorter notice. The utility shall use reasonable efforts to coordinate such reduction or temporary disconnection with the IC.

3.4.3 Forced outages

During any forced outage, the utility may suspend interconnection service to effect immediate repairs on the utility system. The utility shall use reasonable efforts to provide the IC with prior notice. If prior notice is not given, the utility shall, upon request, provide the IC written documentation after the fact explaining the circumstances of the disconnection.

3.4.4 Adverse operating effects

The utility shall notify the IC as soon as practicable if, based on Good Utility Practice, operation of the SGF may cause disruption or deterioration of service to other customers served from the utility system or affected systems, or if operating the SGF could cause damage to the utility system or affected systems. Supporting documentation used to reach the decision to disconnect shall be provided to the IC upon request. If, after notice, the IC fails to remedy the adverse operating effect within a reasonable time, the utility may disconnect the

SGF. The utility shall provide the IC with a five business day notice of such disconnection, unless the provisions of article 3.4.1 apply.

3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from the utility before making changes to the SGF or mode of operations that may have a material impact on the safety or reliability of the utility system or affected system. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the IC makes such modifications without the utility's prior written authorization, the latter shall have the right to temporarily disconnect the SGF.

3.4.6 Reconnection

The Parties shall cooperate with each other to restore the SGF, interconnection facilities, and the utility system to their normal operating state as soon as reasonably practicable following a temporary disconnection.

Article 4. Cost Responsibility for Customer's Interconnection Facilities, Attachment Facilities, and Distribution Upgrades

4.1 Customer's Interconnection Facilities

The IC shall be responsible for the costs associated with owning, operating, maintaining, repairing, and replacing the Customer's Interconnection Facilities.

4.2 Attachment Facilities

The IC shall pay for one-time and ongoing costs of installing, owning, operating, maintaining and replacing the attachment facilities itemized in Attachment 2 of this Agreement. The utility shall provide an estimated cost for the purchase and

construction of the attachment facilities and provide a detailed itemization of such costs. Costs associated with attachment facilities may be shared with other entities that may benefit from such facilities by agreement of the IC, such other entities, and the utility.

4.3 Distribution upgrades

The utility shall design, procure, construct, install, and own the distribution upgrades described in Attachment 6 of this Agreement. The actual cost of the distribution upgrades shall be directly assigned to the IC. If the utility and the IC agree, the IC may construct distribution upgrades that are located on land owned by the IC.

Article 5. Transmission System

5.1 Transmission system upgrades

5.1.1 No portion of section 5.1 of this article 5 shall apply unless the interconnection of the Small Generating Facility requires transmission system upgrades.

5.1.2 The utility shall design, procure, construct, install, and own the transmission system upgrades described in Attachment 6 of this Agreement. If the utility and the Interconnection Customer agree, the IC may construct transmission system upgrades that are located on land owned by the IC. The costs of the transmission system upgrades shall be borne by the IC.

5.1.3 Notwithstanding any other provision of section 5.1 of article 5, in the event and to the extent an RTE has rules, tariffs, agreements, or procedures properly applying to transmission system upgrades, the provisions of section 5.2 of article 5 shall apply to such upgrades.

5.2 Regional Transmission Entities

Notwithstanding any other provision of this Agreement, if the utility's transmission system is under the control of an RTE and the RTE has rules, tariffs, agreements or procedures properly governing operation of the SGF, transmission of the output of the SGF, sale of the output of the SGF, system upgrades required for interconnection of the SGF, or other aspects of the interconnection and operation of the SGF, the IC and the utility shall comply with the applicable of such agreements, rules, tariffs, or procedures.

5.3 Rights under other agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the IC shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with system upgrades, including the right to obtain cash reimbursements or transmission credits for transmission service that is not associated with the SGF.

Article 6. Billing, Payment, Milestones, and Financial Security

6.1 Billing and payment procedures and final accounting

6.1.1 The utility shall bill the IC for the design, engineering, construction, and procurement costs of attachment facilities and upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The IC shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

6.1.2 Within 120 calendar days of completing the construction and installation of the attachment facilities and/or distribution upgrades described in the

Attachments to this Agreement, the utility shall provide the IC with a final accounting report of any difference between (i) the IC's cost responsibility for the actual cost of such facilities or upgrades, and (ii) the IC's previous aggregate payments to the utility for such facilities or upgrades. If the IC's cost responsibility exceeds its previous aggregate payments, the utility shall invoice the IC for the amount due and the IC shall make payment to the utility within 30 calendar days. If the IC's previous aggregate payments exceed its cost responsibility under this Agreement, the utility shall refund to the IC an amount equal to the difference within 30 calendar days of the final accounting report.

6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and such milestone shall be listed in Attachment 4 of this Agreement. A Party's milestones obligations under this provision may be modified by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure event, it shall immediately (i) notify the other Party of the reason(s) for not meeting the milestone, and (ii) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (iii) request appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not withhold agreement to such an amendment unless it will suffer uncompensated economic or operational harm from the delay, attainment of the same milestone has previously been delayed, or it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

6.3 Financial security arrangements

At least 20 business days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the attachment facilities and

distribution upgrades, the Interconnection Customer shall provide the utility, at the IC's option, a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the utility and is consistent with the Uniform Commercial Code of the jurisdiction where the point of interconnection is located. Such security for payment shall be in an amount sufficient to cover the costs for designing, procuring, installing, and constructing the applicable portion of the attachment facilities and distribution upgrades and shall be reduced on a dollar-for-dollar basis for payments made to the utility under this Agreement during its term. In addition:

6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the utility, and contain terms and conditions that guarantee payment of any amount that may be due from the IC, up to an agreed-to maximum amount.

6.3.2 The letter of credit or surety bond must be issued by a financial institution or insured reasonably acceptable to the utility and must specify a reasonable expiration date.

Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default

7.1 Assignment

This Agreement may be assigned by either Party upon 15 business days prior written notice and opportunity to object by the other Party; provided that:

7.1.1 Either Party may assign this Agreement without the consent of the other Party to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement;

7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the utility, for collateral security purposes to aid in providing financing for the SGF, provided that the IC will promptly notify the utility of any such assignment.

7.1.3 Any attempted assignment that violates this article is void and ineffective.

Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the IC. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

7.2 Limitation of liability

Each Party's liability to the other Party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either Party be liable to the other Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 The Parties shall at all times indemnify, defend, and hold the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits,

recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified Party is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying Party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or small generator investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying party.

7.4 Consequential damages

Other than as expressly provided for in this Agreement, neither Party shall be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure event means "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure event ("Affected Party") shall promptly notify the other Party, either in writing or via the telephone, of the existence of the Force Majeure event. The notification must specify in reasonable detail the circumstances of the Force Majeure event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party informed on a continuing basis of developments relating to the Force Majeure event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the

obligation to make payments) only to the extent that the effect of the Force Majeure event cannot be mitigated by the use of reasonable efforts. The Affected Party will use reasonable efforts to resume its performance as soon as possible.

7.6 Default

7.6.1 No default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure event as defined in this Small Generator Interconnection Agreement or the result of an act or omission of the other Party. Upon a default, the Nondefaulting Party shall give written notice of such default to the Defaulting Party. Except as provided in article 7.6.2, the Defaulting Party shall have 60 calendar days from receipt of the default notice within which to cure the default; however, if the default is not capable of cure within 60 calendar days, the Defaulting Party shall commence the cure within 20 calendar days after notice and continuously and diligently complete the cure within six months from receipt of the default notice; and, if cured within such time, the default specified in such notice shall cease to exist.

7.6.2 If a default is not cured as provided in this article, or if a default is not capable of being cured within the period provided for herein, the Nondefaulting Party shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not that Party terminates this Agreement, to recover from the Defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

Article 8. Insurance

8.1 The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be in accordance with 20VAC5-314-160 of the Commission's Regulations Governing the Interconnection of Small Electrical Generators. The IC shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Insurance shall be obtained from an insurance provider authorized to do business in the State of Virginia. Certification that such insurance is in effect shall be provided upon request of the utility, except that the IC shall show proof of insurance to the utility no later than 10 business days prior to the anticipated commercial operation date of the SGF. An IC of sufficient creditworthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

8.2 The utility agrees to maintain general liability insurance or self insurance consistent with the utility's commercial practice. Such insurance or self-insurance shall not exclude coverage for the utility's liabilities undertaken pursuant to this Agreement.

8.3 The Parties further agree to notify each other whenever an accident or incident occurs resulting in any injuries or damages that are included within the scope of coverage of such insurance, whether or not such coverage is sought.

Article 9. Confidentiality

9.1 Confidential information shall mean any confidential and/or proprietary information provided by one Party to the other Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be

deemed confidential information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential information does not include information previously in the public domain, required to be publicly submitted or divulged by governmental authorities (after notice to the other Party and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving confidential information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect confidential information obtained from the other Party as it employs to protect its own confidential information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of confidential information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

9.3 Notwithstanding anything in this Agreement to the contrary, if the Virginia State Corporation Commission ("Commission"), during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence, the Party shall provide the requested information to the Commission, within the time provided for in the request for information. In providing the information to the Commission, the Party may request that the information be treated as confidential and nonpublic by the Commission and that the information be withheld from public disclosure. Parties

are prohibited from notifying the other Party prior to the release of the confidential information to the Commission. A Party shall notify the other Party when it is notified by the Commission that a request to release confidential information has been received by the Commission, at which time either Party may respond to the Commission before such information would be made public.

Article 10. Disputes

10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

10.2 In the event of a dispute, either Party shall provide the other Party with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute. The Parties shall make a good faith effort to resolve the dispute informally within 10 business days.

10.3 If the dispute has not been resolved within 10 business days after receipt of the Notice, either Party may seek resolution assistance from the Commission's Division of Energy Regulation where the matter will be handled as an informal complaint.

Alternatively, either Party may, upon mutual agreement, seek resolution through the assistance of a dispute resolution service. The dispute resolution service will assist the Parties in either resolving the 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 shall be responsible for one-half of any costs paid to neutral third parties.

10.4 If the dispute remains unresolved either Party may petition the Commission to handle the dispute as a formal complaint or may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

Article 11. Taxes

11.1 The Parties agree to follow all applicable tax laws and regulations

11.2 Each Party shall cooperate with the other to maintain the other Party's tax status. Nothing in this Agreement is intended to adversely affect the utility's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

Article 12. Miscellaneous

12.1 Governing law, regulatory authority, and rules

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the State of Virginia without regard to its conflicts of law principles. This Agreement is subject to all applicable laws and regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a governmental authority.

12.2 Amendment

The Parties may amend this Agreement by a written instrument duly executed by both Parties.

12.3 No third-party beneficiaries

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

12.4 Waiver

12.4.1 The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.2 Any waiver at any time by either Party of its rights with respect to this Agreement shall not be deemed to be a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Termination or default of this Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the IC's legal rights to obtain an interconnection from the utility. Any waiver of this Agreement shall, if requested, be provided in writing.

12.5 Entire Agreement

This Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

12.6 Multiple counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

12.7 No partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any

partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other governmental authority, (i) such portion or provision shall be deemed separate and independent, (ii) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (iii) the remainder of this Agreement shall remain in full force and effect.

12.9 Environmental releases

Each Party shall notify the other Party, first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Small Generating Facility, the customer's interconnection facilities, or attachment facilities, each of which may reasonably be expected to affect the other Party. The notifying Party shall (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (ii) promptly furnish to the other Party copies of any publicly available reports filed with any governmental authorities addressing such events.

12.10 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement;

however, each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party for the performance of such subcontractor.

12.10.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; however, in no event shall the utility be liable for the actions or inactions of the IC or its subcontractors with respect to obligations of the IC under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.10.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

12.11 Reservation of rights

The utility shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation.

Article 13. Notices

13.1 General

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

If to the Interconnection Customer:

Interconnection Customer: Flaggy Run Solar 1, LLC
Attention: Dan Shaffer/Tim Barker with NCRE
Address: 4462 Meadowbrook Road
City, State, Zip: Rocky Mount, NC 27801
Phone: 423-341-7873

Email: dan@ncre-usa.com

If to the Utility:

Utility: Dominion Energy Virginia
Attention: Mike Nester, Manager
Address: 200 W Vepco Street
City, State, Zip: Roanoke Rapids, NC 27870
Phone: 252-308-1077

Email: mike.nester@dominionenergy.com

13.2 Billing and payment

Billings and payments shall be sent to the addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: North Carolina Renewable Energy, LLC
Attention: Dan Shaffer/Tim Barker
Address: 4462 Meadowbrook Road
City, State, Zip: Rocky Mount, NC 27801
Phone: 423-341-7873

Email: timbarker@ncre-usa.com

If to the Utility:

Utility: Dominion Energy Virginia
Attention: Kasey Shirley
Address: 701 E. Cary Street – OJRP 18th Floor
City, State, Zip: Richmond, VA 23219

13.3 Alternative forms of notice

Any notice or request required or permitted to be given by either Party to the other and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and email addresses set out below:

If to the Interconnection Customer:

Interconnection Customer: Flaggy Run Solar 1, LLC

Attention: Tim Barker - NCRE

Address: 4462 Meadowbrook Road

City, State, Zip: Rocky Mount, NC 27801

Phone: 603-969-5761

Email: timbarker@ncre-usa.com

If to the Utility:

Utility: Dominion Energy Virginia

Attention: Mike Nester, Manager

Address: 200 W Vepco Street

City, State, Zip: Roanoke Rapids, NC 27870

Phone: 252-308-1077

Email: mike.nester@dominionenergy.com

13.4 Designated operating representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

Interconnection Customer: Flaggy Run Solar 1, LLC

Attention: Dan Shaffer/Tim Barker - NCRE

Address: 4462 Meadowbrook Road

City, State, Zip: Rocky Mount, NC 27801

Phone: 423-341-7873/603-969-5761

Email: dan@ncre-usa.com

timbarker@ncre-usa.com

Utility's Operating Representative:

Utility: Dominion Energy Virginia

Attention: Distributed Generation Specialist

Address: 2700 Cromwell Rd

City, State, Zip: Norfolk, VA 23509

Phone: 757-857-2720

13.5 Changes to the notice information

Either Party may change this information by giving five business days written notice prior to the effective date of the change.

Article 14. Signatures

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

For the Utility

Name: Joe Woomer

Signature: _____

Title: Vice President Grid & Technical Solutions

Date: _____

For the Interconnection Customer

Name: Daniel Sdatter

Signature: Daniel Sdatter

Title: Manager

Date: 4/3/19

**Attachment 1 to
Schedule 6**

Glossary of Terms

"Affected system" means an electric utility system other than that of the utility that may be affected by the proposed interconnection.

"Affected system operator" means an entity that operates an affected system or, if the affected system is under the operational control of an independent system operator or a Regional Transmission Entity, such independent entity.

"Applicable laws and regulations" means all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any governmental authority.

"Attachment facilities" means the facilities and equipment owned, operated, and maintained by the utility that are built new in order to physically connect the customer's interconnection facilities to the utility system. Attachment facilities shall not include distribution upgrades or previously existing distribution and transmission facilities.

"Business day" means Monday through Friday, excluding federal holidays.

"Certified" has the meaning ascribed to it in Schedule 2 of Chapter 314 (20VAC5-314-10 et seq.) of the Virginia Administrative Code.

"Customer's interconnection facilities" means all the facilities and equipment owned, operated and maintained by the Interconnection Customer, between the Small Generating Facility and the point of interconnection necessary to physically and electrically interconnect the Small Generating Facility to the utility system.

"Commission" means the Virginia State Corporation Commission.

"Competitive service provider" means any entity, other than the utility, supplying electric energy service to the Interconnection Customer.

"Default" means the failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

"Distribution system" means the utility's facilities and equipment generally delivering electricity to ultimate customers from substations supplied by higher voltages (usually at transmission level). For purposes of this Agreement, all portions of the utility's transmission system regulated by the Commission for which interconnections are not within Federal Energy Regulatory Commission jurisdiction are considered also to be subject to Commission regulations.

"Distribution upgrades" means the additions, modifications, and upgrades to the utility's distribution system at or beyond the point of interconnection necessary to abate problems on the utility's distribution system caused by the interconnection of the Small Generating Facility. Distribution upgrades do not include customer's interconnection facilities or attachment facilities.

"Facilities study" has the meaning ascribed to it in the commission's regulations governing the interconnection of small generating facilities at 20VAC5-314-70 E.

"Feasibility study" has the meaning ascribed to it in the commission's regulations governing the interconnection of small generating facilities at 20VAC5-314-70 C.

"FERC" means the Federal Energy Regulatory Commission.

"Good Utility Practice" means any of the practices, methods and acts engaged in or approved by a significant portion of the electric industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected

to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

"Governmental authority" means any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided that such term does not include the Interconnection Customer, the utility, or a utility affiliate.

"Interconnection Customer" or "IC" means any entity proposing to interconnect a new Small Generating Facility with the utility system.

"Interconnection request" means the IC's request, in accordance with Chapter 314 (20VAC5-314-10 et seq.) of the Virginia Administrative Code, to interconnect a new Small Generating Facility, or to increase the capacity of, or make a material modification to the operating characteristics of, an existing Small Generating Facility that is interconnected with the utility system.

"Interconnection studies" means the studies conducted by the utility, or a third party agreed to by the utility and the Interconnection Customer, in order to determine the interaction of the Small Generating Facility with the utility system and the affected systems in order to specify any modifications to the Small Generating Facility or the electric systems studied to ensure safe and reliable operation of the Small Generating Facility in parallel with the utility system.

"Material modification" means a modification that has a material impact on the cost or timing of any Interconnection Request with a later queue priority date.

"Operating requirements" means any operating and technical requirements that may be applicable due to regional transmission entity, independent system operator, control area, or the utility's requirements, including those set forth in the Small Generator Interconnection Agreement.

"Party" or "Parties" means the utility, the Interconnection Customer or both.

"Point of interconnection" means the point where the customer's interconnection facilities connect to the utility system.

"Regional Transmission Entity" or "RTE" shall refer to an entity having the management and control of a utility's transmission system as further set forth in § 56-579 of the Code of Virginia.

"Small Generating Facility" or "generator" or "SGF" means the Interconnection Customer's equipment for the production of electricity identified in the Interconnection Request.

"Small Generator Interconnection Agreement" or "SGIA" means the agreement between the utility and the Interconnection Customer as set forth in Schedule 6 of Chapter 314 (20VAC5-314-10 et seq.) of the Virginia Administrative Code.

"Supplemental review" has the meaning ascribed to it in the Commission's regulations governing the interconnection of small generating facilities at 20VAC5-314-70 I.

"System" or "utility system" means the distribution and transmission facilities owned, controlled, or operated by the utility that are used to deliver electricity.

"System impact study" has the meaning ascribed to it in the Commission's regulations governing the interconnection of small generating facilities at 20VAC5-314-70 D.

"Tariff" means the rates, terms and conditions filed by the utility with the Commission for the purpose of providing Commission-regulated electric service to retail customers.

"Transmission system" means the utility's facilities and equipment delivering electric energy to the distribution system, such facilities usually being operated at voltages above the utility's typical distribution system voltages.

"Utility" means the public utility company subject to regulation by the Commission pursuant to Chapter 10 (§ 56-232 et seq.) of Title 56 of the Code of Virginia with regard to rates and/or service quality to which the Interconnection Customer proposes to interconnect a Small Generating Facility.

**Attachment 2 to
Schedule 6****Description and Costs of the Small Generating Facility, Customer's
Interconnection Facilities, Attachment Facilities and Metering Equipment**

The Utility has reviewed the 5.0 MW AC Flaggy Run Solar 1, LLC (VA18071) request for installation of parallel generation units located at the southeast intersection of Flaggy Run Road and train tracks, Courtland, VA 23837. The Distributed Generation (DG) owner desires to both export power into the Dominion Energy Virginia (Utility) utility source and provide site power (during daylight hours) via site solar generation. This is an inverter (UL1741/IEEE 1547 certified) based interconnection consisting of two (2) Power Electronics inverters operating at 600 Vac, with a combined rating of 5MW. The inverter system consists of one HEMK FS2000K and one FS3000K, rated 2 MW and 3 MW respectively, and digitally limited to 5MW. The 2 MW and the 3 MW inverters are connected to a 2000 kVA and 3000 kVA pad mounted 3-phase transformer, respectively. All transformers will be rated 19.9/34.5 kV – 600 V with a wye-ground (primary) – wye (secondary) winding configuration, with the wye-ground facing the utility.

Customer Interconnection Facilities

Interconnect Customer will be responsible for all associated solar panels, inverters, transformers and all items listed below:

- Installation of all conductors between the generating facility and POI
- Installation of pad mounted transformers
- Installation of a three phase interruption device
- Installation of all generator breakers and associated equipment
- Communication lines for all metering
- Communication circuit(s) for Transfer Trip Scheme between the DG site and Substation, and between the DG site and inline recloser(s)
- Isolating devices that can be locked and tagged to isolate the IC facility from the ITO
- Obtain any required right-of-way between the ITO's existing facilities and the Point of Interconnection
- Obtain any required right-of-way for the construction of Utility facilities necessary for the interconnection of this generator.
- Provide and maintain a telephone line (POTS) to the Utility metering equipment.
- Metering to report real-time to PJM is required when the generation capacity is 10 MW or more total on the circuit.
- All ICs must provide generator status and instantaneous MW output to PJM per Manual 14D of the PJM OATT via communication links when the aggregate generation capacity reaches 10MW or more on a circuit. This communication medium is

installed, owned, and maintained by the IC. Contact PJM for additional details concerning the requirement [PJM System Planning Division @ (610) 666-8980]

Interconnection Facilities and Metering

The Interconnection Facilities required to be provided by the Utility will include:

New Attachment Facilities for 5.0 MWac of Generation

- Installation of five (5) new poles and guying needed
- Installation of approximately 300 feet of three (3) phase overhead 477 Al. Primary with 477 Al. Neutral conductor
- Installation of G & W Viper Recloser with a SEL651R-2 Recloser Control
- The Utility will provide a Power Monitor (SEL-735 or equivalent device) at the Point of Common Coupling with all required metering/relay functionality. The Utility will also provide a transformer and secondary voltage conductors to provide source voltage for the Utility owned Power Monitor.
- All metering needed for interconnection of generation and auxiliary load
- One Disconnect Switch

The estimated upfront cost of the installation of the new attachment facilities to provide the interconnection is [REDACTED]

The customer will also be responsible for an ongoing monthly operation and maintenance cost of 0.519 percent of the estimated cost of the new facilities of [REDACTED]. The calculation will be: [REDACTED]

The current rate of 0.519% took effect on July 1, 2018 and is subject to change from time to time whenever the Virginia SCC shall permit a change in the Utilities filed rates.

Monthly billing is effective on the date DG site has passed witness tests and is issued an unrestricted permission to operate letter.

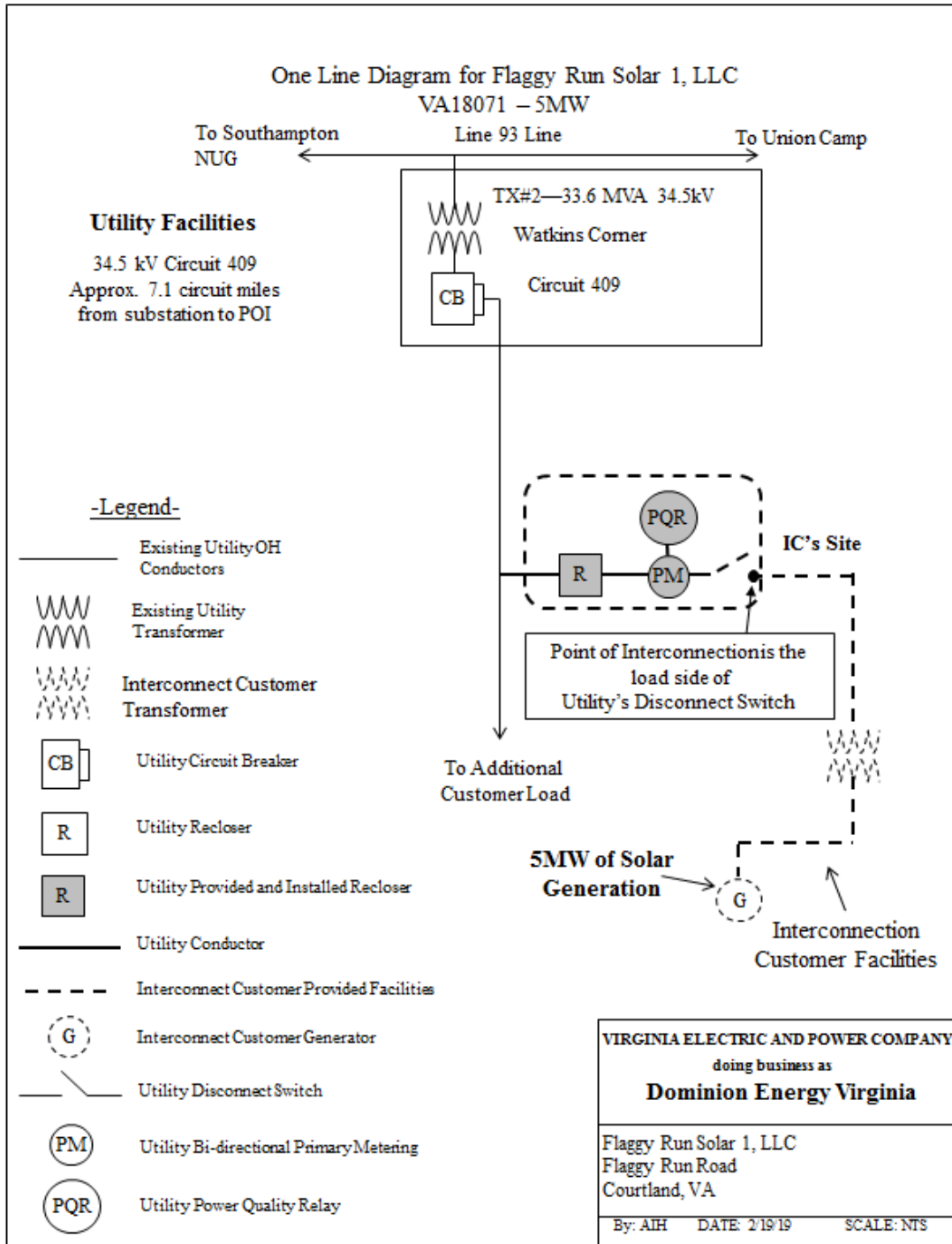
Attachment Facilities - Modification or Termination of Attachment Facilities

When attachment facilities provided for the customer are to be modified as a result of replacement (excluding direct replacement due to equipment failure), removal or abandonment of attachment facilities, or upon termination of this IA, the following charges, as appropriate, will apply in addition to any adjustment of the facilities charges as outlined above:

- a. When attachment facilities are to be replaced with other attachment facilities, IC agrees to pay the estimated cost for removal, less salvage, plus the cost of installation/reinstallation of all facilities required under the facilities charge, including the cost of transformers and meters. However, such cost shall be reduced by the additional facilities charge base calculated for the additional attachment facilities.
- b. When attachment facilities are to be removed during or after the initial term of IA, or upon termination of this IA, and the customer made an initial one-time facilities charge payment, Customer agrees to pay the cost of removal, less salvage (excluding any credit for transformers and meters) of such attachment facilities.

**Attachment 3 to
Schedule 6**

One-line Diagram Depicting the Small Generating Facility, Customer's Interconnection Facilities, Attachment Facilities, Metering Equipment, and Distribution Upgrades



**Attachment 4
to Schedule 6**

MILESTONES

VA18071 - Flaggy Run Solar 1, LLC

MILESTONES

In-Service Date*: **1/30/2020**

(9 Months from Execution of this Interconnection Agreement and Payment of Construction Costs contained herein)

Milestone	Date Due	Responsible Party
(1) Final Execution of Interconnection Service Agreement	4/5/2019	Interconnect Customer
(2) Payment of Cost for Network Upgrades and Attachment Facilities	4/5/2019	Interconnect Customer
(3) Start final Design/Construction of IA upgrades attachments	5/5/2019	Interconnect Customer
(4) Dominion Easements and/or Transmission Encroachment	5/20/2019	Interconnect Customer
(5) Determination of Transfer Trip Communications Medium	5/5/2019	Interconnect Customer
(6) Engineering for Substation Construction Project	11/1/2019	Dominion
(7) Material Procurement for Substation Construction Project	11/1/2019	Dominion
(8) Issued-for-Construction Drawings & Information	12/1/2019	Interconnect Customer
(9) Private Facilities to POI	12/31/2019	Interconnect Customer
(10) POTS and/or Communications Lines (PJM and/or Transfer Trip)	12/31/2019	Interconnect Customer
(11) Final Electrical Inspection	1/27/2020	Interconnect Customer
(12) Distribution Upgrades & Attachment Facilities	1/30/2020	Dominion
(13) Substation Upgrades	1/30/2020	Dominion
(14) Site Energization	1/30/2020	Dominion
(15) As-built Construction Drawings & Information	1/30/2020	Interconnect Customer
(16) PQ Baseline Monitoring & Test Transfer Trip	2/6/2020	Dominion
(17) Witness / Anti-Islanding Testing	2/13/2020	Interconnect Customer & Dominion

***** The above dates are estimates and may be amended during the construction process and needed for either party involved. *****

Agreed to by:

Dominion: _____ Date: _____
 Interconnection Customer: _____ Date: _____

*Note: Listed milestones have been calculated using maximum durations as set in the Virginia Interconnection Procedures, Forms, and Agreements for State-Jurisdictional Generator Interconnections. In-Service and Milestone dates, on this form, are calculated based on the date the IA is tendered to the Customer.

**Attachment 5 to
Schedule 6****Additional Operating Requirements for the Utility System and Affected Systems
Needed to Support the Interconnection Customer's Needs**

The Utility has reviewed the 5.0 MW AC Flaggy Run Solar 1, LLC (VA18071) request for installation of parallel generation units located at the southeast intersection of Flaggy Run Road and train tracks, Courtland, VA 23837. The Distributed Generation (DG) owner desires to both export power into the Dominion Energy Virginia (Utility) utility source and provide site power (during daylight hours) via site solar generation. This is an inverter (UL1741/IEEE 1547 certified) based interconnection consisting of two (2) Power Electronics inverters operating at 600 Vac, with a combined rating of 5MW. The inverter system consists of one HEMK FS2000K and one FS3000K, rated 2 MW and 3 MW respectively, and digitally limited to 5MW. The 2 MW and the 3 MW inverters are connected to a 2000 kVA and 3000 kVA pad mounted 3-phase transformer, respectively. All transformers will be rated 19.9/34.5 kV – 600 V with a wye-ground (primary) – wye (secondary) winding configuration, with the wye-ground facing the utility. The resulting protection requirements are based on the following information:

- No more than 5.0 MW AC of total generation will be in parallel with the Utility system at any one time.
- The DG owner's generation facility will be paralleled with the Utility system by the following connections:
 - The DG owner's generation facility will be connected to the Watkins Corner Circuit 409 via the new Automatic Line Recloser (ALR) 409RYYY which is sourced by CB 40962, Bus #2, Watkins Corner Transformer #2 and Transmission Line 93.
- Transmission Line 93 currently has existing or expected project queue DG totaling 4.0 MW AC; the cumulative total is now 9.0 MW AC. Watkins Corner Circuit 409 distribution facilities currently has existing or pending project queue DG totaling 4.0 MW AC.
- Watkins Corner Circuit 409 feeder breaker has reclosing times at 10 seconds and 45 seconds after the first trip.
- Transmission Line 93 has time delayed reclosing applied on its terminal breakers (no instantaneous reclosing).

DG owner parallel operation will not be limited to any particular time or utility circuit-loading condition (daylight is required for generation to be available); however, DG owner parallel operation will not be permitted during periods when the source circuit is switched into an abnormal configuration.

- The DG owner will be contracting with Utility to export power into the Utility distribution system.
- The load data for the pertinent sectionalizing devices are as follows:
 - Watkins Corner Circuit 409 (40962) has a typical "light" loading of 4.2 MVA.
 - Watkins Corner Transformer #2 has a typical "light" loading of 4.2 MVA.
 - Transmission Line 93 has a typical "light" loading of 13.4 MVA.

Based on projected minimum loads given for the applicable utility sectionalizing devices, the following minimum *Light Load to Cumulative Generation Capacity* ratios will apply for this installation (transfer trip is required from each zone with a ratio less than 3:1):

<i>Utility Device</i>	<i>Minimum Ratio</i>
CB 40962	0.47
Transformer #2	0.47
Transmission Line 93	1.49

Table 1 - Light Load to Generation Ratio

Based on the size and type of this generation, the applicable Utility Standards and the minimum load ratios applicable for this installation, the following requirements must be met in their entirety before permission to parallel operations can be granted:

1. Installation of a Utility owned Automatic Line Recloser (ALR) at the point of common coupling (PCC) with all required relaying (described in Table 3 below) at the DG owner expense.
2. Installation of an additional Utility owned Protective Relaying (SEL-735 Power Quality package) at the PCC (Utility Metering Instrument Transformer Cabinet) with all required metering/relay functionality at the DG owner expense. **The power source (single phase, 120 V ac) to this Power Monitor shall be supplied from a 2 kVA or larger Station Service (Primary kV – 120 V ac) source (low exposure) independent of any other generation, load or exposure.** Such Protective Relaying should aid in the determination of on-going harmonic levels among other information regarding the interconnection site as well as providing a trip initiation to the ALR when either harmonic standard limits are exceeded or other undesirable conditions are detected.
3. Power Quality baseline readings will be required at the PCC before and after the interconnection is completed in order to monitor the harmonic effects of the generation unit and will be obtained at the DG owner's expense. The PV plant shall meet IEEE Standard 519 – 2014, *IEEE Recommended Practice and Requirements for Harmonic Control in Electric Power Systems*. If there is evidence that Voltage Total Harmonic Distortion (THD) is greater than or equal to 5%, Current Total Demand Distortion (TDD) is greater than or equal to 5%, or any single harmonic exceeds the distortion limits specified in IEEE Standard 519- 2014, the DG owner would be required to add a filtering system to its installation to meet the requirements of IEEE 519 – 2014.
4. Effective Grounding: Due to the step-up transformer configuration being wye-ground (primary) – wye (secondary), the Utility EPS will not be effectively grounded when an upline device opens to clear a fault and the DG remains connected to the islanded segment for a period of time. One of the two following requirements will be needed to mitigate this issue:
 - a. Install Direct Pilot Wire Tripping (Transfer Trip) from each of the upline utility devices to the DG site recloser.
 - b. A light load to generation ratio greater than 3:1 for the nearest upline device from the POI.

5. Station upgrades listed below are required (if not already existing):
 - a. Add potential transformers (PT) to 34.5 kV Bus to provide directionality.
 - b. Add the DG relay panel; SEL-451 and SEL-735.
 - c. Add transmission line transfer trip to Line 93 to serve as an input to the SEL-451 DG panel relay to send transfer trip to the POI recloser to clear all potential sources to a transmission fault. Ensure that line terminal stations have been upgraded to provide line transfer trip functionality.
 - d. Install Direct Pilot Wire Tripping (or transfer trip) from each of the upline utility devices: CB 40962, Bus #2, and the Watkins Corner Transformer #2 to the DG site recloser. Transfer trip is required due to a light load to generation ratio less than 3:1.
 - e. Wire Transformer #2 LORs 86T2 and 86T2BU, and Bus#2 LOR 86B2 to trip and prevent reclosing of CB 40962.

The voltage and frequency set points listed in Table 2 are derived from IEEE-1547a-2014 (Amendment to IEEE Standard 1547-2003). The "*Total Clearing Time (sec)*" listed in Table 2 is a summation of the detection time, field adjustable clearing time, and trip time. The DG owner will be required to apply all the enabled protection settings and not exceed the "*Total Clearing Time (sec)*". The DG owner shall provide detailed, manufacturer-supplied computer simulation models (Aspen OneLiner, PSS/E, and PSCAD) of the inverter, to include full control and hardware details, needed to investigate DG impacts.

Currently, this site is intended to operate with utility interactive inverter functionality enabled and with grid support utility interactive inverter functionality disabled. Therefore, the inverter functions in Table 2 are to be disabled: LVRT, HVRT, LFRT, ZVRT, VAR Support, and Voltage Regulation.

Function		Set Point	Clearing Time (sec)
			Utility
27	Under-voltage	$V < 45\%$ nominal voltage	0.160
		$45\% \leq V < 60\%$	0.160
		$60\% \leq V < 88\%$	0.160
59	Over-voltage	$110\% < V < 120\%$	0.160
		$V \geq 120\%$ nominal voltage	0.160
81U	Under-frequency	$F < 57.0$ Hz	0.160
		$F < 59.5$ Hz	0.160
81O	Over-frequency	$F > 60.5$ Hz	0.160
		$F > 62.0$ Hz	0.160
	Overall Anti-Islanding	Disconnect inverter from system (PCC)	0.160
	Steady State Power Factor	UNITY Power Factor	

LVRT	Low Voltage Ride Through	DISABLE	
HVRT	High Voltage Ride Through	DISABLE	
LFRT	Low Frequency Ride Through	DISABLE	
ZVRT	Zero Voltage Ride Through	DISABLE	
	Volt/Var Control	DISABLE	
	Volt/Watt Control	DISABLE	
	Frequency/Watt	DISABLE	

Table 2: DG Inverter Settings

The required relay functions and the corresponding set points, with each sectionalizing all of the DG owner's generation and always enabled on the ALR regardless of the operating condition, are listed in the following Table 3:

Function		Set Point	Duration to Disconnection (sec)
27	Undervoltage	75 % of nominal operating voltage	2.0
59	Overvoltage	110% of nominal operating voltage	2.0
81U	Underfrequency	59.5 Hz	2.0
81O	Overfrequency	60.5 Hz	2.0
51	Phase Time-delay Overcurrent	Set for minimum, with adequate load allowance	Maintain proper coordination with DG owner high side fuse

Table 3: ALR Set Points

Since the installation of the Utility-owned ALR at the PCC, associated relaying, Protective Relaying (SEL-735 Power Quality package) and the related additional substation work are all provided at the DG owner expense, we will need to work out the details to coordinate the planned interconnection with the associated engineering, equipment acquisition and installation times. Please note that the DG owner will not be allowed to interconnect until all the permanent facilities and associated relaying are installed, tested and fully functional.

All the data requested in Table 4 must be provided by the DG owner for Utility to perform short-circuit studies.

Duration		Voltage at Inverter Terminals During Sag (%)										
Sec	Cycles	0	10	20	30	40	50	60	70	80	90	100
0.008	0.5											
0.017	1											
0.033	2											
0.067	4											
0.133	8											
0.16	9.6											
0.267	16											
0.533	32											
1.067	64											
2	120											
3	180											

Table 4: DG Inverter Fault Current in Per Unit of Max Current Output

Interconnection Agreement, DE reserves the right to require the DG owner to remedy any adverse operating conditions at the DG owner’s expense, should they occur.

Finally, please promptly provide us details/confirmation concerning the DG owner’s final inverter model (nameplate photos), the applied inverter trip points, and interface transformer specifications (i.e. transformer impedance, load losses, high side fuse make, model, rating, etc.), as soon as possible.

**Attachment 6 to
Schedule 6**

**Utility's Description of its Distribution and Transmission Upgrades and Estimate
of Upgrade Costs**

Substation: [REDACTED]

Project GIDSJVA18071 provides an interconnection point on 34.5kV circuit 409 out of Watkins Corner substation. It will install a DG panel to support the interconnection. It will also require modification to existing transformer TX #2 and bus #2 protection schemes to allow tripping of breaker on circuit 409 for a TX or bus lockout operation.

Distribution Transfer trip is required due to light load to generation ratio being less than three. Telco transfer trip is considered as a worst-case option given to the developer to evaluate.

Existing batteries will have enough capacity to support the additional panels, but the charger will need to be replaced.

Purchase and install (Watkins Corner Substation):

1. One (1), Line tuning box
2. One (1), 135 Vdc, 50A battery charger w/stand
3. Install conductor, connectors, conduit, control cable, foundations and grounding material as per engineering standards

Remove/Retire (Watkins Corner Substation):

1. Battery charger

Purchase and install relay material (Watkins Corner Substation):

1. One (1), SEL-451-5 & SEL-735 DG Support Panel (w/ Telco TT)

Purchase and install relay material (DG Site):

1. One (1), DG Receiver Cabinet – AC [No Upline Recl]

Relay work at Southampton substation:

1. None. (Line transfer trip enabled on line 93)

Relay work at Union Camp substation:

1. Enable line transfer trip on line 93

Distribution: \$-0-

NCRE proposes to build a 5 MW Flaggy Run Solar 1 Farm located on Flaggy Run Road in Courtland, VA. Based on the location, the Flaggy Run Solar 1 would interconnect to Utility's Watkins Corner Substation Circuit 409 (34.5 kV) which is fed off of TX #2. The Point of Interconnection (POI) is located near the Grid Address **M1010 QF22**. The site is located approximately 7.1 miles in circuit length away from Watkins Corner substation.

Planning Study Results:

- Adequate circuit capacity exists for aggregate connected DER.
- Adequate substation transformer capacity exists for aggregate connected DER.
- No Voltage Violations due to Operations of Intermittent DER Output during voltage study with thermal upgrades

Total estimated upfront cost for all construction upgrades is estimated to be

██████████

Total estimated cost for entire project is ██████████

The Utility will bill the Interconnect Customer the actual amount for all engineering and constructions after the project has been complete and subtract any upfront payments from the total.

There will be no additional cost for the annual operation and maintenance expenses associated with the Substation and Distribution upgrades.