Feasibility Study for Williston H Solar LLC 2,750 kW Solar Project

GMP CID-96036 QP-741

Located at 1022 Redmond Road, Williston, Vermont
Connected to the GMP 88G2 Circuit near Tag 793705

Ryan Gray

December 2024

Document Revision No.	Date	Author	Comments
0	12/1/2024	Ryan Gray	Creation of the document
1	3/28/2025	Ryan Gray	Reduced project size from 3,250 to 2,750 kW
2	10/29/2025	Ryan Gray	Updated interconnection route

This document provides Green Mountain Power's results of its Feasibility analysis for the proposed Project. This Feasibility analysis complies with the Vermont Public Utility Commission Rule 5.512 (D) Preliminary Screening Criteria . If the proposed Project fails a given criterion, supplemental analysis has been included. To the extent that the supplemental analysis confirms that the Project may have adverse impacts on safety or reliability, further study will be required.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

SECTION 1

Project Description and Notes

Project and Distribution System Description

Williston H Solar LLC propose to install a 2,750 kW-AC Solar (the Project) in Williston, Vermont. The Project requests to interconnect to Green Mountain Power (GMP) on the GMP Williston distribution Substation in the vicinity of 793705 (the Point of Interconnection or POI). This substation has a 12.47/7.2 kV grounded-wye configuration. This substation serves the 88G1, 88G2 and 88G3 circuits via the T6 power transformer and serves the 88G4, 88G5 and 88G6 circuits via the T5 power transformer. The Project would be located approximately .1 circuit miles from the substation. The power transformers at the substation each have a base/top nameplate rating of 20/37 MVA and their voltage is regulated by Load Tap Changers (LTC's) inside of the transformers. The secondary buss of both transformers can be temporarily tied together by a buss tie breaker which is operated in a normally open configuration.

As of 10/8/2024, the application date for the Project, the total of installed and proposed distributed energy resources (DER) on the Williston substation was 5,250 kW, including the Project. The total DER on the T6 power transformer was 5,250 kW, including the Project. There are no rotating machine generators on the Williston substation.

The existing installed and proposed projects shall be included in the analysis as part of the total or aggregate distributed resources as necessary.

Substation/Circuit Protection and Loading

Location	Equipment and Control Type	Maximum Loading (kW)[1]	Minimum Loading (kW)[1]	Total DER Proposed and Connected (kW)
T6 Transformer bank	220 Low Side Breaker w/ Electro-Mechanical relays	570 6/25/2023 12:45	350 6/25/2023 08:00	5,250
88G2 Feeder	Circuit breaker w/ Electronic Relaying	0	0	5,250

[1] Circuit level loads are two full years plus current year SCADA and AMI data, prior to application date. The amount of distributed generation on-line at the time of the peak was estimated and is included in these figures. Line loads are based on CymDIST load flow calculations.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

Relevant Studies

- QP 701 Feasibility Study for Williston E Chip Alley Solar LLC

  The Following upgrades From Section 4 of above listed Feasibility Study have been identified and are anticipated to be completed by Williston E Chip Alley Solar LLC.

  - Construction of a three-phase underground line extension (new 88G2 feeder) approximately 200 feet in length using 750MCM cable
- The following upgrades/changes to the Williston substation are required:
  - Relocation of the Feeder cables supplying power to building 801 from the P1 to the P2 terminal and the cables supplying power to the 801 building from the M3 to the M2 terminals.
  - Adjustment of the transformer No Load Tap Changer (NLTC) on the T5 & T6 transformers to achieve a 13.20kV secondary voltage (%5 reduction).
  - Adjustment of the NLTC's on GF facilities transformers to account for the reduction in primary voltage, and to maintain adequate secondary voltage to their facilities and equipment.
  - Installation of external voltage regulators (Feeder regulators) onto the new 88G2 feeder to allow for operation at 12.47kV (additional %5 reduction)
  - Installation of a single-phase line PT for use in the live line reclosing block scheme
  - Adjustment of the LTC controllers on the T5 & T6 transformers to maintain/regulate 13.20kV on bus 21 & 22.
  - Adjustment of the NLTC on the station service transformers to maintain 120/240 secondary voltage to station equipment.
  - Installation of a power metering package on the 88G2 terminal for tracking and monitoring feeder loading and Kilowatt Hours (kWH)
- The following protection changes/upgrades are required:
  - A DTT scheme will need to be implemented between the 1592 and the new 88G2 breaker.
  - Replacement/upgrade of the existing LTC controller on T6 transformer to a controller capable of regulating in a reverse flow (CO-GENERATION) operating mode.
  - Replacement of the existing (P3) Electro-Mechanical relaying with a microprocessor based SEL 351S relay, along with GMP's standard feeder protection and SCADA package, including a live line reclosing block scheme.
  - Adjustment of 87T-1 & 87T-2 electromechanical relays for new NLTC position / operation at 13.20kV (if unable to make satisfactory adjustments, these relays will need to be upgraded to SEL 387 microprocessor relays)
  - Disabling of reverse power (32) relays on the 220 breaker to allow for reverse power flow into the T6 transformer.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

This Project has been studied assuming all of the above upgrades have been implemented. If the project referenced above does not move forward to interconnection, or if the Project wishes to interconnect prior to said projects, the above requirements and costs may become the Project's responsibility.

Existing Materials

There are no existing materials relevant to this Project.

Modeling Assumptions:

- This Project has been studied with an 300 foot three-phase 1/0 AAC overhead line extension from the POI to the project Generator Step Up transformer. (GSU)
- The minimum daytime load was determined by analyzing the minimum loads during "daylight" hours between 8:00am and 4:00pm. This date generally falls within the spring and fall months of April, May, September, or October. Otherwise, a conservative estimate of 30% of the peak load will be noted and used.
- The modeling for this analysis utilizes the electrical one-line diagram submitted for the Project. The Project proposes to install pad mounted 2,750 kVA, 12,470/7,200 volt grounded-wye to 600/346 volt grounded-wye transformer. The impedance of the transformers is estimated to be 5.75%.
- Unless otherwise specified, the power factor for PV projects is assumed to be 100% and the power factor for synchronous and induction generators is assumed to be +/-98%, and +/-93%, respectively.
- The short circuit contribution from the Project is assumed to be 150% of the Project's AC capacity.
- The inverter connection type is a three phase, no or low impedance continuous bond to the GMP neutral, also known as an ineffectively grounded connection.
- The inverters shall be required to operate with a total demand distortion (TDD) that complies with IEEE 1547 which references IEEE 519 specifically for harmonic contribution limits.
- Regarding voltage flicker for inverter based PV systems; GMP finds that inrush current is not a significant indicator of sudden voltage drop as it would be for rotating machine generators. To measure the sudden change in voltage, GMP's voltage flicker test for inverter based PV systems shall be used to test the impact of the Project to the distribution circuit. The voltage flicker test will consider the cloud shading effects on the PV modules. The cloud shading effect will consider the output drop of 70% for the PV system being studied, i.e. a drop in output from the nameplate ratings to 30% of the nameplate ratings before any voltage regulation can react to the change of voltage. If other PV systems are located within close proximity to the Project being studied, these systems may be included in the voltage flicker test. The percent difference in voltage readings at the Project's POI, and at any point in the distribution circuit, shall be validated using the GE flicker table. If the cloud shading results in less than a 1.8% change in primary voltage at any point on the distribution circuit, the Project passes the voltage flicker test.
- GMP Protection Criteria:
    - Non-fault currents shall not exceed 83% of the phase pickup of an electronic recloser under the conditions of minimum load and 100% generation.
    - For reach, the pick-up level shall not be less than 3.0 for bolted LLL and LG faults.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

- GMP Thermal Criteria:
  - The aggregate proposed and installed DER on the feeder under study, including the Project, with generation output at 100% and minimum load, shall not exceed:
    - 90% of a conductor's ampacity rating (both overhead and underground conductor);
    - 100% of a sectionalizing fuse's continuous rating;
    - 100% of a sectionalizer's continuous rating;
    - 100% of a switch's continuous rating;
    - 100% of a load tap changer's continuous rating;
    - 100% of a recloser's continuous rating; and
    - 100% of a regulator's continuous rating, without load bonus.
  - The aggregate proposed and installed DER on the feeder under study, including the Project, with generation output at 100% and *no load*, shall not exceed:
    - 100% of the power transformer's top nameplate on a per-winding basis.
- Further information on GMP assumptions and requirements can be found in the Green Mountain Power Interconnection Guidelines for Distributed Energy Resources at https://greenmountainpower.com/wp-content/uploads/2017/01/Final-2021-DER-Guidelines-2-2021-03-19.pdf

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

SECTION 2

Rule 5.512 (D) Criteria

Criteria that are not passed will be colored in red.

1) **The proposed interconnection point is on a distribution line.**
   Pass

2) **The aggregated Export Capacity, including the capacity of the Project, on a distribution circuit will not cause any distribution equipment, including but not limited to conductors, substation transformers, line stepdown transformers, substation breakers, regulators, fuse cutouts, and line reclosers, or customer equipment on the system, to exceed the equipment's thermal ratings.**

   Fail - The aggregated Export Capacity causes thermal rating exceedances discussed in section 3

3) **The proposed Project's Nameplate Rating, in aggregation with other Generation Resource Nameplate Ratings on the distribution circuit, will not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers) or Interconnection Requester equipment on the system to exceed 87.5% of the short-circuit interrupting capability; nor will the Project be proposed for a circuit that already exceeds 87.5% of the short-circuit interrupting capability.**

   Pass - After review, GMP finds the maximum fault current contribution from the aggregate generation does not exceed 87.5% of the short-circuit interrupting capability of any existing protective device or equipment.

4) **The proposed Project will have no adverse impact on existing protection Coordination.**

   Pass - After review, GMP finds the proposed Project has no adverse impact on existing protection Coordination.

5) **The proposed Project, in aggregation with other Export Capacity on the distribution circuit, will not result in potential for Transmission Ground Fault Overvoltage (TGFOV).**

   Pass – After review, GMP finds no TGFOV concerns

6) **The proposed Project, in aggregation with other Export Capacity on the distribution circuit, will not cause unintentional islanding. The proposed Project does not require additional unintentional islanding protection.**

   Fail - The proposed Project creates unintentional islanding concerns discussed in section 3

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

7) **For interconnection of a proposed single-phase or effectively grounded three-phase Project where the primary distribution system is three-phase, four-wire, the Project will be connected line-to-neutral. For interconnection of a proposed single-phase or three-phase Project where the primary distribution system is three-phase, three-wire, the Project will be connected line to line.**

   Conditional Pass

   This circuit is a three phase, four wire multi-grounded neutral system, otherwise known as "grounded wye". The proposed Project will be connected through a grounded wye-grounded wye transformer. This Project connection is considered as ineffectively grounded with three phase inverter based sources.

   The Project can proceed with interconnection provided the following are met:

   - *Due to its size, the Project is required to install a PCC recloser.*

   GMP also requires the inverters used for this project to comply with the Inverter Source Requirement Document of ISO New England (ISO-NE SRD). As part of the ISO-NE SRD requirements, GMP requires the Project to enter "momentary cessation" for over voltage conditions while operating in the "Permissive Operation" mode (Table III: Inverters Voltage Ride-through Capability and Operational Requirements). GMP requires the inverters to enter "Permissive Operation with Momentary Cessation" with a Maximum Response of 0.1s. If the proposed inverters are not capable of this Maximum Response Time, a Category III inverter shall be used instead which can comply with this requirement (IEEE 2018 6.4.2 Table 16). Inverter responses to under voltages while operating in the Permissive Operation mode are specified in the ISO-NE SRD at footnotes a and b.

8) **The proposed Project is not located in an area where there are known or posted transient stability limitations to Projects located in the general electric vicinity, including but not limited to known harmonic issues.**

   Pass - After review, GMP finds the project not to be in an area of known or posted transient stability limitations.

9) **The proposed Project will not affect the Interconnecting Utility's 's ability to maintain voltages consistent with Standard ANSI C84.1.**

   Pass - After review, GMP finds no voltage issues adhering to ANSI C84.1

10) **Voltage drop caused by starting Generation Resource is within acceptable limits, meaning that inrush current caused by the startup of the proposed Project up to once per hour is not greater than 3% of the available fault current or does not cause greater than a 3% voltage deviation at the Point of Interconnection as modeled in an unbalanced load flow. Voltage drop due to starting the proposed Project more than once per hour meets a tighter inrush-current tolerance to be determined by the Interconnecting Utility. This criterion is applicable only to synchronous or induction Projects.**

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

N/A – The project isn't a project utilizing a synchronous or induction generator.

11) The Interconnection Requester affirms that the proposed Project meets the applicable codes and standards of Section 5.520 or is a certified equipment package under Section 5.519.

The inverters proposed for this project are twenty-two (22) Chint Power Systems SCH125KTL-DO/US-600 which are compliant with GMP required UL1741 and IEEE 1547 standards. If another type of inverter is substituted, GMP shall be made aware of this proposed change.

12) Flicker caused by the proposed Project must comply with IEEE Standard 1547.

Pass - The test for voltage drop is discussed above in Section 1 under Modeling Assumptions. There is another solar project, with a capacity of SIZE 2,500 kW, that is adjacent to the Project. Because this other solar project is within one-quarter mile of the Project, GMP considers it to be in close proximity and has included it in the cloud shading analysis. For cloud shading, the maximum voltage change at the Project's POI is .20%, which is acceptable.

13) For Projects that will not export to the grid, the voltage drop caused by Inadvertent Export is within acceptable limits, meaning that voltage change at the primary level caused by the loss of load at the Project point of interconnection is less than 3%.

Pass

14) Identification of affected Vermont utilities and/or Non-Jurisdictional Affected Utilities. These entities must identify no adverse impact on their Affected Systems

Fail - Because the Project's capacity exceeds 1,000 kW, GMP is required to submit a generator notification form to ISO-NE per ISO-NE Planning Procedure 5-1. ISO may determine that a Proposed Plan Application (PPA) is required which may result in additional study, consistent with ISO Study and Performance Requirements in Planning Procedures 5-6 and 5-3. GMP will keep the project apprised of any updates regarding the ISO-NE review.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

SECTION 3

Supplemental Review

This section assesses whether failed criteria identified in Section 2 can be addressed, to ensure safe and reliable interconnection of the Project, using known solutions that would not require a System Impact Study. This supplemental review may also address potential issues that are not covered in the preliminary review screening criteria.

Preliminary Review Summary

The Project did not pass the following criteria:

Criterion 2: Thermal Ratings
Criterion 6: Islanding
Criterion 14: Affected Utilities

Further analysis is described below.

Protection Device Loading & Coordination: Pass

This test considers whether the total generation beyond a protective device can cause enough current flow that would erroneously cause the protective device to operate. This test considers a worst-case scenario of no load with generation at 100%; if that screen fails, a less conservative scenario of *minimum* load with generation at 100% is then considered. The results are presented below:

- T6 Transformer low-side breaker: The 220 low-side breaker at the Williston substation is set at 2500 amps per phase pick-up. GMP sets the continuous current limit through this breaker at 2500/1.2 or 2083 amps. Under the conditions described above, there would be a maximum current flow of 228 amps through these breakers.
- Station 88G2 Feeder breaker: The 88G2 breaker at the Williston substation is set at 960 amps per phase pick-up. GMP sets the continuous current limit through this breaker at 960/1.2 or 800 amps. Under the conditions described above, there would be a maximum current flow of 228 amps through this breaker.

The existing protective devices at the Williston substation were reviewed to ensure proper coordination with the additional generation. The addition of the Project does not result in mis-coordination.

Thermal Loading: Fail

This test considers whether current flow due to generation can result in thermal overloads on equipment including, but not necessarily limited to, overhead conductors, cables, switches, regulators, and, reactors. Refer to Section 1-Modeling Assumptions for GMP thermal criteria. After review, GMP found thermal overloads in the following equipment and cables resulting from this interconnection.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

1. The 88G2 150-amp feeder voltage regulators have a maximum rating of 150 amps under normal operation. Under the conditions described in Section 1 there would be a maximum of 228 amps through these regulators. These 150 amp regulators must be upgraded to 328 amp regulators.[2]

2. The 88G2 1/0 underground feeder getaway cables have a maximum rating of 140 amps. Under the conditions described in Section 1 there would be a maximum of 228 amps through these cables. These 1/0 cables must be upgraded to 750AL MCM.[2]

Substation and Transmission Capacity: Pass

This test considers whether current flow due to generation can overload the substation transformer, high-side fusing (or breaker) or, the transmission line entering the substation. When all feeders connected to the station are considered, a total of 5,750 KW of reverse flow would occur if the load was at 0% while the generation was at 100%. The top nameplate rating of the substation transformers is 37 MVA each. After review, GMP found no overloads.

System Voltages: Conditional Pass

Steady state voltage: Pass

This test considers whether there could be reverse power flow on any regulators, and if so, whether they are capable of proper regulation in the reverse direction. This test also considers whether there are any other steady state voltage issues (i.e. voltages that fall outside of the limits specified by ANSI C84.1)

- **Reverse flow controls:** Pass – At minimum load and maximum generation, there would be reverse flow through the 88G2 feeder regulators and the number 6 transformer LTC. Both of these controls are set to regulate voltage during reverse flow.
- **Voltage levels:** Pass – In the most conservative case of peak generation and no load, steady state voltages are found to be inside ANSI limits. (if necessary) The project was then studied under peak generation and minimum daytime load. Under these conditions, voltages were found to be within ANSI limits.
- **Voltage imbalance:** Pass – The imbalance in all sections of the three-phase line serving three-phase or two-phase load is less than 3% both before and after this Project.

Ground Fault Over Voltage (GFOV): Conditional Pass

- **GFOV on the distribution system**: Conditional Pass - The possibility of GFOV on the distribution system (DGFOV) is of concern when the minimum load to generation ratio is less than 2. After review, the minimum load to aggregate generation ratio on the circuit is less than 2.

[2] GMP and Encore verbally discussed including these upgrades in the construction of a previous project. In doing so these two upgrades would become moot for this study.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

DGFOV will be addressed by the required PCC recloser.

- **GFOV on the transmission**: Pass – The possibility of ground fault over voltage on the transmission system (TGFOV) is a concern when there is a reverse flow of power onto the transmission system that cannot be dampened during line-to-ground faults on the transmission**.** TGFOV can also occur with no reverse flow when the minimum load-to-generation ratio for the section of the transmission system at issue is less than 2. Due to the minimum loading at this Substation GMP has installed TGFOV mitigation in the form of a Direct Transfer Trip (DTT) from the 1592 breaker located in substation 86 to the 88G2 breaker.

- **GFOV beyond a stepdown**: Pass - There are no transformers, stepdown or otherwise, between the Project and the station bus excluding the Project's local GSU.

Flicker Voltage Fluctuation: Conditional Pass

- **Natural transients** (fast moving cloud cover): Pass - This test considers whether voltage fluctuation due to rapidly moving clouds is within limits. This issue was covered under Section 2, Criterion 7. Voltage fluctuation due to rapidly moving clouds is within limits.

- **Generator Reconnection:** Conditional Pass – Traditionally, inverter-based distributed generation is assumed to reconnect to a system, following the operation of a protective device that caused the generation to go off-line, five minutes after healthy grid voltage is detected. GMP is concerned, however, that simultaneous reconnection of substantial amounts of distributed generation can result in temporary high voltages and excessive voltage regulator operation. Given the large amount of distributed generation on this circuit, GMP requires that the Project reconnect at six minutes following the detection of healthy voltage.

- **Generator Synchronization:** Pass – This generation connects to GMP via an inverter which complies with IEEE & UL standards.

Unintentional Islanding: Pass

GMP considers whether the proposed Project, along with other distributed energy resources (DER) on the Affected System, is capable of supporting an unintentional island. To test for the possibility of unintentional islanding, GMP employs the following test:[3]

[3] GMP recognizes that, even if a project passes its anti-islanding test, it is theoretically possible for an unintentional island to form. Specifically, an unintentional island could form in the very rare instance that: 1) a circuit switching device is opened in a *non-fault* situation; 2) at the moment of switching, downstream of this device, there is a near-perfect match between real power generation and load; and 3) at the moment of switching, downstream of this device, there is a near-perfect match between reactive power generation and load. GMP notes that from a worker and public safety perspective, this situation is analogous to that of a customer's back-up generator inadvertently feeding back onto a part of the distribution system that may otherwise be considered to be de-

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

- First, GMP ensures that the Project's inverters meet applicable standards for anti-islanding.

  After review, GMP finds that the Project's inverters are compliant with GMP required UL1741 and IEEE 1547 standards

- Second, GMP considers the size of the Project, and for each line segment upstream of the Project, considers the aggregate amount of DER on that line segment, the percentage of this DER that is rotating machine or non-certified, and the line segment's minimum load.

  After review, GMP finds that each line segment upstream of the Project shall be equipped with a reclose block protection strategy. The only line segment upstream of the Project is denoted by the substation 88G2 breaker and the PCC recloser. The substation 88G2 breaker is presently equipped with reclose block.

Monitoring and Control: Pass

Based on the Project's size, GMP requires the ability to monitor the Project's status and output. This requirement shall be met by the installation of a GMP PCC recloser. The Project will be responsible for the recurring monthly cost of the SCADA communications to the PCC recloser.

Impact to Other Utilities: Pass

Because the Project's capacity exceeds 1,000 kW, GMP is required to submit a generator notification form to ISO-NE per ISO-NE Planning Procedure 5-1. ISO has already approved this request.

energized. As a result, and to maximize safety, GMP relies on its existing operational practices to protect the public and its workers. Among these is the practice that, at all times, lines are considered to be energized until a qualified GMP employee is on site to verify that the line has in fact been de-energized and is safe to be approached.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

SECTION 4

Conclusion

The Project can move forward, without a System Impact Study or Facilities Study, on the condition that the following measures are completed before interconnection:

The Project must also wait for the upgrades identified in: QP 701 Feasibility Study for Williston E Chip Alley Solar LLC to be completed or opt to complete these upgrades as part of this Project.

1) Construction of a three-phase underground line extension approximately 50 feet in length using 1/0 Aluminum cable. The line extension would begin at the proposed POI for the Williston E Chip Alley Solar Project and extend southeast along the existing driveway to the intersection of Redmond Road and connect onto the former 19G3 distribution line.

2) Installation of a pad mount Viper-S PCC recloser, primary metering package and disconnect switch. The Project will be responsible for the recurring monthly cost of the SCADA communications to the PCC recloser. The GMP facilities need to be accessible by GMP trucks and the exact location of the take-off pole and line extension poles to be determined by site visit with the Distribution Designer.

3) The following upgrades to the primary system and Williston substation are required:
    a. The existing 3 phase cable from 88G2 feeder breaker to the Williston E Chip Alley Solar Project POI must be upgraded to 750 MCM cable (approximately 200 feet).[4]
    b. The existing 150-amp 88G2 feeder regulators must be upgraded to 328-amp units.[4]

4) England (ISO-NE SRD). As part of the ISO-NE SRD requirements, GMP requires the Project to enter "momentary cessation" for over voltage conditions while operating in the "Permissive Operation" mode (Table III: Inverters Voltage Ride-through Capability and Operational Requirements). GMP requires the inverters to enter "Permissive Operation with Momentary Cessation" with a Maximum Response of 0.1s. If the proposed inverters are not capable of this Maximum Response Time, a Category III inverter shall be used instead which can comply with this requirement (IEEE 2018 6.4.2 Table 16). Inverter responses to under voltages while operating in the Permissive Operation mode are specified in the ISO-NE SRD at footnotes a and b.

5) GMP requires the Project's inverters reconnect using a Soft-Start Ramp rate of 2% of maximum current output per second with a modified reconnection time of six minutes.

6) The Project is required to execute a Project Notice to Proceed with the appropriate GMP distribution designer when the Project is physically ready for interconnection to GMP's system.

[4] GMP and Encore verbally discussed including these upgrades in the construction of a previous project. In doing so these two upgrades would become moot for this study.

163 ACORN LANE • COLCHESTER, VT 05446-6611 • PHONE (802) 864-5731 • FAX (802) 655-8419 • callcenter@greenmountainpower.com

~~7) Approval of generation notification form with ISO-NE.~~

Upgrades not resulting from the Project but are required before interconnection (GMP or other project's responsibility):

1) None.

Note that at the time of this report, the longest lead-time material for the GMP portion of this Project is approximately eighty (80) weeks. Lead times for all materials required for this Project are subject to change based upon manufacturer availability and delivery times. GMP will order materials for this Project when the customer provides payment. GMP cannot guarantee the availability of materials out of its stock.

Alan McBride
Vice President, System Planning

April 17, 2025

Mr. Hantz A. Présumé
VELCO
366 Pinnacle Ridge Rd
Rutland, VT 05701

Subject: Williston H Solar, LLC, 1022 Redmond Road Solar – Proposed Plan Application (PPA) – GMP-24-G10-Rev1

Dear Mr. Présumé,

This letter is to inform you that, pursuant to review under Section I.3.9 of the ISO Tariff, no significant adverse effect has been identified with regard to the following PPA:

GMP-24-G10-Rev1 – Generator application from Green Mountain Power Inc. on behalf of Williston H Solar, LLC for the 2.75 MW Solar PV in Williston, VT and interconnecting to 1022 Redmond Road Williston, VT via circuit G2 out of Williston Substation. The proposed in-service date of the project is September 1, 2026. The Reliability Committee (RC) reviewed the materials presented in support of the proposed project and did not identify a significant adverse effect on the reliability or operating characteristics of its transmission facilities, the transmission facilities of another Transmission Owner or the system of any other Market Participant.

Having given due consideration to the RC review, ISO New England has determined that implementation of the plan will not have a significant adverse effect upon the reliability or operating characteristics of the Transmission Owner's transmission facilities, the transmission facilities of another Transmission Owner, or the system of a Market Participant. A determination under Section I.3.9 of the ISO Tariff is limited to a review of the reliability impacts of a proposed project as submitted by Participants and does not constitute an approval of a proposed project under any other provisions of the ISO Tariff.

Sincerely,

/s/ Al McBride

Alan McBride
Vice President, System Planning

cc: Proposed Plan Applications

ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841
413-540-4223
amcbride@iso-ne.com