

STATE OF VERMONT  
PUBLIC UTILITY COMMISSION

Case No. 21-\_\_\_\_-NMP

Petition of Putney Green Acres Solar LLC, )  
pursuant to 30 V.S.A. §§ 248 and 8010, for a )  
certificate of public good to install and operate a )  
500 kW (AC) solar electric generation facility to be )  
located in Putney, Vermont )

APPLICANT'S PROPOSED FINDINGS OF FACT  
PURSUANT TO PUC RULE 5.107(C)(7)

**Description of the Project**

1. The Project is a 500 kW (AC) net-metered photovoltaic electric generation facility proposed by Putney Green Acres Solar LLC for a former paper sludge landfill on River Road in Putney, Vermont that is now closed and capped. Prefiled Testimony of Martha Staskus (hereinafter "Staskus PFT") at 2-4.

2. The Project will occupy an approximately 2.4± acres of larger 20± acre parcel of land off River Road south of Interstate 91 in Putney, Vermont. The geocoordinates of the site are 42.968613°N, -72.495287°W. Staskus PFT at 4.

3. The Project will consist of the following components:

- multiple rows of solar panels mounted on a racking system anchored to the ground;
- ten (10) string inverters each having a capacity of 50 kW (AC), for an aggregate nameplate capacity of 500 kW (AC) mounted on the racking system;
- electrical lines enclosed in conduit connecting the panel rows, string inverters, AC combiner panel and AC disconnect pedestal;

- three (3) 167 kVA pole-mounted transformers on a GMP distribution pole;
- a GMP line extension to connect to the existing GMP distribution system;
- energized equipment rated for outdoor use, securely shielded by locked enclosure covers and otherwise compliant with NEC code "Guarding of Live Parts"; and
- Access off an existing drive from River Road south of Interstate 91.

Exh. PGAS-MS-2; Exh. PGAS-MS-6; Staskus PFT at 4-5.

4. No lighting will be installed at the Project. Staskus PFT at 5.

#### **Applicable Rate Adjustors**

5. The Applicant has elected to transfer the Project's renewable energy credits ("RECs") to Green Mountain Power Corporation. Staskus PFT at 8.

6. The Project is a preferred site because it is proposed for a closed sanitary landfill pursuant to 10 V.S.A. § 6602 that is certified by the Agency of Natural Resources as suitable for solar development. Exhibit PGAS-MS-5; Staskus PFT at 8-9.

7. Because the Project is greater than 150 kW and is located on a preferred site, a siting adjustor of minus two cents per kilowatt hour shall apply to all energy generated by the net-metering system.

8. Because the Applicant has elected to transfer the ownership of the RECs generated by the net-metering system, the Project is entitled to receive a REC adjustor of plus one cent per kilowatt hour for 10 years from the date the system is commissioned.

9. The siting and REC adjustors will be stated in the Project's CPG, pursuant to Commission Rule 5.127(B)(2) and (C)(1).

**Orderly Development of the Region**

[30 V.S.A. § 248(b)(1)]

10. The Project will not unduly interfere with the orderly development of the region, with due consideration having been given to the recommendations of the municipal and regional planning commissions and legislative bodies and the land conservation measures contained in the town and regional plans. This finding is supported by findings 11 through 13, below.

11. The Project is compatible with applicable policies and goals in both the Putney Town Plan, the Windham Regional Plan and Windham Regional Energy Plan. Staskus PFT at 11; Exh. PGAS-MS-6.

12. The Project will further the renewable energy policies and goals stated in both the town and regional plans. Staskus PFT at 11; Exh. PGAS-MS-6.

13. On a regional basis, the Project's impacts are localized and minimal. The array has a low profile in the landscape and the character and components of the array and associated equipment is visually consistent with similar solar projects seen throughout Vermont and is suitable for the context in which the array will be located. Staskus PFT at 11; Exh. PGAS-MS-6.

**Municipal Screening Requirements**

[30 V.S.A. § 248(b)(1)(B)]

14. The Town of Putney has not adopted a solar screening requirement with which the Project would have to comply. Staskus PFT at 8.

**Impact on System Stability and Reliability**

[30 V.S.A. § 248(b)(3)]

15. The Project will not have an adverse impact on system stability and reliability. This finding is also supported by findings 16 through 18, below.

16. The Project will comply with the National Electric Code and all energized equipment and wiring will be inaccessible, underground or within locked or sealed enclosures. Staskus PFT at 17-18; Exh. PGAS-MS-4.

17. Green Mountain Power, the interconnecting utility, has concluded that the Project can be safely interconnected without causing an undue adverse impact on system stability and reliability provided the conditions in the Feasibility Study are met. Exh. PGAS-MS-7.

18. The Applicant has budgeted for and will be responsible for paying for all necessary interconnection costs designated as Applicant's responsibility in the Feasibility Study, as required by Rule 5.500. Staskus PFT at 11.

**Aesthetics, Historic Sites, Air and Water Purity, the Natural Environment, the Use of Natural Resources, and Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

19. Subject to the conditions described below, the Project will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, or public health and safety, with due

consideration having been given to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K), impacts on primary agricultural soils as defined in 10 V.S.A. § 6001, and greenhouse gas impacts. This finding is supported by findings 20 through 51, below.

**Outstanding Resource Waters**

[30 V.S.A. § 248(b)(8) & 10 V.S.A. § 1424a(d)]

20. The Project will not affect any outstanding resource waters as defined by 10 V.S.A. § 1424a(d) because there are no outstanding resource waters in the Project area. Exh. PGAS-DB-2.

**Air Pollution & Greenhouse Gas Emissions**

[30 V.S.A. § 248(b)(5); 10 V.S.A. § 6086(a)(1)]

21. The Project will not result in undue air pollution or greenhouse gas emissions. Any air emissions associated with installation will be primarily from any fossil-fueled vehicles and equipment used for deliveries, worker transportation, and installation activities. The emissions will be typical of small construction projects, will be short-term, and will not be adverse. Staskus PFT at 12.

**Water Pollution**

22. The Project will not result in undue water pollution. This finding is supported by findings 23 through 37 under the criteria of headwaters through soils, below.

**Headwaters**

[10 V.S.A. § 6086(a)(1)(A)]

23. The Project is not located on or near a headwaters area. Therefore, the Project will not have an undue adverse impact on headwaters. Exh. PGAS-DB-2.

**Waste Disposal**

[10 V.S.A. § 6086(a)(1)(B)]

24. The Project will generate minimal waste that will be handled and disposed of in accordance with applicable Department of Environmental Conservation regulations. Staskus PFT at 14.

25. The Project will not involve the injection of waste materials or any harmful or toxic substances into ground water or wells. Staskus PFT at 14.

**Water Conservation**

[10 V.S.A. § 6086(a)(1)(C)]

26. The Project will not have an undue adverse effect on water conservation because water use will be limited to dust control during construction, if needed, and to promote seed germination. Staskus PFT at 14.

**Floodways**

[10 V.S.A. § 6086(a)(1)(D)]

27. The Project is not located within a floodway or floodway fringe and therefore will not restrict or divert the flow of flood waters, significantly increase the peak discharge of a river or stream within or downstream from the Project, or endanger the health, safety, or welfare of the public or of riparian owners during flooding. Exh. PGAS-DB-2.

**Streams**

[10 V.S.A. § 6086(a)(1)(E)]

28. The Project will, whenever feasible, maintain the natural condition of the onsite streams, and will not endanger the health, safety, or welfare of the public or of adjoining landowners. This finding is supported by finding 29, below.

29. An unnamed tributary to the Connecticut River has been culverted under Interstate 91 and the railroad tracks to the south of the Interstate. There is an approximately 100 square foot excavated opening between the two culverts where the stream daylights. New overhead power for the Project will cross this area of the stream channel requiring minor tree clearing within the designated riparian zone. The stream channel is not in a natural condition in the Project area. The crossing has been designed perpendicular to the channel and the clearing within the riparian zone will not impact the natural condition of the stream. Exh. PGAS-DB-2; Prefiled Testimony of Dori Barton (hereinafter "Barton PFT") at 3.

**Shorelines**

[10 V.S.A. § 6086(a)(1)(F)]

30. The Project will not have an undue adverse impact on shorelines. This finding is supported by finding 29 above and finding 31, below.

31. The shoreline of the Connecticut River is approximately 150' to the south of the Project. The Project has been designed to preserve a 100' riparian buffer from the banks of the River. There are no changes proposed to the riparian zone or shoreline area

of the River. The Project will retain the natural condition of the river shoreline in the area of the Project, will maintain a shoreline screen, will not affect existing access to the river for recreational purposes, and will not impact riverbank stabilization in the adjacent areas of the shoreline. Exh. PGAS-DB-2; Barton PFT at 3.

**Wetlands**

[10 V.S.A. § 6086(a)(1)(G)]

32. The Project will not have an undue adverse impact on wetlands because there are no wetlands on the Project site, and the closest VSWI mapped Class 2 wetland is located ~1300' to the west of the Project. Exh. PGAS-DB-2; Exh. PGAS-MS-2.

**Sufficiency of Water and Burden on Existing Water Supply**

[10 V.S.A. §§ 6086(a)(2) & (3)]

33. The Project will not cause an unreasonable burden on an existing water supply because the Project will require only minimal water use for dust control during construction, if necessary, and seed germination. Staskus PFT at 14.

**Soil Erosion**

[10 V.S.A. § 6086(a)(4)]

34. The Project will not cause undue soil erosion or reduce the capacity of the land to hold water so that a dangerous and unhealthy condition results. This finding is supported by findings 35 through 37, below.

35. During installation, temporary earth disturbance will occur from preparing the site, installing the conduit with electric cable as well as the electrical infrastructure, and racking posts. Exh. PGAS-MS-2; Staskus PFT at 15.

36. For the state construction stormwater discharge permit, the Project Limit of Disturbance (LOD) will be approximately  $\pm 2$  acres. Exh. PGAS-MS-2; Staskus PFT at 15.

37. The Project will be installed in accordance with the Vermont Standards and Specifications for Erosion Prevention and Sediment Control (February 2020), and the Applicant will apply for coverage under the Agency of Natural Resources Department of Environmental Conservation Construction General Permit. Exh. PGAS-MS-2; Staskus PFT at 15.

### **Transportation**

[10 V.S.A. § 6086(a)(5)]

38. The Project will not cause an undue adverse impact on transportation systems or cause undue traffic. This findings in supported by findings 39 through 41, below.

39. The Project's installation will involve only short-term, periodic traffic impacts due to deliveries of equipment during installation typical of a small construction project. Staskus PFT at 15.

40. Access across the adjacent railroad tracks is through a deeded right of way that benefits the host parcel. Exh. PGAS-MS-10; Staskus PFT at 9-10, 15.

41. The Applicant will coordinate construction across the host parcel's rail right of way to ensure that construction traffic does not interfere with or cause a safety hazard to railway operations. Staskus PFT at 9-10, 15.

**Educational and Municipal Services**

[10 V.S.A. § 6086(a)(6) & (7)]

42. The Project will not place a burden on the ability of a municipality to provide educational, municipal, or other governmental services because the Project is monitored remotely and will not require new staff or personnel to move to Putney. Staskus PFT at 16.

**Aesthetics, Historic Sites or Rare and Irreplaceable Natural Areas**

[10 V.S.A. § 6086(a)(8)]

43. This Project will not have an undue adverse impact on aesthetics, historic sites, or rare and irreplaceable natural areas. This finding is supported by findings 42 through 48, below.

**Aesthetics**

44. The Project will not have an adverse impact on the aesthetics of the surrounding area. The Project site is on property of a closed landfill with Interstate 91 approximately to 215 feet to the north. Views along Interstate 91 will be almost entirely screened by existing roadside vegetation and northern property boundary existing vegetation. Exh. PGAS-MS-6.

45. The array will not be a dominant element in this landscape because its design is low-profile within the viewshed. Exh. PGAS-MS-6.

46. The solar array will not make undue sound while operating. Exh. PGAS-MS-8; Staskus PFT at 18.

#### Historic Sites

47. The Project will not have an undue adverse impact on historic sites. This finding is supported by findings 46 through 47, below.

48. The Project site had been subject to a Phase I and Phase II archeological survey in connection with the Act 250 permit for the now-capped landfill. The Project will not have an undue adverse impact on underground historic resources because no resources of significance are present at the site. Staskus PFT at 16; Exh. PGAS-MS-6.

49. The Taylor House (State Historic Survey Number 1313-18) is located approximately 890 feet northwest of the Project. The Project will not be visible from the Taylor House and will have no impact on visitors interpreting the historic site. Staskus PFT at 16; Exh. PGAS-MS-6.

#### Rare and Irreplaceable Natural Areas

50. The Project will not have an undue adverse effect on rare and irreplaceable natural areas because there are no rare and irreplaceable natural areas within the Project area. Exh. PGAS-DB-2.

#### Necessary Wildlife Habitat and Rare, Threatened and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

51. The Project will not have an undue adverse effect on any endangered species or critical wildlife habitat. There are no rare, threatened, or endangered species in the Project area. Exh. PGAS-DB-2.

**Development Affecting Public Investments**

[10 V.S.A. § 6086(a)(9)(K)]

52. The Project will not unnecessarily or unreasonably endanger any public or quasi-public investment in any facility, service, or lands, and will not materially jeopardize the function, efficiency or safety of, or the public's use or enjoyment of or access to any facility, service, or lands. Staskus PFT at 17.

**Public Health and Safety**

[30 V.S.A. § 248(b)(5)]

53. The Project will not have any undue adverse effects on the health, safety, and welfare of the public. This finding is supported by findings 54 through 56, below.

54. The Project will be constructed in compliance with the National Electrical Code. Staskus PFT at 17-18.

55. Construction traffic will be coordinated with the railroad to ensure public and railway safety during construction. Staskus PFT at 15.

56. All energized array equipment will be rated for outdoor use will be securely shielded, include locked enclosure covers, and be otherwise compliant with the NEC code "Guarding of Live Parts." Staskus PFT at 17-18.

**Primary Agricultural Soils**

[30 V.S.A. § 248(b)(5)]

57. The Project will not have an undue adverse impact on primary agricultural soils. Approximately 0.03± acres of primary agricultural soil will be disturbed by installation of the underground conduit for the array wiring and equipment panel. The soils shall be put back within the trench in the same layers as they were removed to maintain the integrity of the soil horizons. See Exh. PGAS-MS-2; Staskus PFT at 7.

**Minimum Setback Requirements**

[30 V.S.A. § 248(s)]

58. The Project will comply with Vermont's statutory setback requirements for ground-mounted solar electric generation facilities because the Project's solar panels or support structures for the solar panels are set back more than 100 feet from the nearest road and more than 50 feet from the nearest property boundary line. Exh. PGAS-MS-2.

**Decommissioning Plan**

[PUC Rule 5.904(A)]

59. The Applicant will remove the Project once it is no longer in service and will restore the site to its condition prior to installation of the facility to the greatest extent practicable. Staskus PFT at 8.

60. The Applicant will secure any permits that are required to decommission the Project prior to commencing decommissioning work. Any primary agricultural soils

disturbed in connection with decommissioning activities will be restored the same layers as they were removed to maintain the integrity of the soil horizons. Staskus PFT at 8.

**Public Good**

61. The Project does not raise a significant issue with respect to the substantive criteria of 30 V.S.A. §§ 248 and 8010 and will promote the general good of the State.