STATE OF VERMONT
PUBLIC UTILITY COMMISSION
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Case No. 24-1898-PET

Petition of Essex A North Lot Solar, LLC for a certificate of public good, pursuant to 30 V.S.A. § 248, for a 3.5 MW ground-mounted solar array located off Robinson Parkway in Essex Junction, Vermont.

ESSEX A NORTH LOT SOLAR, LLC'S PROPOSAL FOR DECISION AND CERTIFICATE OF PUBLIC GOOD

DATED at Montpelier, Vermont, this 4th day of December, 2024.

Essex A North Lot Solar, LLC

By:

Joslyn Wilschek, Esq.
Wilschek Iarrapino Law Office PLLC
35 Elm Street, Suite 200
Montpelier, VT 05602
802-249-7663
joslyn@ilovt.net

FINAL ORDER GRANTING CERTIFICATE OF PUBILC GOOD

In this Order, the Vermont Public Utility Commission ("Commission") adopts the following proposal for decision.

PROPOSAL FOR DECISION

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I. INTRODUCTION

This case involves a petition filed by Essex A North Lot Solar, LLC ("Petitioner") with the Vermont Public Utility Commission ("Commission") requesting a certificate of public good ("CPG") under 30 V.S.A. § 248 authorization the construction and operation of a 3.5 MW ground-mounted solar array located off Robinson Parkway in Essex, Vermont (the proposed "Project").

In this proposal for decision, I recommend that the Commission approve the Project and issue a CPG, subject to conditions.

II. PROCEDURAL HISTORY

On June 19, 2024, the Petitioner filed a petition with supporting testimony and exhibits (Petition) requesting a CPG to install and operate the Project.

On June 28, 2024, the petition was deemed administratively complete by Commission staff.

On June 28, 2024, Mike Swain, esq. entered an appearance on behalf of the Vermont Department of Public Service (Department).

On June 28, 2024, Elizabeth Lord, esq. entered an appearance on behalf of the Vermont Agency of Natural Resources (ANR). On October 18, 2024, Don Einhorn, esq, filed a notice of appearance in lieu of Elizabeth Lord.

On June 28, 2024, Maxwell I. Krieger, esq. entered an appearance on behalf of the Vermont Division for Historic Preservation (DHP), the DHP filed a Motion to Intervene, and no party objected. I granted DHP's motion on August 2, 2024.

On July 19, 2024, the Chittenden County Regional Planning Commission (CCRPC) filed public comments explaining that the Project conforms with the 2018 Chittenden County ECOS Plan so long as the Petitioner minimizes any impacts to primary agricultural soils in accordance with the Vermont Agency of Agriculture, Food, and Markets (AAFM).

On July 24, 2024, I issued a notice of hearing for the scheduling conference.

On August 2, 2024, I issued a Procedural Order Requesting Additional Single-Plant Information.

On August 9, 2024, I conducted a scheduling conference.

On August 16, 2024, the Petitioner responded to the information request by submitting prefiled testimony of Taegen Kopfler.

On August 19, 2024, I issued a scheduling conference order and established August 26, 2024 as the deadline for motions to intervene and requests for public hearing and site visit. No entity other that DHP filed a motion or notice for intervention by this date or requested a site visit or public hearing.

On August 28, 2024, DHP filed comments concluding that the Project would have no effect on above or below ground historic sites.

On September 3, 2024, the Department and ANR filed their First Set of Discovery Requests on Petitioner.

On September 9, 2024, the Petitioner filed a revised acoustic study as Exhibit EANL-JC-10 and associated supplemental prefiled testimony by Jake Clark.

On September 24, 2024, the Petitioner responded to the First Set of Discovery Requests from the Department and ANR.

On October 15, 2024, ANR and the Department served its Second Set of Interrogatories, Requests for Admission and Requests for Production upon Petitioner.

On October 16, 2024, AAFM filed its First Set of Interrogatories.

On October 25, 2024, AAFM filed a notice of intervention.

During the week of October 28, 2024, the Petitioner responded to the Second Set of Interrogatories, Requests for Admission and Requests for Production and AAFM's First Set of Interrogatories.

On November 13, 2024, the Petitioner filed supplemental testimony by Adam Crary and an associated exhibit.

On November 18, 2024, Petitioner filed a Memorandum of Understanding with ANR.

On November 20, 2024, the Department filed comments and requested that the Commission grant the Petitioner a CPG for the Project with two recommended conditions that the Petitioner does not object to as discussed in the findings below. AAFM also filed comments and had no objection to the Project so long as the Section 248(t) requirement was a condition and Petitioner has no objection.

On December 5, 2024, Petitioner filed a letter with the Commission indicating that an evidentiary hearing may not be necessary because of the MOU with ANR, and comments filed by AAFM and the Department filed on November 20, 2024. This letter was treated as a Request to Amend the Schedule by the Commission.

No further comments on the petition were received by the Commission.

No party requested an evidentiary hearing or objected to the prefiled testimony and exhibits. Accordingly, the following prefiled testimony and exhibits are admitted as if presented

at a hearing: Jake Clark's testimony and supplemental testimony and exhibits EANL-JC-1 through EANL-JC-7, and EANL-JC-9 and 10; Adam Crary's testimony and first supplemental testimony and exhibits EANL-AC-1 through EANL-AC-3; Jeremy Owens's testimony and exhibits EANL-JO-1 through EANL-JO-3; and Stephanie Wyman's testimony and exhibits EANL-SW-1 through EANL-SW-3. Additionally, the Petition, the CCRPC Comments, DHP Comments, Department Comments and the MOU Exhibit EANL-ANR-1 are entered into evidence subject to timely objection by the parties.[1]

III. FINDINGS

Based upon the evidence of record, I hereby report the following proposed findings to the Commission in accordance with 30 V.S.A § 8 (c).

Background and Project Description

1. EANL is a Vermont limited liability company with offices located at 50 Lakeside Avenue, Suite 110, in Burlington, Vermont 05401. Petition; Jake Clark, EANL (Clark) pf. at 2.

2. EANL proposes to install and operate a 3.5 MW ground-mounted solar electric generation facility, known as the Essex A North Lot Solar Project (the "Project") on approximately 13 acres of an approximately 228-acre parcel of land owned by GlobalFoundries (GF) (the "Property"). The Petitioner has rights to lease the Property. Clark at 3.

3. The Project was initiated and designed with the intent of providing GF, the sole customer of Commission-regulated electric utility GF Power LLC (GF Power), with a source of local solar energy generation to help it achieve its renewable energy goals. GF Power is a

[1] If any party has an objection to any of these documents being entered into evidence, the party shall submit its objection within 14 days of the date this Order is entered.

relatively new Commission-regulated electric utility serving a single industrial customer, GF. GF is a world leader in feature-rich semiconductor manufacturing with a strong commitment to sustainable and environmentally efficient operations. Semiconductor manufacturing is an electric-energy-intensive industry and GF's Journey to Zero Carbon Emissions program is multifaceted, focusing on improving energy efficiency, sourcing renewable and low-carbon energy, and enhancing manufacturing emissions controls. On an annual basis, GF uses more electricity than the entire City of Burlington. As a result, GF Power has the third largest utility load among Vermont distribution utilities.[2] Clark pf. at 5-6.

4. This Project allows GF to make substantial progress by adding cost-effective new renewables in Vermont while locating generation projects as close as possible to the load, thereby reducing power grid impacts within Vermont. The use of onsite renewable energy offers significant advantages, including the stabilization of energy costs and meeting the growing expectations of GF customers to manufacture products using renewable energy. Clark pf. at 6-7.

5. The Project is also being undertaken to help GF Power comply with Vermont's Renewable Energy Standard (RES), 30 V.S.A. §§ 8004-8005, including requirements for the utility to purchase distributed renewable energy from plants 5 MW or less in an amount equal to a specified percentage of GF Power's load.[3] Specifically, the RES requires GF Power to comply

[2] *Petition of GlobalFoundries U.S. 2 LLC requesting a certificate of public good, pursuant to 30 V.S.A. § 231, for a newly created, wholly owned subsidiary of GlobalFoundries, GF Power, to operate as a public service company, under regulation appropriate to its function*, 21-1107-PET, Order of 10/21/22 (the "GlobalFoundries Order"). Pursuant to 3 V.S.A. § 810, the Commission may take judicial notice of findings in its prior orders.

[3] For further discussion please see *Petition of Encore Renewable Energy for a declaratory ruling regarding whether several potential solar projects are separate plants and qualify as Tier II resources under Rule 4.400 and 30 V.S.A. § 8005* Case No. 23-3974-PET, Declaratory Ruling Regarding the Applicability of the Definition of Tier II Resources Under Vermont's Renewable Energy Standard to Certain Potential Solar Facilities (Jan. 26, 2024) ("Dec Action Order"). H.289, which became law on June 17, 2024 and has an effective date of July 1, 2024, includes new Tier 2 in-state renewable energy requirements for GF that requires 20% by 2035.

with the so-called Tier II requirements under which a utility must obtain 20% of its energy from "distributed renewable generation," as defined in 30 V.S.A. § 8005, by 2032.[4] This Project is one of several that GF Power has contracted with Encore to have designed, permitted, and constructed for the purpose of complying with its RES Tier II obligations.[5] Clark pf. at 7-8.

6. The Project is structured so that the Petitioner plans to sell the output of the solar Project to GF Power under a Power Purchase Agreement (PPA) at a competitive rate of $0.06830/kwh. Clark pf. at 7.

7. The power is both generated and interconnected into the GF facilities, but it is transferred via the Green Mountain Power (GMP) distribution infrastructure on the GF Campus, so GF will pay a wheeling charge to GMP to compensate for this use of its infrastructure. This structure will contribute to GF Power's RES compliance activities, help its sole customer—GF—to advance its sustainability initiatives, and allow GMP to help facilitate accomplishment of these objectives without any negative impact on GMP's ratepayers. Clark pf. at 8.

8. The Project was identified as a "potential solar facility" —Project A —in the Commission's Declaratory Ruling in Case No. 23-3974, where the Commission concluded that this Project was a single plant so long as the Project plans submitted in the Section 248 case were identical to the plans submitted in Case No. 23-3974 with respect to the factors that define a single plan.[6] The plans for this Project meet that standard. Clark pf. at 8-9.

9. The Petitioner will transfer the renewable energy credits associated with this Project to GF Power pursuant to the PPA between Petitioner and GF Power. Clark pf. at 9.

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[4] See footnote 3 and Dec. Action Order at finding 3.
[5] Dec. Action Order at finding 4. For location, size, and interconnection information related to other planned projects, please see Exhibit EANL-JC-5.
[6] Dec. Action Order at finding 6.

10. The closest residence to the solar array is approximately 599 feet from the nearest edge of the panels. Clark pf. at 21; exh. EANL-JC-2.

11. The Project consists of approximately 7,488 non-reflective photovoltaic modules installed on fixed-tilt ground-mounted racking units within a fenced area spread across the approximately 13-acre Project area. The array is separated into three sections of racking, with two sections having 9 rows of panels, and the third section having 20 rows of panels. The approximate 38 rows of panels comprising the solar array range in length and run generally east-west, are oriented predominantly to the south, and are fixed at around 25 degrees. Racking systems will be approximately 3.5 feet tall on the low side and 15 feet tall on the high side and installed on driven post foundations, generally without the use of concrete. Clark pf. at 9-; exhs. EANL-JC-2 & 3.

12. Electricity will run from the panels in direct current to a network of string inverters, which are UL1741-SA compliant, dispersed among the array, before being converted to alternating current. Cabling will then run in a protective conduit to a switchgear, which will include the data acquisition system and other auxiliary equipment and the production meter. Clark pf. at 10.

13. Electricity will then run underground to a 4,200 kVA pad-mounted transformer with secondary oil containment. Clark pf. at 10.

14. From the transformer, the electricity will run north, 390 feet underground, to a proposed riser pole. From the riser pole, the electricity will run north approximately 360 feet on new overhead 3-phase lines, which will require 5 new poles (1 riser pole, and 4 more poles to get to the existing GMP-owned pole) to convey electricity to the point of interconnection with an

existing GMP-owned pole on the east side of the police department access road. The 5 new wooden poles will be approximately 40 feet high. At the point where the new overhead lines connect with the existing GMP-owned pole on the east side of the Police Station access road, the Project will interconnect with GMP's existing distribution network. Petitioner will own the transformer, whereas GMP will own the above-referenced overhead line extension and new poles. Clark pf. at 10; Stephanie Wyman, EANL (Wyman) pf. at 2-3; exhs. EANL-JC-2 & 7.

15. The Petitioner will access the Property via a new access drive that will provide connectivity to an existing drive to the west. The new access drive will be approximately 480 feet long, 12 feet wide, and made of crushed stone gravel. The Petitioner will construct this permanent access drive with a minimum of 18 inches of gravel material over geotextile fabric. The Petitioner will install two short-term staging areas for deliveries and temporary storage of equipment. One short-term staging area would be located at the end of the access drive, and the second would be north of the entrance to the Project area. Clark pf. at 10-11; exh. EANL-JC-2.

16. The Project requires the Petitioner to clear and/or top certain areas of trees on the site for Project installation and to avoid shading of the array. Petitioner anticipates that in total, the Project will require approximately 2.7 acres of tree clearing (including grubbing). Clark pf. at 12; exh. EANL-JC-2.

17. The Petitioner will install an approximately 7- to 8-foot-high agricultural style wire-knot perimeter fence affixed to driven fence posts. The perimeter fencing would restrict access to and from the Project to secure it and prevent the public from entering the array. The Petitioner will install a secured gate where the fence meets the access drive. GMP and first responders will be provided with access through the gate. Clark pf. at 11; exh. EANL-JC-3.

18. The Project does not require lighting and thus the Petitioner does not propose a lighting plan for the Project. Clark pf. at 12.

19. Minimal earthwork will be involved for the installation of the access drive, underground conduit, necessary equipment pads for the transformer, and associated stormwater treatment improvements. Limited grading may be necessary in areas of the site where the uneven terrain would not be compatible with the proposed racking installations. Clark pf. at 12; exh. EANL-JC-2.

20. The Project includes one 4,200 kVA pad-mount transformer that uses a biodegradable dielectric fluid. The Petitioner also proposes to install a secondary oil containment system sufficient to hold a minimum of 110% of the transformer coolant volume plus five inches of free board for the pad-mount transformer. Clark pf. at 12; exhs. EANL-JC-2 & 3.

21. Construction activities and related deliveries will be limited to 7:00 A.M. - 6:00 P.M. on weekdays; 8:00 A.M. - 5:00 P.M. on Saturdays, and no construction on Sundays or state or federal holidays. Clark pf. at 13.

22. Once the Project is fully commissioned, operations and maintenance activities will be minimal. The Petitioner will conduct routine system performance one to two times per year, which will consist of vegetation management, mechanical, and electrical inspections. The Petitioner will remotely monitor operations; in the event of a system malfunction, personnel will visit the site for troubleshooting or repairs. Clark pf. at 13.

Review of Project Under the Section 248 Criteria

Orderly Development of the Region
[30 V.S.A. § 248(b)(1)]

23. The Project will not interfere with the orderly development of the region. In making this finding, due consideration has been given to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality. Substantial deference has been given to the land conservation measures and specific policies contained in the duly-adopted regional plan. This finding is supported by the additional findings below.

24. The CCRPC Regional Plan (adopted June 20, 2018) received a Certificate of Energy Compliance for the Regional Plan from the Department of Public Service. Jeremy Owens, EANL (Owens) pf. at 4; exh. EANL-JO-2.

25. The Regional Plan does not contain any land conservation measures or specific policies applicable to the Project parcel. The Project parcel is not under conservation easements or restrictions, and the Project would not violate conservation measures in the Regional Plan. The Project complies with the Regional Plan. Owens pf. at 3-4; exh. EANL-JO-2.

26. The CCRPC filed comments stating that the Project conforms with the 2018 Chittenden County ECOS Plan so long as the Petitioner minimizes any impacts to primary agricultural soils in accordance with the Vermont Agency of Agriculture, Food, and Markets. As set forth below under the primary agricultural criteria, the Project will have no undue adverse impact to this criterion. *July 10, 2024, Letter from CCRPC, Charlie Baker.*

27. The Project is consistent with the 2019-2027 Village of Essex Junction Comprehensive Plan (the "Town Plan"). The Town Plan contains no clearly applicable land conservation measures or specific policies that apply to the Project site. Owens pf. at 4-5; exh. EANL-JO-2.

Municipal Screening Requirements
[30 V.S.A. § 248(b)(1)(B)]

28. The Town of Essex has not adopted screening requirements for ground-mounted solar electric generational facilities pursuant to either 24 V.S.A. § 2291(28) or 4415(15) with which the Project would have to comply. Owens pf. at 5.

Need for Present and Future Demand for Service
[30 V.S.A. § 248(b)(2)]

29. The Project will meet the need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and measures and energy efficiency and load management measures, including those developed pursuant to the provisions of subsection 209(d), section 218c, and subsection 218(b) of Title 30. This finding is supported by the additional findings below.

30. The Project is being implemented specifically to comply with GF Power's RES Tier II obligations. Vermont law requires these obligations to be met through "new renewable energy" with a plant capacity of five MW or less and a direct connection to the distribution or subtransmission system of a Vermont utility. The Project qualifies as "new renewable energy" and thus satisfies GF Power's need for more Tier-II qualified new renewable energy. Clark pf. At 5-8, 17.

31. Regarding GF Power's sole customer, semiconductor manufacturing is an electric energy intensive industry and GF's Journey to Zero Carbon Emissions program is multifaceted, focusing on improving energy efficiency, sourcing renewable and low-carbon energy, and enhancing manufacturing emissions controls. This Project allows GF to make substantial progress by adding cost-effective new renewables in Vermont while locating generation projects as close as possible to the load, thereby reducing power grid impacts within Vermont. Clark pf. at 17.

Impact on System Stability and Reliability

[30 V.S.A. § 248(b)(3)]

32. The Project will not adversely affect system stability and reliability. This finding is supported by additional findings below.

33. The Petitioner filed a complete interconnection application pursuant to Commission Rule 5.500 on January 19, 2024. GMP commissioned a Feasibility Study to evaluate potential impacts of the Project to the grid and issued a Facilities Study. It then issued a Facilities Report. The Facilities Report concluded the Project would not result in adverse impacts to the system provided the following measures are implemented prior to the Project's interconnection:

1) Installation of a line extension from Tag 103095 to the location of the point of common coupling recloser. This line extension will include a pole-mounted disconnect switch at or near Tag 103095.

2) Installation of a three-phase, pad-mounted, 15 kV Viper S recloser to be located at the point of common coupling (PCC). An existing pole-mounted transformer will supply power to the recloser and associated communications equipment.

3) Installation, testing, and commissioning of a supervisory control and data acquisition system, and interface this system with the PCC recloser.

4) Installation of a three-phase, four-wire, 12 kV-class bi-directional pad-mounted metering package to be located at the PCC.

5) Installation of a single (1) phase voltage transformer on the line side of the 19G4 distribution feeder.

6) Programming, testing and commissioning settings and logic changes to the 19G4 breaker protection relay.

Clark pf. at 17- 18; exh. EANL-JC-6.

34. The Petitioner will pay for these upgrades and will work with GMP to ensure their completion prior to interconnection, and the Petitioner will enter into an interconnection agreement with GMP prior to construction. Clark pf. at 18.

35. The Petitioner has agreed to the following CPG condition as recommended by the Department: The Petitioner shall submit a signoff from ISO-NE with the Commission and the parties before construction.

Economic Benefit to the State
(30 V.S.A. § 248(b)(4))

36. The Project will result in an economic benefit to the State and its residents. The Project will pay annual local and municipal property taxes to the Town as required under 32 V.S.A § 3481. Using the discounted cash flow methodology prescribed in 32 V.S.A § 3481(1)(D), along with guidance provided by the Department of Taxes, and current property tax rates, the Petitioner estimates that the local property taxes due from the Project in the first year

will be approximately $21,396. Over a 25-year period, the Petitioner estimates that the Project will result in approximately $545,591 in local property taxes. Clark pf. at 18.

37. The Project will pay an annual Uniform Capacity Tax as required under 32 V.S.A § 8701. The revenue generated by this tax will go into the statewide education fund. With the proposed AC capacity of the Project at 3,500 kW, and the current Uniform Capacity Tax rate of $4.00 per kW AC, the Project will pay approximately $14,000 per year into the statewide education fund. Over a 25-year term, the Petitioner estimates that the Project will pay approximately $350,700 in Uniform Capacity Tax to the statewide education fund. Clark pf. at 19.

38. During the design and development phases, the Petitioner has hired many Vermont and regional firms to work on the environmental, aesthetic, legal, engineering, and permitting components of the Project. Additional electricians and workers will be needed during Project construction, as well as during the ongoing maintenance and operation of the Project. The Project's construction phase will also likely contribute to local economic activity via lodging, meals, and other ancillary purchases made by contractors. Clark pf. at 19.

39. GF continues to compete in an industry where the average selling price of products is an important determinant in sales. One of the major factors affecting the selling price is the cost of electricity. Therefore, managing electricity costs is a significant strategic focus for GF to help it maintain its competitiveness and continue to operate in Vermont. This is one of the core reasons GF petitioned the Commission to operate its own utility. Further, due to the Project's location on the GF campus and its ability to help serve on-site load, the Petitioner expects the Project to provide a benefit to the entire transmission grid because it will not require

significant upgrades and leaves transmission capacity and space for other projects in the region. Clark pf. at 19-20.

40. In addition, GF is Vermont's largest private employer. Providing strong environmental sustainability practices creates an advantage in acquiring and retaining talented employees who then extend environmental initiatives beyond the workplace. In addition, its customers are increasingly seeking products manufactured with new and low-carbon energy. Renewable projects like the one proposed in this Petition deliver these benefits. Clark pf. at 20.

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)]

41. 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 the additional findings below, which give due consideration to the criteria specified in 10 V.S.A. §§ 1424a(d) and 6086(a)(1) through (8) and (9)(K).

Outstanding Resource Waters
[10 V.S.A. § 1424(a)(d)]

42. The Project will not affect any outstanding resource waters as defined by 10 V.S.A. § 1424a(d) because there are no outstanding waters in the Project area. Adam Crary, EANL, (Crary) at pf. 4; exh. EANL-AC-2.

Air Pollution and Greenhouse Gas Impacts
[30 V.S.A. § 248(b)(5); 10 V.S.A. § 6086(a)(1)]

43. The Project will not result in undue air pollution, sound, or greenhouse gas emissions. This finding is supported by the additional findings below.

44. The Project will not involve any industrial/manufacturing emissions, excessive dust and smoke during construction, dust or noise from blasting, odors or excessive noise from construction activity. Moreover, the proposed Project will help reduce the need for carbon-based sources of electric energy, contributing to improved air quality. Clark pf. at 21-22.

45. The Project's highest modeled sound pressure level at the closest residence is 35 dBA (exterior) (daytime). The noise levels calculated at the nearest residence will be below both the maximum limits of 45 dBa (exterior) and 30 dBa (interior) as required by the Commission. Clark supp. pf. at 2-3; exh. EANL-JC-10.

46. Other than minor temporary emissions during construction, the Project will not emit greenhouse gases. In fact, this Project will enable Vermont to lessen its reliance on greenhouse gas-emitting generation. Clark pf. at 22.

47. The Petitioner shall follow the following greenhouse gas reporting protocols because the Agency of Natural Resources will require it to do so:

(a) The Petitioner shall provide ANR with the following Project "as-built" information within 60 days of the commissioning date of the Project to assist the Agency with compiling and analyzing greenhouse gas impacts:

i. Solar panel manufacturer and model;
ii. Solar panel cell technology (e.g. mono-Si, multi-Si, CdTe, etc.);
iii. Rated solar panel output (in watts);
iv. Number of solar panels installed;
v. Array mounting type (fixed, 1-axis tracking, 2-axis tracking, ground, roof, other);
vi. For fixed or 1-axis tracking, panel orientation, and mounting angle;
vii. Rack system manufacturer and model;

viii. Rack system components, including the number of aluminum rails, steel mounting posts, etc.;
ix. Number and type of any other mounting components (e.g. concrete ballasts and foundation blocks);
x. Manufacturer, model, and number of inverters;
xi. Manufacturer, model, and number of transformers;
xii. Mass of concrete used (for ballasts, foundations, mounting pads, etc.);
xiii. Percent of Portland cement composition of concrete;
xiv. Description, quantity and source of any recycled materials used (e.g., recycled content concrete, recycled aluminum racking, etc.);
xv. Amount (length) and gauge of wiring used for project;
xvi. Components for connection to grid (circuit boxes, circuit breaker panels, metering equipment, etc.);
xvii. Distance (e.g., truck miles traveled) for transport of system components to site; and
xviii. Distance to grid connection.

(b) By January 30 of each year, ANR may request that Petitioner provide an annual report for the previous calendar year of operations to ANR. The annual report shall contain the information set out below, which will be used to assist ANR with compiling and analyzing greenhouse gas impacts. Petitioner will have 60 days from the date of ANR's request to supply the information, excepting the Renewable Energy Credit information, which may be submitted by July 31 of each year. Should ANR not request the information set out below by January 30, Petitioner will not have any obligation to provide an annual report from the previous year of operations. The information to be provided includes the following:

i. Electric generation in kWh for the prior year, broken down by month and the sale of any Renewable Energy Credits associated with generation; and
ii. Any information about the replacement of PV panels, inverters, transformers, or a complete racking system. In instances of failure and replacement of equipment (e.g. PV panels, inverters, etc.,), Petitioner shall provide descriptions of both the failed and replacement components at the same level of detail as required by the "as-built" reporting requirements of

condition (a), above. This provision does not require Petitioner to provide information about de minimis replacement of system components (e.g., replacement of racking system hardware), or information regarding regular maintenance activities.

(c) Should ANR not request the information in (a), above, in any two consecutive years after Project commissioning, Petitioner's reporting obligations for all subsequent years shall automatically cease.

(d) ANR and Petitioner, by mutual agreement, may cancel or amend Petitioner's reporting obligations set out at (a) at any time.

(e) ANR shall not use the information provided by Petitioner in (a) above to make any claims or report of benefits (including, but not limited to, benefits related to the renewable attributes of the Project's electric generation and greenhouse gas reductions associated with the Project) accruing to Vermont, or any other entity, resulting from the Project generating electricity from photovoltaic generation.

Clark pf. at 22-24.

Use of Natural Resources
(30 V.S.A. § 248(b)(5))

48. The Project will require a limited amount of natural resources of gravel and crushed stone for the surface of the equipment area and for the surface of the 480-foot-long access drive to the Project site. Clark pf. at 21.

Water Pollution
[10 V.S.A. § 6086(a)(1)]

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

Headwaters
[10 V.S.A. § 6086(a)(1)(A)]

50. The Project will not result in undue adverse effects to headwaters. This finding is supported by the additional findings below.

51. The Project is not located in a headwaters location because the Project site is within lands devoted to intense development. The entire Project area is mapped by ANR within the designated Urban Soil Background Area, depicting areas with the highest density of habitable buildings within the state. Crary pf. at 4; exh. EANL-AC-2.

52. Although the Project is not in a headwaters location, the Project will be constructed to not adversely impact ground or surface water quality, and will meet applicable health and Department of Environmental Conservation (DEC) regulations. Crary pf. at 5; Wyman pf. at 3-4.

Waste Disposal
[10 V.S.A. § 6086(a)(1)(B)]

53. The Project will meet all applicable health and Vermont Department of Environmental Conservation regulations regarding the disposal of waste and will not involve the injection of waste materials or any harmful or toxic substances into groundwater or wells. This finding is supported by additional findings below.

54. The Project operation will not generate sanitary waste. Wyman pf. at 3.

55. Because the amount of existing and proposed impervious surfaces encompassing the GF campus totals more than the 1-acre threshold, the Project will be required to treat all new impervious areas. The majority of the GF campus has coverage under a National Pollutant Discharge Elimination System (NPDES) Permit 3-1295. Therefore, all new impervious surface

created by the Project has been designed to discharge to the existing permitted system and will receive coverage under the existing permit. Wyman pf. at 3-4; exh. EANL-SW-2.

56. The Project will generate minor amounts of scrap and waste material during installation, and this waste will be disposed of or recycled at an approved disposal facility in accordance with Vermont solid waste management rules. Woody debris generated by any potential shrub and tree clearing or trimming will be either offered to the landowners for use as firewood, or chipped, piled, or transported off site. The Project is not anticipated to generate waste during operation. Wyman pf. at 4; exh. EANL-SW-2.

57. Given the developed and industrial use of the Project parcel, Petitioner will work with the DEC Sites Management Sections (SMS) to ensure Project soils are sampled, tested, and managed appropriately and in accordance with applicable regulations as needed; thus, the Project will meet applicable DEC regulations regarding the disposal of wastes. Wyman pf. at 4.

58. The Project on its own does not require an SPCC Plan. Regardless, the Project transformer will be placed within a secondary containment structure to prevent the release of transformer oil to the environment. The 4.2 MVA pad-mounted transformer will be housed within secondary oil containment, sized to contain 110% of the largest anticipated volume of a potential release of transformer dielectric fluid, plus a 5-inch rainwater event. Wyman pf. at 4; exh. EANL-SW-2; exhs. EANL-JC-2 & 3; Clark pf. at 12.

59. There are no surface water or groundwater protection areas within the vicinity of the Project. The closest ANR-mapped well is mapped within the Project limits of work. The well is not used for potable water, as the GF facility relies on municipal water for potable and domestic water use. The proposed transformer is not located within wetlands, wetland buffers,

streams, or stream buffers. The proposed secondary containment structure will prevent the release of oil to waters of the United Staes or other sensitive receptors. Furthermore, the transformer fluid will be non-hazardous. Accordingly, the proposed transformer does not pose the potential for adverse impacts to sensitive receptors. exh. EANL-SW-2; exhs. EANL-JC-2 & 3.[7]

60. The Petitioner has agreed to the following CPG condition: "Before beginning site preparation or construction of the Project, the CPG Holder shall ensure that GlobalFoundries, the owner of the Project site, updates the stormwater pollution prevention plan required by the NPDES Direct Discharge Permit #3-1295, issued by the Vermont Department of Environmental Conservation, to include all new impervious surfaces associated with the Project. The CPG Holder shall design and construct the Project so that all impervious surfaces associated with the Project are captured by the existing GlobalFoundries stormwater system and ultimately discharge to the Winooski River from stormwater outfall S/N 013 covered under the NPDES Direct Discharge Permit #3-1295." exh. EANL-ANR-1.

Water Conservation, Sufficiency of Water, and Burden on Existing Water Supply
[10 V.S.A. §§ 6086(a)(1)(C), (a)(2), & (a)(3)]

61. The Project will not burden existing water supplies and will not have an undue adverse effect on water conservation because it does not require a water supply. Crary pf. at 9.

Floodways
[10 V.S.A. § 6086(a)(1)(D)]

[7] Please note that the referenced exhibit EANL-SW-2, and Jake Clark's prefiled testimony at page 12 inadvertently refers to multiple transformers, but the Project has only one transformer as shown on the site plan, exhibit EANL-JC-2.

62. The Project is not within a floodway, floodway fringe, or river corridor and therefore will not restrict or divert the flow of floodwaters, 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. Crary pf. at 5; exh. EANL-AC-2.

Streams
[10 V.S.A. § 6086(a)(1)(E)]

63. The Project will maintain the natural condition of all streams and will not endanger the health, safety, or welfare of the public or adjoining landowners because no work is required or proposed in any streams. This finding is supported by additional findings below.

64. There are segments of two intermittent stream channels, unnamed tributaries to the Winooski River along the western boundary and within the northern section of the study area. No Project components are proposed to be located within these stream channels. Crary pf. at 6.

65. There will be minor tree clearing within the associated riparian wetland buffer of wetland 2022-1, which is needed to mitigate shading over the solar array. As the clearing is minor in nature and consists of approximately 6,500 square feet, and does not occur within 50 feet of the ordinary high water of the associated stream bank, the Project will maintain the natural condition of the corresponding stream, and will not endanger the health, safety, or welfare of the public or of adjoining landowners. Crary pf. at 5-6; exh. EANL-AC-2.

Shorelines
[10 V.S.A. § 6086(a)(1)(F)]

66. The Project is not located on a shoreline. Crary pf. at 6; exh. EANL-AC-2.

Wetlands
[10 V.S.A. § 6086(a)(1)(G)]

67. The Project will not have an undue adverse effect on wetlands. This finding is supported by the additional findings below.

68. The Petitioner has designed the Project to avoid any activity within wetlands. Crary pf. at 7; exh. EANL-AC-2.

69. The Petitioner has designed the Project to minimize activity within Class II wetland buffers, but complete avoidance of Class II wetland buffers is not practicable to meet the Project's purpose of installing the 3.5 MW Project as set forth in findings 3-6 above. The Project will require approximately 7,800 square feet of impact to two Class II wetland buffers to reduce array tree shading impact, and install four new overhead utility poles. Temporary impacts in wetland buffer will result from installing Project construction controls, including Project demarcation fencing and EPSC measures during construction, and will be restored after construction. Crary pf. at 7; exh. EANL-AC-2.

70. Although the Project will result in unavoidable impacts to Class II wetland buffer zones, the Petitioner has implemented a number of avoidance and minimization measures into the Project design to ensure the Project, as proposed, will avoid impacts to wetlands and minimize impacts to buffers. exh. EANL-AC-2.

71. The Petitioner will be required to obtain a Vermont Wetlands Permit authorization for those buffer activities that are regulated under the Vermont Wetland Rules. All Project work will be conducted in accordance with those permit conditions, which will protect on-site wetland functions. The Petitioner will not begin construction until it obtains applicable permits. Accordingly with permit issuance, the Project will conform to the Vermont Wetland Rules—the rules of the Secretary of Natural Resources as adopted under chapter 37 of title 10

relating to significant wetlands—and will not have an undue adverse impact on the wetland complex functions. Crary pf. at 7; exh. EANL-AC-2.

72. A USACE Section 404 Permit is not required as there is no proposed fill or dredge within Waters of the US (including wetlands) that would trigger federal review. Crary pf. at 7; exh. EANL-AC-2.

73. The Petitioner has agreed to the following CPG condition: "Before beginning site preparation or construction of the Project and of the Project-related interconnection upgrades and extensions, the CPG Holder shall obtain from the Agency's Department of Environmental Conservation a Vermont Wetlands Permit. All impacts associated with the Project-related interconnection upgrades and extensions will be considered by the Agency's Wetlands Program as cumulative impacts together with the impacts associated with the Project activities for purposes of the Vermont Wetlands Permit. All Project work, including all Project-related interconnection upgrades and extensions, shall be performed in accordance with the terms and conditions of the Wetlands Permit." exh. EANL-ANR-1.

Soil Erosion
[10 V.S.A. § 6086(a)(4)]

74. The Project will not cause unreasonable soil erosion or reduce the capacity of land to hold water so that a dangerous or unhealthy condition may result. This finding is supported by the additional findings below.

75. The Project will require authorization under the DEC Construction General Permit (CGP). Wyman pf. at 5; exh. EANL-SW-2.

76. As part of this authorization, the Project will implement EPSC best management practices (BMPs) to control soil erosion and discharge of sediment from the construction site

through a site-specific EPSC Plan as determined by the Project's risk category. BMPs include, but are not necessarily limited to: a stabilized construction entrance to minimize tracking of soil by vehicles; demarcation of disturbed areas with barrier tape; installing perimeter controls such as silt fence and construction fencing; and installing straw wattles at numerous locations parallel to the slope within the array to prevent erosion and the creation of rills. Wyman pf. at 5; exh. EANL-SW-2.

77. The Petitioner has agreed to the following CPG condition: "Before beginning site preparation or construction of the Project, the CPG Holder shall obtain from the Agency's Department of Environmental Conservation an Individual Construction Stormwater Permit. All Project work shall be performed in accordance with the terms and conditions of the Individual Construction Stormwater Permit." exh. EANL-ANR-1.

Transportation
[10 V.S.A. § 6086(a)(5)]

78. The Project will not cause unreasonable congestion or unsafe conditions with respect to the use of highways, waterways, railways, airports or airways, and other means of transportation existing or proposed. This finding is supported by the additional findings below.

79. The Petitioner proposes to deliver materials to the Project site through the GlobalFoundries campus, so there will be no traffic impacts on Route 117. The Project is not expected to require oversize or overweight deliveries. The Project will not require road closures or lane shutdowns for extended periods of time. No other long-term interruptions or impacts to highways or local roads are anticipated. Clark pf. at 24.

Educational Services
[10 V.S.A. §§ 6086(a)(6)]

80. The Project will not place an unreasonable burden on the ability of a municipality to provide educational services because the Project will not require or affect education services. Clark pf. at 24.

Municipal Services
[10 V.S.A. §§ 6086(a)(7)]

81. The Project will not place an unreasonable burden on the ability of the affected municipality to provide municipal or government services because the Project will not require or affect local services. The Project will not require any municipal water or sewer services, new roadway acceptance or maintenance by the Town of Essex, nor require any fire or police services beyond those typically required of other businesses. The Petitioner will provide first responders access to the Project site in the event of an emergency. A lockable disconnect switch will allow shutdown of the Project in case of fire or other emergency. Clark pf. at 25.

Aesthetics, Historic Sites, and Rare and Irreplaceable Natural Areas
[10 V.S.A. § 6086(a)(8)]

82. The Project will not have an undue adverse impact on aesthetics or on the scenic or natural beauty of the area, nor will the Project have an undue adverse effect on historic sites or rare and irreplaceable natural areas. This finding is supported by the additional findings below.

Aesthetics

83. The Project will not have an undue adverse impact with respect to the aesthetics or scenic beauty of the area. Under the first part of the Quechee Test, the Project would result in

an adverse effect to the aesthetics and the scenic and natural beauty of the surrounding area from the adjacent portion of Maple Street (Vermont Route 117), and the south end of Rivendell Drive. However, the adverse effect would be limited to the areas of these roads that are closest to the Project. Owens pf. at 5-6; exh. EANL-JO-2.

84. The Project would not violate any clear written community standard intended to preserve the aesthetics or scenic or natural beauty of the area because neither the Regional Plan nor Town Plan contains clearly written standards regarding aesthetics at the Project site. These plans generally encourage the development of renewable energy sources and do not clearly specify the Project site or surrounding roadways for scenic protection. Owens pf. at 6; exh. EANL-JO-2.

85. The Project includes several reasonable mitigating elements that reduce potential adverse aesthetic impacts and improve the harmony of the Project with its surroundings. Mitigation for the Project includes:

- The Project is set back approximately 453 feet from Maple Street (Vermont Route 117).
- Project components are low in profile; the rows of panels will be screened by intervening landform and contour with the existing topography; and, where visibility will occur along Maple Street, the Project will not substantially interfere with existing views to the south (see Appendix B, Viewpoints 6-10).
- All of the Project's internal wiring would be installed underground between array racks and the transformer location.

• Landscape mitigation is proposed to help screen and soften views of the Project from Maple Street and residential uses to the north and northeast (Appendix D-landscape mitigation plan). Owens pf. at 6; exh. EANL-JO-2.

86. In conclusion, the Project meets the Quechee Test insofar as its impact on aesthetics would not be unduly adverse. Owens pf. at 6; exh. EANL-JO-2.

Historic Sites

87. No above-ground historic sites will be adversely impacted by the Project. There are no listed above-ground historic sites in the Project area. There are also no potentially historic buildings or structures with potential visibility of the Project. Clark pf. at 25-26; Owens pf. at 7; exh. EANL-JO-3; Letter from Laura Trieschmann, State Historic Preservation Officer, Vermont Division for Historic Preservation (August 28, 2024).

88. The Project will have no effect on any below ground historic sites. Letter from Laura Trieschmann, State Historic Preservation Officer, Vermont Division for Historic Preservation (August 28, 2024).

Rare and Irreplaceable Natural Areas (RINA)

89. The Project will not have an undue adverse impact on rare and irreplaceable natural areas because there are no rare and irreplaceable natural areas within the Project area. Crary pf. at 8; exh. EANL-AC-2.

Necessary Wildlife Habitat and Endangered Species

[10 V.S.A. § 6086(a)(8)(A)]

90. The Project will not have an undue adverse impact on any endangered species or critical wildlife habitat. This finding is supported by the additional findings below.

91. There are no rare, threatened, or endangered plants known to occur within or adjacent to the Project site. Crary pf. at 8-9; exh. EANL-AC-2.

92. VHB performed a passive acoustic survey to determine whether the federal and state endangered northern long-eared bat (*Myotis septentrionalis*) (MYSE) and state endangered tri-colored bat (*Perimyotis subflavus*,"PESU") were present at the Project site. The acoustic monitoring survey resulted in a probable absence determination for both the MYSE and PESU. As such, the Project will not affect any protected or otherwise rare species. Crary supp pf. at 1-3; exh. EANL-AC-3.

93. There is no necessary wildlife habitat within the proposed Project site. Crary pf. at 8; exh. EANL-AC-2.

Development Affecting Public Investments
[10 V.S.A. § 6086(a)(9)(K)]

94. The Project will not unnecessarily or unreasonably endanger any public or quasi-public investment in the facility, service, or lands, or materially jeopardize or interfere with the function, efficiency, or safety of, or the public's use or enjoyment of, or access to, the facility, service, or lands. The nearby existing public investments are Route 117 and the Essex Police Station, and the Project will not interfere with the public's use of either. Clark pf. at 28.

Public Health and Safety
[30 V.S.A. § 248(b)(5)]

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

96. The Petitioner will perform all work in accordance with the National Electrical Safety Code and National Electric Code. Clark pf. at 20.

97. The Project will be secured by an existing perimeter fence with appropriate electrical warning signs. Clark pf. at 20.

98. The Project will use anti-reflective coating on panels to reduce for glare. Clark pf. at 20.

99. The Petitioner has agreed to the follow condition requested by the Department: "In the event the CPG Holder owns and controls a portion of the underground primary voltage line that is located outside the Project fence line, as depicted on Exhibit EANL-JC-2 on page C2.00 and C2.03, the CPG Holder shall register with Dig Safe and comply with 30 V.S.A. Chapter 86 and Commission Rule 3.8000 for the life of the Project."

Primary Agricultural Soils
[30 V.S.A. § 248(b)(5)]

100. The Project will not have any undue adverse effects on primary agricultural soils as defined in 10 V.S.A. § 6001. This finding is supported by the additional findings below.

101. There are primary agricultural soils (PAS) present within the Project area according to mapping from the Natural Resources Conservation Service. However, based on the lack of connectivity to other PAS in the vicinity and the previous impacts and existing infrastructure, the Project will not result in PAS impacts, or will impact an area of PAS with such little agricultural value that the impacts are de minimis. The existing PAS on the parcel are already fragmented and disturbed, and the Project will not further fragment the potentially useable farmland on the parcel. Wyman pf. at 5; exh. EANL-SW-3.

Consistency With Company's Least-Cost Integrated Plan
[30 V.S.A. §248(b)(6)]

102. The Petitioner does not have an integrated resource plan and the Commission has not required non-utilities to have a least-cost integrated resource plan.[8] Nonetheless, it is the Petitioner's understanding that GF Power has not completed an IRP and is not required to submit its first such plan to the Commission until July 1, 2026. Based on the Petitioner's understanding of the needs of GF Power's sole customer and the utility's plan to meet those needs through contracting for substantial amounts of renewable energy via competitively priced PPAs on customer-owned sites close to customer load, thereby avoiding substantial costs and environmental impacts related to transmission, it is anticipated that this Project will be consistent with GF Power's forthcoming IRP.

Compliance With Twenty Year Electric Plan
[30 V.S.A. §248(b)(7)]

103. The Project is consistent with the 2022 Comprehensive Energy Plan as approved by the Department under 30 V.S.A. § 202(f). Determination Under 30 V.S.A. § 202(f) signed by TJ Poor, dated November 15, 2024.

104. The Project will contribute to meeting the state's long-term renewable energy goals because it is a proposed solar project that is located near load. Specifically, the Project furthers the key objectives in the CEP, which calls for meeting Vermont's long-term energy needs largely with renewable resources as embodied in the high-level goals set in the 2011 and 2016 CEPs, and reaffirmed in the 2022 CEP (page 2): "Meet 25% of energy needs from renewable sources by 2025, 45% by 2035, and 90% by 2050." The Project is consistent with

[8] *Case No. 22-3427,* Petition of ER Danyow Road Solar, LLC for a certificate of public good, pursuant to 30 V.S.A. § 248, for a 5 MW ground-mounted solar array located in Sheldon, Vermont, Final Order (4.24.23).

CEP thematic goals including affordability, in-state generation, diversity of supply, grid resiliency, and low emissions. Moreover, as the Project is being built close to load on GF's facilities, it furthers the CEP's "goal of a secure and affordable electric grid that can efficiently integrate, use, and optimize high penetrations of distributed energy resources to enhance the state's resilience and reduce greenhouse gas emissions." CEP 2022, page 13. Clark pf. at 29.

Can Be Served Economically by Existing or Planned Transmission Facilities
[30 V.S.A. § 248(b)(10)]

105. The Project can be served economically by existing or planned transmission facilities without undue adverse effects on Vermont utilities or customers. The existing transmission infrastructure has already been mitigated against potential Transmission Ground Fault Over-Voltage and the Project is not sited within the Sheffield-Highgate Export Interface. Clark pf. at 30.

Minimum Setback Requirements
[30 V.S.A. § 248(s)]

106. The Project complies with Vermont's statutory setback requirements for ground-mounted solar electric generation facilities, which require that the facility be set back more than 100 feet from the nearest road and more than 50 feet from the nearest property boundary line. Clark pf. at 31; exh. EANL-JC-2.

Decommissioning Cost Estimate and Letter of Credit

107. At the end of the Project's useful life, the Petitioner will assess whether it is financially viable to continue to operate the Project; whether any changes could be made to the

Project to allow its continued operation after necessary approvals; or whether the Project should be decommissioned. Clark pf. at 30-31; exh. EANL-JC-9.

108. At the time the Project is decommissioned, the Petitioner will remove the Project and restore the site to its condition before the Project was installed to the greatest extent practicable as required by Commission Rule 5.904(B). Clark pf. at 31; exh. EANL-JC-9.

109. The Petitioner submitted a decommissioning plan. Clark pf. at 30-31; exh. EANL-JC-9.

110. The decommissioning plan includes a detailed cost estimate, which estimates that the cost of decommissioning will be $280,768 at current rates. The cost estimate does not take any salvage value into account. Clark pf. at 31; exh. EANL-JC-9.

111. The Petitioner filed a draft irrevocable standby letter of credit that names the Commission as the sole beneficiary, includes an auto-extension provision or "evergreen clause," and is bankruptcy-remote. Clark pf. at 31; exh. EANL-JC-9.

112. Prior to commencing Project construction, the Petitioner shall file and receive Commission approval of an executed letter of credit. Clark pf. at 31; exh. EANL-JC-9.

113. The Petitioner has agreed to the following CPG condition: "No later than six months in advance of the Project's decommissioning, the CPG Holder shall complete and provide to the Vermont Department of Environmental Conservation Wetlands Program, an updated wetlands assessment to determine if any of the Project infrastructure is located within any Class I or II wetlands or their buffer zones." exh. EANL-ANR-1.

114. The Petitioner has agreed to the following CPG condition: "If, at the time of Project decommissioning, any Project infrastructure is determined to be located within a Class I

or II wetland or its buffer zone, then the CPG Holder shall obtain from the Wetlands Program a jurisdictional determination as to whether the decommissioning activities require a Vermont Wetland Permit. If, at the time of decommissioning, any Project infrastructure is determined to be located within a Class I or II wetland or its buffer zone and a Vermont Wetland Permit is not required, the CPG Holder shall submit a wetlands restoration plan to the Wetlands Program for review and approval as an Allowed Use under the Vermont Wetland Rules (see Section 6.23 of the current Vermont Wetland Rules). The restoration plan shall address the removal of the solar array and other Project infrastructure located in any wetland, and shall, at a minimum, contain the following elements:

A. Identification of phasing and staging areas;
B. Utilization of methods that prevent rutting in the wetland, including removal of structures during frozen or dry conditions, or use of construction mats or similar techniques to minimize soil disturbance;
C. Revegetation of all disturbed areas within the wetland and buffer zone with appropriate conservation seed mix(es); and
D. Provisions for inspection by the Agency prior to and following site restoration." exh. EANL-ANR-1.

115. The Petitioner has agreed to the following CPG condition: "If any Project infrastructure is located within a Class I or II wetland or its buffer zone at the time of Project decommissioning, then decommissioning of the Project shall not take place until the Agency's Wetland Program has issued a Vermont Wetland Permit or has approved a wetlands restoration

plan as an allowed use under the Vermont Wetland Rules, whichever is applicable, and all decommissioning activities shall be performed in accordance with the Vermont Wetland Permit or the approved wetlands restoration plan." exh. EANL-ANR-1.

Memorandum of Understanding

116. The Petitioner entered an MOU with ANR. exh. EANL-ANR-1.

Discussion

I recommend that the Commission accept the ANR MOU and require the Petitioner to comply with the terms and conditions of the MOU as a condition of its approval of the Project.

V. CONCLUSION

Based upon the evidence in the record, I recommend that the Commission conclude that the Project, subject to the conditions set forth herein, complies with 30 V.S.A. § 248 and will promote the general good of the State:

(a) 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 the recommendations of the municipal legislative bodies, and substantial deference having been given to the land conservation measures and specific policies contained in the duly-adopted regional plan;

(b) complies with the screening requirements of applicable municipal bylaws or ordinances and recommendations of a municipality applying such a bylaw or ordinance;

(c) will meet a need for present and future demand for service which could not otherwise be provided in a more cost-effective manner through energy conservation programs and

measures and energy efficiency and load-management measures, including those developed pursuant to the provisions of subsection 209(d), section 218c, and subsection 218(b) of Title 30;

(d) will not adversely affect system stability and reliability;

(e) will result in an economic benefit to the state and its residents;

(f) will not have an undue adverse effect on aesthetics, historic sites, air and water purity, the natural environment, the use of natural resources, and 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), and greenhouse gas impacts;

(g) is a non-utility project and criterion 30 V.S.A. § 248(b)(6) is therefore not applicable;

(h) is consistent with the *Vermont Twenty-Year Electric Plan*;

(i) does not involve a facility affecting or located on any segment of the waters of the State that has been designated as outstanding resource waters by the Secretary of Natural Resources;

(j) does not involve a waste-to-energy facility;

(k) can be served economically by existing or planned transmission facilities without undue adverse effect on Vermont utilities or customers;

(l) does not involve an in-state generation facility that produces electric energy using woody biomass; and

(m) is consistent with statutory minimum setback requirements.

This Proposal for Decision has not been circulated to the parties pursuant to 3 V.S.A. § 811 because it is not adverse to any party.

VI. ORDER

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED by the Public Utility Commission ("Commission") of the State of Vermont that:

1. The findings, conclusions, and recommendations of the Hearing Officer are hereby adopted. All other findings proposed by parties, to the extent that they are inconsistent with this Order, were considered and not adopted.

2. In accordance with the evidence and plans submitted in this proceeding, the 3.5 MW ground-mounted solar array (the "Project") proposed for construction and operation by Essex A North Lot Solar, LLC (the "CPG Holder"), will promote the general good of the State of Vermont pursuant to 30 V.S.A. § 248 and a certificate of public good to that effect shall be issued in this matter.

3. As a condition of this Order, the CPG Holder shall comply with all terms and conditions set out in the CPG issued in conjunction with this Order.

4. DATED at Montpelier, Vermont, this _____ day of _____, 2024.

_____	)
	) PUBLIC UTILITY
_____	) COMMISSION
	) OF VERMONT
_____	)

OFFICE OF THE CLERK

FILED:

ATTEST:

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@.vermont.gov)

Appeal of this decision to the Supreme Court of Vermont must be filed with the Clerk of the Commission within 30 days. Appeal will not stay the effect of this Order, absent further order by this Commission or appropriate action by the Supreme Court of Vermont. Motions for reconsideration or stay, if any, must be filed with the Clerk of the Commission within 28 days of the date of this decision and Order.

STATE OF VERMONT
PUBLIC UTILITY COMMISSION

Case No. 24-1683-PET

Petition of Essex A North Solar, LLC for a certificate of public good pursuant to 30 V.S.A. § 248, for a 3.5 MW ground-mounted solar array located off Robinson Parkway in Essex, Vermont.

Certificate of Public Good ("CPG") Issued Pursuant to 30 V.S.A. §§ 248 & 8010

IT IS HEREBY CERTIFIED THAT the Vermont Public Utility Commission ("Commission") of the State of Vermont found and adjudged that the site preparation, construction, operation, and maintenance of a 3.5 MW solar electric generation facility off Robinson Parkway, in Essex, Vermont (the "Project") by Essex A North Lot Solar, LLC (the "CPG Holder"), in accordance with the evidence and plans submitted in this proceeding, will promote the public good of the State, subject to the following conditions:

1. Site preparation, construction, operation, and maintenance of the Project must be in accordance with the plans and evidence submitted in this proceeding. Any material deviation from these plans or a substantial change to the Project must be approved by the Commission. Failure to obtain advance approval from the Commission for a material deviation from the approved plans or a substantial change to the Project may result in the assessment of a penalty pursuant to 30 V.S.A. §§ 30 and 247.
2. Before beginning site preparation, construction, operation, or maintenance of the Project, the CPG Holder must obtain all other necessary permits and approvals. Site

preparation, construction, operation, and maintenance of the Project must be in accordance with such permits and approvals, and with all other applicable regulations, including those of the Vermont Agency of Natural Resources ("ANR").

3. The CPG Holder must restrict construction activities and related deliveries for the Project to the hours between 7:00 A.M. and 6:00 P.M. Monday through Friday and between 8:00 A.M. and 5:00 P.M. on Saturdays. No construction activities or deliveries are allowed on Sundays, state holidays, or federal holidays.
4. The CPG Holder is responsible for all costs of distribution and transmission system upgrades that are necessary to address adverse impacts on system stability and reliability due to the Project, as determined by the system impact study and facilities study.
5. Before operating the Project, the CPG Holder must enter into an interconnection agreement with Green Mountain Power Corporation that conforms to the requirements of Public Utility Commission Rule 5.500. The CPG Holder is responsible for the cost of electrical system upgrades reasonably necessary to implement interconnection of the Project and such other costs appropriately submitted to the CPG Holder in accordance with Commission Rule 5.500.
6. The CPG Holder must remove the facilities authorized by this CPG once they are no longer in service and must restore the site to its condition before installation of the facility to the greatest extent practicable, consistent with the terms and conditions of its proposed decommissioning plan, identified in the evidentiary record as exhibit EANL-JC-9.

7. Before beginning site preparation, the CPG Holder must file with the Commission and obtain Commission approval for an executed letter of credit in the amount of $280,768. The letter of credit must be an irrevocable standby letter of credit that: (i) names the Commission as the sole beneficiary of the letter of credit; (ii) is issued by an A-rated financial institution; (iii) includes an automatic extension provision or "evergreen clause"; and (iv) is bankruptcy-remote.
8. Every three years the CPG Holder must file a report with the Commission, the Department, and each party to this proceeding, describing any adjustments and changes to the decommissioning fund in the previous three-year period. This report must be filed no later than February 28 of the third year following the issuance of the CPG and every subsequent third year.
9. The value of the decommissioning fund must be adjusted for inflation every three years based on the net positive change in the annual average of the U.S. Bureau of Labor Statistics' Northeast Urban Consumer Price Index for the preceding three-year period.
10. The Project's standby letter of credit must be adjusted every three years to reflect changes to the decommissioning fund as provided in condition 9, above. Revisions must be made no later than February 28 in conjunction with the report required pursuant to condition 8, above. The Commission may require more frequent adjustments due to facility or site conditions.
11. The Commission has the right to draw on the Project's irrevocable standby letter of credit to pay for decommissioning in the event that the CPG Holder has not begun decommissioning activities within 90 days of a Commission order directing decommissioning.

12. Upon completion of all decommissioning and site restoration activities, the CPG Holder must request a determination from the Commission that the CPG Holder's decommissioning obligations have been satisfied. Upon the Commission's determination that the decommissioning obligations have been satisfied, the Commission will terminate the Project's letter of credit.
13. The CPG Holder must fully implement the final aesthetic mitigation plan, identified in the record as the second revised Appendix D to exhibit EANL-JO-2, as soon as reasonably possible, and in no case more than 90 days following the completion of construction, unless such timing would require implementation between October 15 and April 15, in which case the plan must be fully implemented within 30 days of the following April 15.
14. Within 30 days following the full implementation of the final aesthetic mitigation plan, the CPG Holder must submit to the Commission and all parties in this proceeding a certification that all work has been fully implemented in a manner consistent with the approved plan. This certification must include the completion of construction date as well as the date of interconnection and must be supported by an affidavit and dated photographs of the installed mitigation measures. If construction of the Project components or aesthetic mitigation has deviated from the design of the Project as approved, the CPG Holder must also file for Commission review and approval of a revised final mitigation plan. Submission of a revised final mitigation plan will not relieve the CPG Holder from its obligation to request an amendment to the CPG for a substantial change.

15. For a period of three years, the CPG Holder must conduct an annual inspection of the Project to determine the health, vigor, and continued effectiveness of the mitigation. The CPG Holder must file with the Commission and parties an annual certification documenting the results of the inspection and any corrective actions taken. Certifications required under this paragraph must be submitted by the dates one, two, and three years following the submission of the certification of completion required by Paragraph 14, above.
16. The CPG Holder must maintain mitigation measures contained in the final aesthetic mitigation plan or revised final aesthetic mitigation plan for the life of the Project as those measures are depicted on the plan.
17. In accordance with Commission Rule 5.805(C), the Commission may conduct further process as needed to ensure compliance with the final aesthetic mitigation plan or revised final aesthetic mitigation plan.
18. Before beginning site preparation, the CPG Holder must file with the Commission, the parties, and the Town of Essex a letter stating that it has fulfilled all pre-site preparation CPG conditions, and that it intends to begin site preparation for the Project.
19. Before operating the Project, the CPG Holder must file with the Commission, the parties, and the Town of Essex a letter confirming that it has fulfilled all pre-operation CPG conditions and that it intends to begin operation of the Project.
20. As required by 30 V.S.A. § 248(a)(7), within 45 days of the date of this Order, the CPG Holder shall record a notice of the CPG on the form available at http://puc.vermont.gov/document/cpg-municipal-notice-form in the land records of

each municipality in which a facility subject to the CPG is located. The CPG Holder must file proof of this recording with the Commission.

21. As provided in 30 V.S.A. § 248(t), notwithstanding any contrary provision of the law, primary agricultural soils as defined in 10 V.S.A. § 6001 located on the site of a solar electric generation facility approved under Section 248 must remain classified as such soils, and the review of any change in the use of the site subsequent to the construction of the facility must treat the soils as if the facility had never been constructed.
22. The CPG Holder must comply with the terms contained in the memorandum of understanding with ANR, identified in the evidentiary record as exhibit EANL-ANR-1.
23. Before beginning site preparation or construction of the Project, the CPG Holder shall obtain from the Agency's Department of Environmental Conservation an Individual Construction Stormwater Permit. All Project work shall be performed in accordance with the terms and conditions of the Individual Construction Stormwater Permit.
24. Before beginning site preparation or construction of the Project, the CPG Holder shall ensure that GlobalFoundries, the owner of the Project site, updates the stormwater pollution prevention plan required by the NPDES Direct Discharge Permit #3-1295, issued by the Vermont Department of Environmental Conservation, to include all new impervious surfaces associated with the Project. The CPG Holder shall design and construct the Project so that all impervious surfaces associated with the Project are captured by the existing GlobalFoundries stormwater system and ultimately discharge to the Winooski River from stormwater outfall S/N 013 covered under the NPDES Direct Discharge Permit #3-1295.

25. Before beginning site preparation or construction of the Project and of the Project-related interconnection upgrades and extensions, the CPG Holder shall obtain from the Agency's Department of Environmental Conservation a Vermont Wetlands Permit. All impacts associated with the Project-related interconnection upgrades and extensions will be considered by the Agency's Wetlands Program as cumulative impacts together with the impacts associated with the Project activities for purposes of the Vermont Wetlands Permit. All Project work, including all Project-related interconnection upgrades and extensions, shall be performed in accordance with the terms and conditions of the Wetlands Permit.
26. No later than six months in advance of the Project's decommissioning, the CPG Holder shall complete and provide to the Vermont Department of Environmental Conservation Wetlands Program, an updated wetlands assessment to determine if any of the Project infrastructure is located within any Class I or II wetlands or their buffer zones.
27. If, at the time of Project decommissioning, any Project infrastructure is determined to be located within a Class I or II wetland or its buffer zone, then the CPG Holder shall obtain from the Wetlands Program a jurisdictional determination as to whether the decommissioning activities require a Vermont Wetland Permit. If, at the time of decommissioning, any Project infrastructure is determined to be located within a Class I or II wetland or its buffer zone and a Vermont Wetland Permit is not required, the CPG Holder shall submit a wetlands restoration plan to the Wetlands Program for review and approval as an Allowed Use under the Vermont Wetland Rules (see Section 6.23 of the current Vermont Wetland Rules). The restoration plan shall address the

removal of the solar array and other Project infrastructure located in any wetland, and shall, at a minimum, contain the following elements:

A. Identification of phasing and staging areas;

B. Utilization of methods that prevent rutting in the wetland, including removal of structures during frozen or dry conditions, or use of construction mats or similar techniques to minimize soil disturbance;

C. Revegetation of all disturbed areas within the wetland and buffer zone with appropriate conservation seed mix(es); and

D. Provisions for inspection by the Agency prior to and following site restoration.

28. If any Project infrastructure is located within a Class I or II wetland or its buffer zone at the time of Project decommissioning, then decommissioning of the Project shall not take place until the Agency's Wetland Program has issued a Vermont Wetland Permit or has approved a wetlands restoration plan as an allowed use under the Vermont Wetland Rules, whichever is applicable, and all decommissioning activities shall be performed in accordance with the Vermont Wetland Permit or the approved wetlands restoration plan.

29. The CPG Holder shall allow the ANR, through its authorized representatives, to enter upon and inspect the Project area upon reasonable notice, in a reasonable manner, and at reasonable times during ordinary business hours to determine compliance with the above conditions.

30. In the event the CPG Holder owns and controls a portion of the underground primary voltage line that is located outside the Project fence line, as depicted on Exhibit EANL-JC-2 on page C2.00 and C2.03, the CPG Holder shall register with Dig Safe and comply with 30 V.S.A. Chapter 86 and Commission Rule 3.8000 for the life of the Project.
31. The Petitioner shall submit a signoff from ISO-NE with the Commission and the parties before construction.
32. The CPG Holder must pay all invoices (if any) from any State agency that (a) are related to this proceeding and (b) are not still under review by the Commission.
33. This Certificate of Public Good may not be transferred without prior approval of the Commission.

DATED at Montpelier, Vermont, this _____ day of _____, 2024.

_____	)
	) PUBLIC UTILITY
_____	) COMMISSION
	) OF VERMONT
_____	)

OFFICE OF THE CLERK

FILED:

ATTEST: _____

Notice to Readers: This decision is subject to revision of technical errors. Readers are requested to notify the Clerk of the Commission (by e-mail, telephone, or in writing) of any apparent errors, in order that any necessary corrections may be made. (E-mail address: puc.clerk@vermont.gov)