

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Case No. 25- ____

Petition of Williston H Solar, LLC for a
certificate of public good pursuant to
30 V.S.A. § 248 for a 2.75
ground-mounted solar array located off
Redmond Road in Williston, Vermont

**PREFILED TESTIMONY AND DECLARATION OF
JAKE CLARK
ON BEHALF OF
WILLISTON H SOLAR, LLC**

This document and supporting exhibits have been filed ePUC

Summary of Testimony

Mr. Clark's testimony provides an overview of the Petitioner's plans to install and operate a 2.75 MW solar electric generation facility located off Redmond Road in Williston, Vermont (Project). It also describes the proposed Project's relationship to certain criteria set forth in 30 V.S.A. § 248: orderly development of the region (§ 248(b)(1)); need (§ 248(b)(2)); system stability and reliability (§ 248(b)(3)); economic benefit to the State and its citizens (§ 248(b)(4)); public health and safety, air pollution, use of natural resources, and greenhouse gas impacts (§ 248(b)(5)); transportation systems (10 V.S.A. § 6086(a)(5)); educational services (10 V.S.A. § 6086(a)(6)); municipal services (10 V.S.A. § 6086(a)(7)); historic sites (10 V.S.A. § 6086(a)(8)); development affecting public investments (10 V.S.A. § 6086(a)(9)(K)); integrated resource plan (§ 248(b)(6)); compliance with electric energy plan (§ 248(b)(7)); impact on Vermont utilities and customers (§ 248(b)(10)); setbacks (§ 248(s)); and decommissioning plan and fund (Public Utility Commission Rule 5.900). As required by Rule 5.403, Mr. Clark also provides a summary of all community outreach efforts, a summary of comments received in the 45-day advance notice period as described in section 5.402(C)(4), including written comments and oral comments made at any public hearings and the Petitioner's response to any such comments, and addresses the Commission's declaratory judgment decision regarding proposed generation projects.

EXHIBIT LIST

Exhibit WHS-JC-1	Resume
Exhibit WHS-JC-2	Site Plan and USGS Map
Exhibit WHS-JC-3	Equipment Specifications
Exhibit WHS-JC-4	Comments Received in Response to 45-day notice

Exhibit WHS-JC-5	System Impact Study
Exhibit WHS-JC-6	One-Line Diagram
Exhibit WHS-JC-7	Acoustic Analysis
Exhibit WHS-JC-8	Historic Structures Memo
Exhibit WHS-JC-9	Decommissioning Plan and Fund

Introduction

Q1. Please state your name, current employer, business address, and position.

A1. My name is Jake Clark, and I am currently the Vice President of Development at Encore Renewable Energy (Encore). My business address is 50 Lakeside Avenue, Suite 110, Burlington, VT 05401. As a Certified B Corp, Encore is a leading integrated clean energy project development company with a focus on commercial, industrial, and community-scale solar PV systems for Vermont towns, schools, businesses, and landowners. We also assist a variety of clients in navigating complex technical, financial, and regulatory matters through various stages of development. Encore is assisting Williston H Solar, LLC (“WHS Solar” or “Petitioner”) with this proposed Project.

Q2. Please describe your educational background and work experience.

A2. I have worked at Encore since 2019. Prior to this role, I was special counsel at the Vermont Department of Public Service where I worked on a variety of certificate of public good matters. Before working for the Department of Public Service, I worked for several years as a contract attorney in the energy regulatory sector. My undergraduate degree is in mechanical engineering, and I worked in construction management on large scale (\$70MM–\$250MM) projects before earning my law degree. My resume is attached as Exhibit WHS-JC-1.

1 Q3. Who is the Petitioner and what is their address?

2 A3. As stated above, the Petitioner is Williston H Solar, LLC. The Petitioner's mailing address
3 is 50 Lakeside Avenue, Suite 110, Burlington, VT 05401. The Petitioner is a Vermont
4 limited liability company in good standing.

5
6 Q4. Have you testified previously before the Public Utility Commission ("Commission" or
7 "PUC")?

8 A4. Yes. I have provided testimony in several closed cases before the Commission. These
9 include approved solar generation projects, Case No. 22-1644-PET, Case No. 22-3427-
10 PET, Case No. 22-2628-PET, and Case No. 20-1219-PET. I have also provided testimony
11 in Case No. 21-2114-PET and 21-3022-PET, which are approved battery energy storage
12 projects.

13
14 Q5. What is the purpose of your testimony?

15 A5. My testimony supports Williston H Solar's Petition for a certificate of public good (CPG)
16 pursuant to 30 V.S.A § 248 with respect to the Petitioner's proposal to install and operate
17 a 2.75 MW ground-mounted solar electric generation facility known as the Williston H
18 Solar Project located off Redmond Road in Williston, Vermont (the "Project"). I provide a
19 Project overview and specifically address the following Section 248 criteria: orderly
20 development of the region (§ 248(b)(1)); need (§ 248(b)(2)); system stability and reliability
21 (§ 248(b)(3)); economic benefit to the State and its citizens (§ 248(b)(4)); public health and
22 safety, air pollution, use of natural resources, and greenhouse gas impacts (§ 248(b)(5));

1 transportation systems (10 V.S.A. § 6086(a)(5)); educational services (10 V.S.A. §
2 6086(a)(6)); municipal services (10 V.S.A. § 6086(a)(7)); historic sites (10 V.S.A. §
3 6086(a)(8)); development affecting public investments (10 V.S.A. § 6086(a)(9)(K));
4 integrated resource plan (§ 248(b)(6)); compliance with electric energy plan (§ 248(b)(7));
5 impact on Vermont utilities and customers (§ 248(b)(10)); setbacks (§ 248(s)); and
6 decommissioning plan and fund (Public Utility Commission Rule 5.900). As required by
7 Rule 5.403, I also provide a summary of all community outreach efforts, a summary of
8 comments received in the 45-day advance notice period as described in Rule 5.402(C)(4),
9 including written comments and oral comments made at any public hearings and the
10 Petitioner's response to any such comments, and address the Commission's declaratory
11 judgment decision regarding proposed generation projects.

12
13 Witness Stephanie Wyman will address 30 V.S.A. § 248(b)(5) compliance with natural
14 resources, 10 V.S.A. § 6086(a)(1)(B) waste disposal; 10 V.S.A. § 6086(a)(4) soil erosion;
15 and 10 V.S.A. § 6086(a)(9)(B) primary agricultural soils.

16
17 Witness Carla Fenner will address: 30 V.S.A. § 248(b)(8) and 10 V.S.A. § 1424a(d)
18 outstanding resource waters; 30 V.S.A. § 248(b)(5) natural environment; 10 V.S.A. §
19 6086(a)(1) water and air pollution; 10 V.S.A. § 6086(a)(1)(A) headwaters; 10 V.S.A. §
20 6086(a)(1)(D) floodways; 10 V.S.A. § 6086(a)(1)(E) streams; 10 V.S.A. § 6086(a)(1)(F)
21 shorelines; 10 V.S.A. § 6086(a)(1)(G) wetlands; 10 V.S.A. § 6086(a)(8) rare and
22 irreplaceable natural areas, necessary wildlife habitat, endangered species; water

1 conservation, sufficiency of water supply, and burden on existing water supply (10 V.S.A.
2 § 6086(a)(1)(2), and (3)).

3
4 Witness Jeremy Owens will address 30 V.S.A. § 248(b)(1) orderly development and
5 municipal screening; (5) aesthetics; and 10 V.S.A. § 6086(a)(8) aesthetics and landscape
6 mitigation pursuant to PUC Rule 5.800.

7
8 **Project Description and Overview**

9 Q6. Please generally describe the proposed Project.

10 A6. WHS Solar proposes to install and operate the Project on approximately 11 acres of a 440-
11 acre parcel of land located off Redmond Road in Williston, Vermont (the “Property”), on
12 tax parcel ID 04-010-027-000 (Tax ID 759-241-11611). The Petitioner has rights to lease
13 the portion of the host Property necessary for the Project. The site was selected as the result
14 of an extensive analysis of potential alternative sites which considered feasibility factors
15 including the following: interconnection feasibility, aesthetic impacts, environmental
16 impacts, land use/community impacts, presence of potential environmental contamination,
17 subsurface geotechnical characteristics, and potential alternative productive use of the site
18 by the owner.

19
20 The Project was initiated and designed with the intent of providing GlobalFoundries (GF),
21 the sole customer of Commission-regulated electric utility GF Power LLC (GF Power),
22 with a source of local solar energy generation to help it achieve its renewable energy goals.

1 GF Power is a relatively new Commission-regulated electric utility serving a single
2 industrial customer, GF. The Project is being undertaken to help GF Power comply with
3 Vermont's Renewable Energy Standard (RES), 30 V.S.A. §§ 8004-8005, including
4 requirements for the utility to purchase distributed renewable energy from plants 5 MW or
5 less in an amount equal to a specified percentage of GF Power's load.¹ Specifically, the
6 RES requires GF Power to comply with the so-called Tier II requirements under which a
7 utility must obtain 20% of its energy from "distributed renewable generation," as defined
8 in 30 V.S.A. § 8005, by 2035.² This Project is one of several that GF Power has contracted
9 with Encore to have designed, permitted, and constructed for the purpose of complying
10 with its RES Tier II obligations.³

11
12 GF is a world leader in feature-rich semiconductor manufacturing with a strong
13 commitment to sustainable and environmentally efficient operations. Semiconductor
14 manufacturing is an electric energy intensive industry and GF's Journey to Zero Carbon
15 Emissions program is multifaceted, focusing on improving energy efficiency, sourcing
16 renewable and low-carbon energy, and enhancing manufacturing emissions controls. As a
17 result, GF Power has the third-largest utility load among Vermont distribution utilities.⁴

¹ 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"). Please note that H.289, which became law on June 17, 2024 and has an effective date of July 1, 2024, includes new Tier II in-state renewable energy requirements for GF that requires 20% by 2035.

² 30 V.S.A. § 8005(a)(2)(C)(i).

³ Dec. Action Order at finding 4. For location, size, and interconnection information related to other planned projects, please see Exhibit ECPL-JC-5.

⁴ *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,*

1 This Project allows GF to add cost-effective new renewables in Vermont while locating
2 generation projects as close as possible to the load, thereby reducing power grid impacts
3 within Vermont. The use of renewable energy has significant advantages including the
4 stabilization of energy costs and meeting the growing expectations of GF customers to
5 produce products using renewable energy.

6
7 The Project is structured so that the Petitioner plans to sell the output of the Project to GF
8 Power under a Power Purchase Agreement (PPA) at a competitive rate of \$108.21 /MWh
9 \$0.10821/kWh. The PPA is on file with the Commission in Case No. 25-0605-PPA, which
10 has been closed after no comments on the PPA were received by the Commission during
11 the Rule 5.200 ninety-day notice period.

12
13 The electricity generated by the project will be interconnected into the Chip Aly substation,
14 located off Redmond Road. GF Power will take that electricity through existing
15 connections between GMP distribution service and GF Power.

16
17 Q7. Was the Project identified as a “potential solar facility” in the Commission’s Declaratory
18 Ruling in Case No. 23-3974⁵?

19 A7. Yes, the Project that is the subject of this Petition was identified as Project H in the
20 Commission’s Declaratory Ruling.

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.

⁵ Id.

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Q8. Are the Project plans as submitted in the Petition for this case identical to the plans submitted in Case No. 23-3974 with respect to the factors that define a single plant?

A8. Yes, the plans are identical with respect to the factors that define a single plant as interpreted and applied to the evidence presented in Case No. 23-3974. There is one change that is not material to the Commission’s single-plant analysis: in case no. 23-3974-PET, Project H was identified as being “approximately 2.7 MW.” In this Petition, the Project seeks a CPG to generate up to 2.75 MW.

Q9. Who will retain ownership of the environmental attributes?

A9. The Petitioner will transfer the renewable energy credits (RECs) associated with this Project to GF Power pursuant to the PPA between Petitioner and GF Power.

Q10. Please generally describe the site plan and specific Project equipment.

A10. The Project consists of approximately 6,344 non-reflective photovoltaic modules installed on fixed-tilt, ground-mounted racking units within a fenced area spread across the approximately 11-acre Project area. The approximately 50 rows of panels comprising the solar array range in length and run generally east-west. They are oriented predominantly to the south and are fixed at around 30 degrees. Please see Exhibit WHS-JC-2 for a site plan. Racking systems will be approximately 3 feet tall on the low side and 15 feet tall on the high side and installed on driven post racking, generally without the use of concrete. Please refer to Exhibit WHS-JC-3 for typical equipment specifications for the Project. The final

1 site design and equipment selection will occur post permit issuance; however, such design
2 will be substantially the same as shown in Exhibit WHS-JC-2.

3
4 Electricity will run from the panels in direct current to a bank of inverters, which are
5 UL1741-SB compliant, located near the center of the array, roughly halfway between the
6 northern extent and the southern extent of the Project, before being converted to alternating
7 current. Cabling will then run in protective conduit to a switchgear, which will include the
8 data acquisition system and other auxiliary equipment. Electricity will then run
9 underground to one 2,750 kVA pad-mounted transformer with secondary oil containment.

10
11 From the transformer, the electricity will run southwest on overhead poles and wires,
12 spanning across a forested ravine, and interconnect to the GMP-owned substation on Chip
13 Aly Rd. Petitioner will own all equipment up to a vault adjacent to the GMP substation.
14 Please see Exhibit WHS-JC-2 and Exhibit WHS-JC-7 for a one-line diagram.

15
16 Q11. How will Petitioner and other authorized personnel access the Project?

17 A11. The Petitioner will access the Property using an existing entrance into the fields along
18 Redmond Road, at the southern extent of the project. The Petitioner is proposing to use this
19 existing point of access to minimize the need for additional civil work to install a new
20 access point. From the existing access point connecting to Redmond Road up to the
21 location of the centrally located transformer, the petitioner proposes to install crushed stone
22 access road surfaces Additional details are shown on Exhibit WHS-JC-2.

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Q12. Will the Project involve any tree work?

A12. Yes. The petitioner proposes to do approximately 4.2 acres of tree cutting and grubbing and 1.5 acres of tree trimming. Please see the testimony of Carla Fenner and accompanying Exhibits WHS-CF-2 and WHS-JC-2 for additional details on tree work.

Q13. Does the Petitioner propose to install a fence? If so, please describe the fence.

A13. Yes. The Petitioner proposes to install an approximately 7–8-foot-high agricultural style wire-knot perimeter fence affixed to driven fence posts around the perimeter of the array. The perimeter fencing would restrict access to and from the Project to secure the Project and prevent the public from entering the array. The Petitioner will install a secured gate where the fence meets Redmond Road, along the Project’s southern extent. First responders will be provided with access through the gate. Exhibit WHS-JC-3 includes a representative fence specification sheet.

Q14. Is the Petitioner proposing a lighting plan for the Project?

A14. No, the Petitioner does not require lighting for any aspect of the Project and thus does not propose a lighting plan for the Project.

Q15. Will the Project require grading?

A15. Yes. The Project will require grading to make the slope of the access road safe for construction and maintenance vehicles from Redmond Road to the transformer. Minimal

1 earthwork or soil disturbance will be involved for the installation of underground conduit,
2 necessary equipment pad for the transformer, and associated stormwater treatment
3 improvements.

4
5 Q16. Will the Project require installation of any components containing oil?

6 A16. Yes. The Project includes one 2,750 kVA pad-mounted transformer that uses a
7 biodegradable dielectric fluid. The Site Plan (Exhibit WHS-JC-2) shows the location of the
8 proposed transformer and Exhibit WHS-JC-3 includes transformer specifications. The
9 Petitioner also proposes to install a secondary oil containment system sufficient to hold a
10 minimum of 110% of the transformer coolant volume plus five inches of free board. For
11 more information, please see the testimony of Stephanie Wyman regarding waste disposal.

12
13 Q17. Please explain the proposed construction process and schedule.

14 A17. The Petitioner, and GF Power, are planning to have the Project in service Q3 2027. To
15 meet this date, procurement would need to begin Q2 2026, which cannot occur until the
16 CPG is issued, and construction would commence by Q4 2026. Construction activities,
17 which will span over a 4–7-month duration, primarily include: (1) delivery of materials
18 and equipment to the site, (2) installation of racking and panels, (3) installation of inverters,
19 and (4) installation of the transformer and network upgrades. Many of these tasks can be
20 performed concurrently over the 4–7-month schedule, however they are dependent on
21 weather among other variables.

22

1 The Petitioner acknowledges that the Commission's typical construction hours are limited
2 to 7:00 A.M.–7:00 P.M. on weekdays; 8:00 A.M.–5:00 P.M. on Saturdays, and no
3 construction on Sundays or state or federal holidays. The Petitioner requests for this Project
4 that it be allowed to perform construction seven days a week within the same hourly
5 restrictions of 7:00 A.M.–6:00 P.M. on weekdays; 8:00 A.M.–5:00 P.M. on Saturday and
6 Sundays, and with no restriction on holidays. The Project is located in a heavily
7 industrialized campus that operates 24 hours a day, seven days a week, and 365 days a
8 year. The nearest residence is approximately 915 feet away and construction acoustics are
9 unlikely to be problematic at this range due to intervening topography and dense
10 vegetation.

11
12 Q18. What are the Project's operation and maintenance activities?

13 A18. Once the Project is fully commissioned, operations and maintenance activities will be
14 minimal. The Petitioner will perform routine system performance two- to four-times per
15 year, which will consist of vegetation management, and mechanical and electrical
16 inspections. The Petitioner will remotely monitor operations, and in the event of a system
17 malfunction, personnel will visit the site for troubleshooting or repairs. The Petitioner
18 would also recommend that operational and maintenance activities be viewed in the context
19 of the constantly ongoing operational and maintenance activities on the GF campus, which
20 is operational 24 hours a day, 365 days a year.

21

1 Q19. Please describe any public outreach efforts, and address the substantive written comments
2 related to the Section 248(b) criteria that the Petitioner received within 45 days of
3 submitting the advance notice as required by Section 248(f)(2)?

4 A19. The Petitioner provided its 45-day notice to the entities identified in Commission Rule
5 5.402(A)(1) on January 29, 2025 (Case No. 25-2011-AN). The Petitioner has been actively
6 engaged with the Town of Williston Selectboard and Planning Commission and the
7 Chittenden County Regional Planning Commission (CCRPC). After submitting the 45-day
8 advance notice, the Petitioner consulted with the Town and CCRPC to solicit feedback,
9 which initiated an in-person meeting with the Williston Planning Commission and its staff
10 on April 15, 2025.

11 Subsequent to this meeting, the Williston Planning Commission filed written comments
12 with the Commission in Case No. 25-0211-AN. The comments in the Planning
13 Commission's written submission to the PUC captured the essential substance of the
14 Project-specific discussion I had with the Planning Commission. The comments addressed
15 the Project's compliance with the Town's 2016 Comprehensive Plan and Enhanced Energy
16 Plan, expressed strong support for the Project, and included requests for Petitioner to
17 address certain natural resource issues and the placement of utility lines in the Petition
18 package. With regard to the utility line placement, I have addressed that issue in my
19 testimony within the site plan description on pages 7–10 and additional responsive
20 information is in the site plan Exhibit WHS-JC-2. Regarding the natural resources issues,
21 Ms. Fenner's testimony and her Exhibit WHS-CF-2 address the wetland and wildlife

1 habitat-related comments from the Planning Commission, with additional information on
2 wildlife habitat issues supplied in Mr. Owens' Exhibit WHS-JO-2.

3
4 The comments addressed the Project's compliance with the 2019 Williston Community
5 Enhanced Energy Plan and with the 2019 Williston Comprehensive Plan, and stated that
6 the "Town strongly supports the proposed project as it furthers the Williston Energy Plan's
7 goal to double the amount of renewable energy generation sited in Williston. To this end,
8 the Energy Plan states that the town will "seek opportunities to encourage Utility-Scale
9 Renewable Energy Projects" such as the proposed project. Please see Exhibit WHS-JC-4
10 for a copy of the written comments received.

11
12 Q20. Has the CCRPC developed an opinion on the Project?

13 A20. Yes, on March 5, 2025, the CCRPC filed public comments with the PUC in response to
14 the Petitioner's 45-day notice. The letter states that a "state possible constraint" is the
15 potential presence of primary soils, and requests that impacts to primary agricultural soils
16 be minimized. The letter also states that the "site meets all of the 2018 ECOS Plan's
17 suitability standards." The CCRPC also advised that they would review the full CPG
18 petition package when filed and submit any questions or comments to the Commission at
19 that time. Please see Stephanie Wyman's testimony regarding how the Project accordingly
20 minimizes impacts to the agricultural soils on site. Please see Exhibit WHS-JC-4 for a copy
21 of the comments.

1 Q21. Please summarize the comments submitted by the Agency of Natural Resources (ANR)
2 and the Agency of Agriculture Food and Markets (AAFM).

3 A21. ANR provided preliminary comments requesting that the petition contain a plant inventory
4 and if rare, threatened, or endangered plants are present, to describe all measures that will
5 be taken to avoid, minimize, and if necessary, mitigate impacts to RTE plants, including
6 reduction of the risk of introduction or spread of non-native invasive species (NNIS).

7
8 ANR also requested that the petition address whether the Project will affect a sandplain
9 forest, a natural community type, which may be in the Project area. And if so, ANR
10 requested that the petition describe how project activities (site preparation, construction,
11 operations and maintenance, and decommissioning) will avoid, minimize, or mitigate
12 impacts, including reduction of the risk of introduction or spread of NNIS. ANR also
13 requested that rare natural community reporting forms be submitted to the Fish and
14 Wildlife Department Natural Heritage Inventory.

15
16 ANR also notes that the Project is next to deer wintering habitat and requested that the
17 petition address how project activities (site preparation, construction, operations and
18 maintenance, and decommissioning) will be conducted in a manner that avoids direct and
19 indirect impacts (e.g., seasonal restrictions, etc.) to the habitat.

20
21 ANR commented that streams are mapped along the eastern and western portions of the
22 proposed Project array that are contiguous with wetlands in most cases. ANR explained

1 that it expects that the section 248 petition reflects that the riparian buffer is measured from
2 top-of-slope for that portion of the stream, especially given that the soils in these areas are
3 listed as “potentially highly erodible.” ANR requested that the site plan accurately depict
4 the top-of-bank, top-of-slope, or upland edge of any contiguous wetlands, as appropriate,
5 as well as the associated 50-foot riparian buffer, and commented that any Project impacts
6 falling within these adjusted boundaries should be avoided.

7
8 ANR commented that wetlands are next to the Project area and that the petition must
9 include a wetland assessment, and an avoidance and mitigation analysis if the Project will
10 impact the wetlands and their associated buffers.

11
12 Encore hired VHB to assess the Project’s potential impact on all natural resources, and the
13 prefiled testimony and associated exhibits of Carla Fenner address these ANR comments.

14
15 AAFM filed comments seeking information about potential impacts to on-site Primary
16 Agricultural Soils (PAS), as well as information regarding proposed conditions to avoid
17 and/or mitigate impacts to PAS. As discussed in the testimony and associated Exhibit
18 WHS-SW-3 of witness Stephanie Wyman, AAFM’s comments raised issues generally
19 applicable to CPG projects of this nature and Petitioner has addressed those through Project
20 design and decommissioning.

21 **Section 248 Criteria**

22 **Orderly Development of the Region**

(30 V.S.A. § 248(b)(1))

Q22. Please identify what portion of this criterion you address.

A22. I responded to the comments made by the municipal legislative bodies, and regional and local planning commissions as set forth above. Witness Jeremy Owens addresses the applicable municipal and regional plans and whether municipal screening ordinances apply.

Need for Present and Future Demand for Service

(30 V.S.A. § 248 (b)(2))

Q23. What need for present and future demand for service does this Project address?

A23. Please refer to my earlier testimony in A6.

Q24. Is the Project required to 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 energy efficiency measures and load management?

A24. Yes. 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 5 MW or less and a direct connection to the distribution or subtransmission system of a Vermont utility.⁶ The Project qualifies as "new renewable energy" and thus satisfies GF Power's need for more Tier-II qualified new renewable energy.

⁶ 30 V.S.A. § 8005(a)(2).

System Stability and Reliability
(30 V.S.A. § 248(b)(3))

Q25. Will the Project adversely affect system stability and reliability?

A25. No. The Petitioner filed a complete application for interconnection to GMP pursuant to Commission Rule 5.500 on October 1, 2024. GMP commissioned a Feasibility Study to evaluate potential impacts of the Project to the GMP Distribution System. As shown in Exhibit WHS-JC-5, the Feasibility Study concluded the Project would not result in adverse impacts to the system and can move forward, without a System Impact Study or Facilities Study, on the condition that the following measures are completed before interconnection:

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

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

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

5
6 4) England (ISO-NE SRD). As part of the ISO-NE SRD requirements, GMP requires the
7 Project to enter “momentary cessation” for over-voltage conditions while operating in the
8 “Permissive Operation” mode (Table III: Inverters’ Voltage Ride-through Capability and
9 Operational Requirements). GMP requires the inverters to enter “Permissive Operation
10 with Momentary Cessation” with a Maximum Response of 0.1s. If the proposed inverters
11 are not capable of this Maximum Response Time, a Category III inverter shall be used
12 instead, which can comply with this requirement (IEEE 2018 6.4.2 Table 16).

13
14 5) GMP requires that the Project’s inverters reconnect using a Soft-Start Ramp rate of 2%
15 of maximum current output per second with a modified reconnection time of six minutes.

16
17 6) The Project is required to execute a Project Notice to Proceed with the appropriate GMP
18 distribution designer when the Project is physically ready for interconnection to GMP’s
19 system.

20

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

4
5 The Petitioner will pay for these upgrades and will work with GF Power to ensure their
6 completion prior to interconnection, and the Petitioner will enter into an interconnection
7 agreement with GF Power prior to construction.

8
9 In addition, by letter dated April 17, 2025, ISO-NE determined under Section I.3.9 of the
10 ISO Tariff “that implementation of the [Project] will not have a significant adverse effect
11 upon the reliability or operating characteristics of the Transmission Owner’s transmission
12 facilities, the transmission facilities of another Transmission Owner, or the system of a
13 Market Participant.” Exhibit WHS-JC-5.

14
15 **Economic Benefit to the State and Its Residents**
16 (30 V.S.A. § 248(b)(4))
17

18 Q26. In what ways will the Project provide economic benefit to the State of Vermont and its
19 residents?

20 A26. The Project will pay annual local and municipal property taxes to the Town as required
21 under 32 V.S.A § 3481. Using the discounted cash flow methodology prescribed in 32
22 V.S.A § 3481(1)(D), along with guidance provided by the Department of Taxes, and
23 current property tax rates, the Petitioner estimates that the local property taxes due from
24 the Project in the first year will be approximately \$12,870. Over a 25-year period, the

1 Petitioner estimates that the Project will result in approximately \$400,000 in local property
2 taxes.

3
4 Q27. Will the Project provide direct economic revenue to the State?

5 A27. Yes. The Project will pay an annual Uniform Capacity Tax as required under 32 V.S.A §
6 8701. The revenue generated by this tax will go into the statewide education fund. With
7 the proposed AC capacity of the Project at 2,750 kW, and the current Uniform Capacity
8 Tax rate of \$4.00 per kW AC, the Project will pay approximately \$11,000 per year into the
9 statewide education fund. Over a 25-year term, the Petitioner estimates that the Project will
10 pay approximately \$275,000 in Uniform Capacity Tax to the statewide education fund.

11
12 Q28. Will the Project provide positive contributions to the State and its workforce?

13 A28. Yes. During the design and development phases, the Petitioner has hired many Vermont
14 and regional firms to work on the environmental, aesthetics, legal, engineering, and
15 permitting Project components. Additional electricians and workers will be needed during
16 Project construction, as well as during the ongoing maintenance and operation of the
17 Project. The Project's construction phase will also likely contribute to local economic
18 activity via lodging, meals, and other ancillary purchases made by contractors.

19
20
21 Q29. Does the Project result in any other economic benefits?

22
23 A29. Yes. GF continues to compete in an industry where the average selling price of products is
24 an important determinant in sales. One of the major factors affecting the selling price is the

1 cost of electricity. Therefore, managing electricity costs is a significant strategic focus for
2 GF to help it maintain its competitiveness in Vermont. This is one of the core reasons GF
3 petitioned the Commission to operate its own utility. Further, due to the Project's location
4 on the GF campus and the ability to help serve on-site load, we expect there will be a
5 benefit to the entire transmission grid because it will not require significant upgrades and
6 leaves transmission capacity and space for other projects in the region.

7
8 In addition, GF customers are increasingly seeking products manufactured with new and
9 low-carbon energy. Renewable projects like the one proposed in this Petition deliver that
10 additional benefit. Also, as Vermont's largest private employer, providing strong
11 environmental sustainability practices has an advantage in acquiring and retaining talented
12 employees who then extend environmental initiatives beyond the workplace.

13
14 **Public Health and Safety**
15 (30 V.S.A. § 248(b)(5))

16 Q30. Will the Project have any adverse effects on the health, safety, or welfare of the public or
17 adjoining landowners?

18 A30. No. The Project will not adversely impact the public health and safety for the following
19 reasons: (1) all work will be performed in accordance with the National Electrical Safety
20 Code and the National Electric Code; (2) an existing perimeter fence around the site will
21 ensure security with appropriate electrical warning signs; (3) the Project will use anti-
22 reflective coating on panels to reduce the potential for glare; and (4) the Project will not
23 exceed acceptable sound thresholds at nearby residences.

Air Pollution
(30 V.S.A. § 248(b)(5))

Q31. Will this Project result in undue adverse effect on air quality?

A31. No, 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.

Q32. Please explain any potential noise impacts from the Project.

A32. Petitioner has hired consulting engineers Krebs & Lansing (K&L) to estimate sound emissions from the electrical equipment anticipated to produce audible sounds, and to model sound propagation to assess levels at the closest residences and property lines. Please see K&L's acoustic analysis at Exhibit WHS-JC-7. K&L concluded that the Project's highest modeled sound pressure level at the closest residence to the sound-producing equipment (approximately 900 feet from the nearest edge of the Project's panels) is 27 dBA (exterior) (daytime) with lower levels during the evening.

Q33. Will the sound produced by the proposed Project create an undue adverse effect?

A33. No, the sound levels calculated at the nearest residence will be below the maximum limits of 45 dBA (exterior) as required by the Commission.

Use of Natural Resources

(30 V.S.A. § 248(b)(5))

Q34. Will the Project require use of natural resources?

A34. Yes. The Project will require a limited amount of natural resources of gravel and crushed stone for the installation of the access drives as indicated in Exh. WHS-JC-2.

Greenhouse Gas Impacts

(30 V.S.A. § 248(b)(5))

Q35. Will Project construction or Project operation produce any undue air pollution or greenhouse gas impacts?

A35. No. Other than minor temporary emissions during construction, the Project will not emit greenhouse gases. In fact, this Project will enable Vermont to reduce its reliance on greenhouse gas-emitting generation. ANR will require the Petitioner to agree to greenhouse gas-reporting requirements and thus the Petitioner commits to these terms as set forth below:

1. 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.

2. By January 30 of each year, ANR may request that Petitioner provide an annual report for the previous calendar year of operations. 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 (2.i), above. This provision does not require Petitioner to provide information about de minimis replacement of system components (e.g.,

1 replacement of racking system hardware), or information regarding regular
2 maintenance activities.

- 3
- 4 3. Should ANR not request the information in (2.i), above, in any two consecutive years
- 5 after Project commissioning, Petitioner's reporting obligations for all subsequent years
- 6 shall automatically cease.
- 7 4. ANR and Petitioner, by mutual agreement, may cancel or amend Petitioner's reporting
- 8 obligations set out at (2.i) at any time.
- 9 5. ANR shall not use the information provided by Petitioner in (2.i) above to make any
- 10 claims or report of benefits (including, but not limited to, benefits related to the
- 11 renewable attributes of the Project's electric generation and greenhouse gas reductions
- 12 associated with the Project) accruing to Vermont, or any other entity, resulting from
- 13 the Project generating electricity from photovoltaic generation.
- 14

15 **Transportation Systems / Traffic**
16 (10 V.S.A. § 6086(a)(5))

- 17 Q36. Will the Project cause unreasonable congestion or unsafe conditions with respect to use of
- 18 the highways, waterways, railways, airports or airways, and other means of transportation
- 19 existing or proposed?
- 20 A36. No. The Petitioner proposes to deliver materials to the Project site using Mountain View
- 21 Road and Redmond Road. The Project is not expected to require oversize or overweight
- 22 deliveries. The Project will not require road closures or lane shutdowns for extended
- 23 periods of time. No other long-term interruptions or impacts to highways or local roads are
- 24 anticipated.

1

2

3

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

4 Q37. What impact will the Project have on educational services?

5 A37. The Project will not have any impact on educational services.

6

7

8

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

9 Q38. Will the Project need municipal services, including any special police, fire, or rescue
10 services, that will place an unreasonable burden on the ability of the local government to
11 provide municipal or governmental services, or would training be required?

12 A38. No. The Project will not require any municipal water or sewer services, new roadway
13 acceptance or maintenance by the Town, nor require any fire or police services beyond
14 those typically required of other businesses.

15

16 Q39. Will the first responders have access to the Project site in the event of an emergency?

17 A39. Yes, the Petitioner will provide first responders access to the Project site in the event of an
18 emergency. A lockable disconnect switch will allow shutdown of the Project in case of fire
19 or another emergency.

20

21

22

Historical and Archeological Sites
(30 V.S.A. § 248(b)(5) 10 V.S.A. § 6086(a)(8))

1 Q40. Will this Project have an undue adverse effect on below-ground or above-ground historic
2 sites?

3 A40. No. No above-ground historic sites will be adversely impacted by the Project. The
4 Petitioner consulted with T.J. Boyle Associates (TJBA) who conducted a historic structures
5 review of data available on the Vermont Division for Historic Preservation's (VDHP)
6 Online Resource Center for the Town of Williston. This review of the VDHP Online
7 Resource Center resulted in the identification of two nearby properties of historical
8 significance that are listed on the State Register: the VonSchoppe House and the Old
9 Redmond Farm (Farmhouse and Barn). These were the only two listed or obviously eligible
10 sites identified in the Project area that would potentially be visible in the Project context.
11

12 As detailed in Exhibit WHS-JC-8, those above-ground historic structures are respectively
13 2,060 feet and 1,300 feet from the nearest array structure, with limited visibility from
14 publicly-accessible vantage points and with screening provided by existing deciduous and
15 evergreen vegetation and intervening landform. For that reason, the Project does not
16 propose mitigation related to these historic structures.
17

18 Regarding below-ground historic sites, the petitioner has contracted with a VDHP-
19 approved archeological firm to conduct a Phase I Site Identification Survey. This survey
20 will be completed before the end of 2025. The Petitioner will convey the survey results to
21 the Division of Historic Protection. The Petitioner supports the following conditions to be
22 included within the CPG:

- 1 • Prior to the completion of all relevant archaeological investigations, the Petitioner,
2 in consultation with the Vermont Division for Historic Preservation (VDHP), shall
3 identify the Project area as a not-to-be-disturbed archaeological buffer zone.
- 4 • Topsoil removal, grading, scraping, cutting, filling, stockpiling, logging or any other
5 type of ground disturbance is prohibited within the archaeological buffer zone prior
6 to conducting all appropriate archeological studies.
- 7 • Archaeological studies to identify or evaluate sites will be carried out by a qualified
8 consulting archaeologist focused within the areas proposed for installation of the
9 underground electrical connections within the overall array. The archaeological
10 studies will be scheduled accordingly so that mitigation measures that may be
11 necessary can be satisfactorily planned and accomplished prior to construction.
- 12 • All archaeological studies and assessments must be conducted by a qualified
13 consulting archaeologist and must follow the VDHP Guidelines for Conducting
14 Archaeological Studies in Vermont. The Petitioner's archaeological consultant must
15 submit any scope of work to the VDHP for review and approval before commencing
16 the work.
- 17 • Archaeological sites within the Project area will not be impacted until any necessary
18 mitigation measures have been completed. Mitigation may include but is not limited
19 to further site evaluation, data recovery, redesign of one or more proposed project
20 components, or modification of the buffer zone boundaries or the specific conditions
21 that refer to the same.

1 Proposed mitigation measures will be discussed with and approved by the VDHP
2 prior to implementation, and a copy of all mitigation proposals will be filed with the PUC.
3 The archaeological studies will result in one or more reports, as appropriate, that meet the
4 VDHP Guidelines for Conducting Archeological Studies in Vermont. A digital copy of the
5 final report will be submitted to the VDHP.

6
7 **Development Affecting Public Investments**
8 (10 V.S.A. § 6086(a)(9)(K))

9 Q41. Will the Project unnecessarily or unreasonably endanger any public or quasi-public
10 investment in nearby facilities, services, or lands, or materially jeopardize or interfere with
11 the function, efficiency, or safety of, or the public's use or enjoyment of or access to nearby
12 facilities, service or lands?

13 A41. No. There are no nearby public investments.

14
15 **Compliance with Integrated Resource Plan**
16 (30 V.S.A. § 248(b)(6))
17

18 Q42. Is the Project consistent with GF Power's least-cost Integrated Resource Plan (IRP)?

19 A42. The Commission has not required non-utilities to have a least-cost integrated resource
20 plan.⁷ Nonetheless, it is Petitioner's understanding that GF Power has not completed an
21 IRP and is not required to submit its first such plan to the Commission until July 1, 2026.
22 Based on Petitioner's understanding of the needs of GF Power's sole customer and the

⁷ 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).

1 utility's planning to meet those needs through contracting for substantial amounts of
2 renewable energy via competitively priced PPAs and on customer-owned sites close to
3 customer load, thereby avoiding substantial costs and environmental impacts related to
4 transmission, it is anticipated that this Project will be consistent with GF Power's
5 forthcoming IRP.

6
7 **Compliance with Vermont Electric Energy Plan**
8 (30 V.S.A. § 248(b)(7))

9 Q43. Is the Project consistent with the 2022 Comprehensive Energy Plan (CEP)?

10 A43. Yes. The Project will contribute to meeting the state's long-term renewable energy goals
11 because it is a proposed solar project that is located near load. Specifically, the Project
12 furthers the key objectives in the CEP, which calls for meeting Vermont's long-term energy
13 needs largely with renewable resources as embodied in the high-level goals set in the 2011
14 and 2016 CEPs, and reaffirmed in the 2022 CEP (page 2): "Meet 25% of energy needs
15 from renewable sources by 2025, 45% by 2035, and 90% by 2050." The Project is
16 consistent with CEP thematic goals including affordability, in-state generation, diversity
17 of supply, grid resiliency, and low emissions. Moreover, as the Project is being built close
18 to load on GF's facilities, it furthers the CEP's "goal of a secure and affordable electric
19 grid that can efficiently integrate, use, and optimize high penetrations of distributed energy
20 resources to enhance the state's resilience and reduce greenhouse gas emissions." CEP
21 2022, page 13. The Petitioner has asked the Department for a determination under 30
22 V.S.A. § 202(f) that the Project is consistent with the CEP.

Impact on Vermont Utilities and Customers
(30 V.S.A. § 248(b)(10))

Q44. Can existing or planned transmission facilities serve the Project without creating an undue adverse effect on Vermont utilities, customers, or existing transmission facilities?

A44. Yes. The Project will have no impact on Vermont utilities, customers, or transmission facilities and is not located in the Sheffield-Highgate Export Interface.

Setbacks
(30 V.S.A. § 248(s))

Q45. Does the Project comply with minimum setbacks established under 30 V.S.A. § 248(S)?

A45. Yes. The Project will be set back more than 100 feet from all public highways, and more than 50 feet from other property boundary lines. Please refer to Exhibit WHS-JC-2 for the detailed site plan.

PUC Rule 5.900 Decommissioning Plan and Fund

Q46. Will the Project be decommissioned at the end of its useful life, with various system components disposed of?

A46. Yes. At the end of the Project's useful life, the Petitioner will assess whether: (1) it is financially viable to continue to operate the Project as is; or (2) any changes could be made to the Project to allow its continued operation, and appropriate amendment to its CPG be sought; or (3) the Project should be decommissioned. In any event, the Petitioner will remove the Project once it is no longer in service and restore the site to its condition prior to installation of the Project to the greatest extent practicable as required under PUC Rule

1 5.904(B). The Petitioner has developed a Decommissioning Plan that would apply when
2 the Petitioner decommissions the Project. Please see Exhibit WHS-JC-9 for the Project's
3 decommissioning plan.

4
5 Q47. Has the Petitioner proposed a decommissioning fund?

6 A47. Yes, the Petitioner has proposed a funding mechanism based upon an estimate of the
7 Project's decommissioning costs that does not account for equipment salvage. As required
8 by Commission Rule 5.904(B), the decommissioning cost estimate is in present-day dollars
9 and addresses the elements in that rule. The Petitioner contracted with the engineering firm
10 Krebs & Lansing for the preparation of a Decommissioning Fund and Plan. The
11 decommissioning fund will be in place at the time construction begins and will be funded
12 by a surety bond or other form of security such as an escrow agreement or irrevocable
13 letter of credit that includes an automatic renewal provision (evergreen clause) or
14 alternative form of financial security that equals or exceeds the assurance of financial
15 resources for decommissioning as a letter of credit. A draft surety bond is included as
16 Exhibit WHS-JC-9. Prior to commencing Project construction, the Petitioner shall file and
17 receive Commission approval of an executed surety bond or alternative form of security,
18 and will submit documentation that the surety or other issuer of financial security has a
19 rating of A or greater as set forth in the Commission's Order 8 Clarifying the Meaning of
20 "A-Rated" Status for Financial Institutions Issuing Letters of Credit, Case No. 24-1240-
21 INV (4/25/24).

1 Q48. Does this conclude your testimony at this time?

2 A48. Yes.

3

WITNESS DECLARATION

I, Jake Clark, being over 18 years of age, and competent to testify on these matters declare that on behalf of Petitioner, I prepared my prefiled testimony and exhibits in the above-captioned matter and I have the necessary expertise to testify to the same information. I declare that my testimony and exhibits that I have sponsored are true and accurate to the best of my knowledge and belief and were prepared by me or under me by direct supervision. I understand that if the above statement is false, I may be subject to sanctions by the Commission pursuant to 30 V.S.A. § 30.

Dated at Burlington, Vermont, this 6th day of November, 2025.

/s/ Jake Clark
Jake Clark
Vice President of Development
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