

**STATE OF VERMONT  
PUBLIC UTILITY COMMISSION**

Petition of Mill River Solar, LLC for a )  
Certificate of Public Good, pursuant to 30 )  
V.S.A. § 248, authorizing the installation )  
and operation of a 4.95 MW AC ground- ) Case No. 24-\_\_\_\_-PET  
mounted solar array located off Mill River )  
Road in Georgia, Vermont )  
)

**PREFILED TESTIMONY OF ADAM CRARY  
ON BEHALF OF MILL RIVER SOLAR, LLC**

February 23, 2024

**Summary of Testimony**

Mr. Crary’s testimony assesses the Project’s impacts to the following 30 V.S.A. § 248(b)(5) natural environment criteria, including: water pollution, 10 V.S.A. § 1424a(d) outstanding resource waters, headwaters, floodways, streams, shorelines, wetlands, rare and irreplaceable natural areas, and necessary wildlife habitat and endangered species.

**EXHIBIT LIST**

MRS-AC-1	Resume of Adam Crary
MRS-AC-2	Natural Resources Memorandum

1 **Introduction**

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

3 A1. My name is Adam Crary, employed at Vanasse Hangen Brustlin, Inc. (“VHB”), and my  
4 business address is 40 IDX Drive, Building 100, Suite 200, South Burlington, Vermont. I  
5 am currently the Renewable Energy Team leader for VHB in Vermont.

6  
7 **Q2. What is your education background, qualifications, and work experience?**

8 A2. I have a B.S. in Natural Resources (Natural History and Ecology concentration) from the  
9 University of Maine. I have been a Senior Ecologist and then Director of Natural  
10 Sciences at VHB since 2009, where I am responsible in part for managing projects,  
11 technical staff, and technical work in conduct of various ecological surveys and reporting,  
12 typically under the requirements of federal, state, and local environmental regulatory  
13 programs. I also manage and coordinate the work of various other VHB services with a  
14 particular focus on energy-related projects. I have been a professional environmental  
15 consultant since 2001, specializing in natural resources identification and assessments. In  
16 addition to assessments conducted for numerous projects under 30 V.S.A. § 248(b)(5)  
17 review, I have prepared and coordinated applications for the acquisition of numerous  
18 federal and state environmental impact permits, which involve application of expert  
19 ecological and natural resource assessment disciplines. My resume is attached as ***Exhibit***  
20 ***MRS-AC-1.***

21

1 **Q3. Have you testified previously before the Public Utility Commission?**

2 A3. Yes. I have testified (through prefiled testimony and/or live hearings) for numerous  
3 projects located across Vermont, particularly those related to electric infrastructure  
4 upgrades or replacement, or new energy generation, particularly renewables. I have also  
5 provided technical support to expert witnesses testifying before the PUC, including for  
6 utility-scale solar projects, a sample of which are listed on my resume.

7  
8 **Q4. What is the purpose of your testimony?**

9 A4. My testimony supports Mill River Solar, LLC's ("MR Solar", or "Petitioner") petition for  
10 a Certificate of Public Good ("CPG") pursuant to 30 V.S.A § 248 with respect to MR  
11 Solar's proposal to construct and operate an approximately 4.95-megawatt ("MW")  
12 alternating-current ("AC") solar electric generation facility to be installed on fixed-tilt  
13 racking systems within an approximately 23.75 acre perimeter fence on private property  
14 located off Mill River Road in Georgia, Vermont (the "Project"). Specifically, I examine  
15 whether the construction and operation of the Project complies with the following  
16 criteria:

- 17 • Outstanding Resource Waters (10 V.S.A. § 1424a(d));
- 18 • Water Pollution (10 V.S.A. § 6086(a)(1));
- 19 • Headwaters (10 V.S.A. § 6086(a)(1)(A));
- 20 • Floodways (10 V.S.A. § 6086(a)(1)(D));
- 21 • Streams (10 V.S.A. § 6086(a)(1)(E));
- 22 • Shorelines (10 V.S.A. § 6086 (a)(1)(F));

- 1           • Wetlands (10 V.S.A. § 6086(a)(1)(G));
- 2           • Rare and Irreplaceable Natural Areas (10 V.S.A. § 6086(a)(8)); and
- 3           • Necessary Wildlife Habitat and Endangered Species (10 V.S.A. § 6086 (a)(8)(A)).

4 Under my direction, VHB prepared a Natural Resource Assessment Memorandum  
5 ("Natural Resources Memo"), provided as *Exhibit MRS-AC-2*, on which I rely when  
6 making my assessments per these criteria.

7           As described in detail in the NR Memo, natural resources assessments were  
8 conducted within an approximately 71-acre "Study Area," which includes the Project  
9 components (*e.g.*, the array, access, perimeter fence, staging, and interconnection, etc.).  
10 In making my assessments, project support staff at VHB and I relied upon the Project  
11 plans developed by VHB using information provided by MR Solar and its  
12 design/consultant team. In making my assessments, I also rely on overview witness  
13 Ralph Meima's Project description. Project support staff and I have also reviewed the  
14 site plans for the Project (*Exhibit MRS-RM-2*), which incorporate VHB's suggestions to  
15 avoid and minimize natural resource impacts as well as best management practices and  
16 details. The results of VHB's specific assessments are included in detail in the above-  
17 referenced memorandum, and generally summarized below.



**Floodways**

(10 V.S.A. § 6086(a)(1)(D) & 1424a(d)(3))

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2  
3 **Q8. Is the Project within a floodway, floodway fringe, or river corridor, and if so, will it**  
4 **have an undue adverse effect on such areas, or endanger the health, safety, and**  
5 **welfare of the public or riparian owners during flooding?**

6 A8. Yes, portions of the Study Area are located within floodway fringe and river corridor  
7 areas associated with Rugg Brook. The Project array was designed to avoid both types of  
8 areas, however there will be some temporary construction activity related to erosion and  
9 sediment controls as well as minor segments of the Project's perimeter fencing within  
10 two outer-margin areas of the river corridor. The proposed GMP overhead electric line  
11 extension would span over the Rugg Brook in one roadside location but avoids new poles  
12 in floodways areas. Neither activity would impact the river corridor or require permit  
13 authorization or reporting under the state Flood Hazard and River Corridor rule.  
14 Therefore, the Project will not restrict or divert the flow of flood waters (floodway or  
15 floodway fringe), or endanger the health, safety, and welfare of the public, or of riparian  
16 landowners during flooding or from potential erosion. *Exhibit MRS-AC-2* provides  
17 further details behind VHB's assessment and these results.

18  
19 **Streams**

20 (10 V.S.A. § 6086(a)(1)(E))

21 **Q9. Please describe any streams or waterways in the Project vicinity.**

22 A9. As described in detail in *Exhibit MRS-AC-2*, VHB conducted on-site investigations for  
23 and delineations of the streams and surface waters within the Project Study Area. VHB

1 delineated segments of one perennial stream (Rugg Brook) and one intermittent stream  
2 tributary channel to the brook. The Project is designed to avoid any construction activity  
3 within stream channels or any 50-foot riparian buffer. Therefore, the Project will not  
4 alter the natural condition of any streams. A complete description of methodologies and  
5 findings from VHB's natural resources assessments, including details of on-site stream  
6 delineations, is included in *Exhibit MRS-AC-2*.

7  
8 **Q10. Will the Project maintain the natural condition of streams?**

9 A10. Yes. See *Exhibit MRS-AC-2* and my answer above for more details.

10  
11 **Q11. Will the Project impact stream buffers?**

12 A11. No. As described in *Exhibit MRS-AC-2*, there are riparian buffers within the Project's  
13 Study Area, which the proposed design has avoided.

14  
15 **Shorelines**

16 (10 V.S.A. § 6086(a)(1)(F))

17 **Q12. Does the Project involve the development of any shorelines?**

18 A12. No, as there are no shoreline areas within the Project site. See *Exhibit MRS-AC-2* for  
19 more details.

20

21

22

23

**Wetlands**

(10 V.S.A. § 6086(a)(1)(G))

1  
2  
3 **Q13. Is the Project located in or adjacent to a wetland or wetland buffer, and if yes, will**  
4 **the Project violate the rules of the Secretary of the Agency of Natural Resources**  
5 **relating to significant wetlands?**

6 A13. No. VHB conducted wetland assessments and delineations within the Study Area and  
7 delineated several wetland complexes that have been reviewed with the DEC wetlands  
8 program and confirmed. The Project has been designed to avoid any activity within  
9 wetlands or buffers, therefore the Project will not have any adverse impact to significant  
10 wetlands and will not require a permit pursuant to the Vermont Wetland Rules. A more  
11 detailed description of site conditions and VHB’s methodologies and results, and  
12 supporting information regarding wetlands, are included in *Exhibit MRS-AC-2*.

13  
14 **Rare and Irreplaceable Natural Areas, Necessary Wildlife Habitat,**  
15 **Endangered Species**

16 (10 V.S.A. § 6086(a)(8) & 1424a(d)(4)-(9))

17 **Q14. Is the Project located in any significant natural communities or rare and**  
18 **irreplaceable natural area (“RINA”), or will it have any impact on any such areas?**

19 A14. No. There are no significant natural communities or areas that would be considered  
20 RINA within the Project Study Area. *Exhibit MRS-AC-2* provides further details based  
21 on VHB’s database and field reviews.

22

1 **Q15. Will the Project destroy or significantly imperil any necessary wildlife habitat?**

2 A15. No. As described in more detail in *Exhibit MRS-AC-2*, there are no areas that VHB  
3 would consider necessary wildlife habitat within the Project site, except for deer  
4 wintering area, which VHB has identified north of the Project array area. As described in  
5 *Exhibit MRS-AC-2*, the Project will not involve any direct impact to the habitat or  
6 require tree removal within its 100 foot buffer. As a result, the Project can be constructed  
7 and operated to not cause adverse impacts to the DWA.

8

9 **Q16. Will the Project destroy or significantly imperil any rare, threatened, or endangered**  
10 **(“RTE”) species?**

11 A16. No. As described in more detail in *Exhibit MRS-AC-2*, from database and field reviews,  
12 there are no RTE plants known from the Project site. There is protected bat summer  
13 roost (forest) habitat known in the Project vicinity, but the Project does not involve  
14 significant levels of tree clearing that would require further conservation measures or  
15 seasonal restrictions according to state guidelines. Finally, via an onsite bird survey,  
16 VHB noted the presence of the state threatened eastern meadowlark within the Project  
17 site, which the Project will take measures to avoid destroying or significantly imperiling  
18 by either avoiding construction during the grassland bird breeding season, seeking a  
19 takings permit, or only constructing during the breeding season if Project infrastructure is  
20 sufficiently installed such that the site would no longer be suitable grassland bird  
21 breeding habitat. As such, the Project will not destroy or significantly imperil any known  
22 RTE plant or animal species.

1 **Q17. Does this conclude your testimony?**

2 A17. Yes.