

**STATE OF VERMONT
PUBLIC UTILITY COMMISSION**

Petition of Savage Solar Energy LLC for a	)	
Certificate of Public Good, pursuant to 30	)	
V.S.A. § 248, authorizing the installation	)	
and operation of a 2.75 MW solar electric	)	Case No. 26-____-PET
generation facility off Route 103 in Chester,	)	
Vermont to be known as the “Savage Solar	)	
Energy Project”	)	

PREFILED TESTIMONY OF SETH GODDARD

March 23, 2026

Summary: Mr. Goddard’s testimony describes his work on developing the Savage Solar Energy Project’s site plans and addresses the Project’s compliance with Section 248(b)(5) with respect to Air Pollution (sound), Water Pollution (including Waste Disposal, Water Conservation, Sufficiency of Water, and Burden on Existing Water Supply), Soil Erosion, and Primary Agricultural Soils.

Exhibits

SSE-SG-1: Resume
SSE-SG-2: Sound Study

1 **Q1. Please state your name, occupation, and business address.**

2 A1. My name is Seth Goddard. I am Vice President of Krebs and Lansing Consulting
3 Engineers, Inc. (“K&L”), State of Vermont Professional Engineer #55582. My business
4 address is 164 Main Street, Suite 201, Colchester, VT 05446.

6 **Q2. What is the purpose of your testimony?**

7 A2. My testimony supports the application of Savage Solar Energy LLC (“SSE”) for Section
8 248 approval of a solar electric generation facility (“Project”) on property in Chester,
9 Vermont that SSE has an option to lease.

10 Specifically, my testimony provides an overview of the Project, describes my
11 work developing the site plan, and addresses the Project’s compliance with Section
12 248(b)(5) with respect to Air Pollution (sound), Water Pollution (including Waste
13 Disposal, Water Conservation, Sufficiency of Water, Burden on Existing Water Supply),
14 Soil Erosion, and Primary Agricultural Soils.

16 **Q3. Please describe your professional background, qualifications, and experience.**

17 A3. After receiving my BS in Civil Engineering from the University of Vermont in 2005, I
18 joined Krebs and Lansing Consulting Engineers, Inc. where I have worked as an
19 engineer. In 2014, I became a co-owner of the firm. In my present position, I continue to
20 perform extensive work in civil engineering design, permitting and construction services
21 for commercial, industrial, institutional, and residential construction projects. I have
22 performed civil site design and related work for utility projects and several other

1 photovoltaic electric generation systems located in Vermont. A more detailed description
2 of my experience is provided in *Exhibit SSE-SG-1*.

3
4 **Q4. Have you previously testified before the Public Utility Commission (“PUC”)?**

5 A4. Yes, I have provided prefiled testimony on behalf of a number of projects. Recent
6 projects where I have provided testimony include Lowery Road Solar, Case No. 23-1994-
7 PET; Hunt Road Solar, Case No. 23-2420-PET; Barnet Solar, Case No. 23-3381-PET;
8 Furnace Brook Solar, Case No. 23-4028-PET, Post Road Solar, Case No. 23-4324-PET;
9 Little Brook Solar, Case No. 24-3420-PET; and Stone House Solar, Case No. 25-1827-
10 PET.

11
12 **Q5. Please describe the work you conducted with respect to the Project.**

13 A5. I have worked on the civil/site engineering design for the Project and prepared the site
14 plans and reviewed the potential impacts of the Project under certain Section 248 criteria.
15 The site plans are presented by the Project overview witness, Thomas Hand, as *Exhibit*
16 *SSE-TH-2*. In preparing the site plans I have performed the following tasks and
17 evaluations:

- 18 • Design of the site plans, including: shading analysis, array layout, access road,
19 grading, erosion prevention and sediment control measures, fencing, and
20 secondary oil containment design.
- 21 • Review of operational and construction stormwater permitting needs.
- 22 • Review of impacts to primary agricultural soils.

- Review of impacts and permitting needs regarding the flood hazard area and river corridor.
- Review of Project-related sound impacts.

SECTION 248 CRITERIA

Air Pollution – 10 V.S.A. § 6086(a)(1)

Q6. Will the Project have an undue adverse effect with respect to sound?

A6. No, it will not. The sound generated by Project construction will be of limited duration and will be comparable to the sound generated by light construction equipment. Construction activities for the Project will be limited to the hours between 7:00 A.M. and 7:00 P.M., Monday through Friday, and between 8:00 A.M. and 5:00 P.M. on Saturdays, as needed. Construction will not occur on state or federal holidays or Sundays unless authorized by the Commission upon request.

With respect to potential noise impacts during operations, the Project's only components that generate sound that may be audible from off-site locations (i.e., beyond the Project parcel) are the 3,000 kVA transformer and (12) inverters. The transformer will be located on the western edge of the array along the access road. The string inverters will be mounted on three equipment racks that are located near the western edge of the array along the access road and adjacent to the transformer. An 8' tall perimeter fence with acoustic attenuation blankets will be installed around the inverters. *See Exhibit SSE-SG-2.*

1 Estimates of the expected sound levels from the Project's inverters and
2 transformer were developed using the distance damping equation shown on *Exhibit SSE-*
3 *SG-2*. These estimates are conservative in that I have assumed, for purposes of the
4 daytime sound estimates, that all of the electrical equipment is operating simultaneously
5 at its maximum sound levels. Likewise, I have not accounted for any ambient
6 background noise or the attenuating effect of any vegetation, buildings, or topography
7 located between the sound source and off-site receptors, in particular the vegetation and
8 building between the Project and closest residence.

9 The estimated daytime and nighttime Project-related sound levels at the nearest
10 residence are estimated to be approximately 41 dBA (daytime), 28 dBA (nighttime)
11 (rounded to the nearest whole number). The nighttime sound level was modeled using
12 the transformer only as the inverters do not operate in the absence of sunshine on the
13 panels and will therefore not produce any sound. The calculations and supporting
14 information are provided as *Exhibit SSE-SG-2*.

15 These sound levels are generally low and within the quiet to very quiet range
16 compared to everyday noises (see chart in *Exhibit SSE-SG-2*). It is my understanding
17 that these sound levels are comparable to other solar projects previously approved by the
18 Commission. Therefore, the Project will not have an undue adverse effect with respect to
19 sound.

20

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

Q7. Will the Project result in undue water pollution?

A7. No, for the reasons enumerated under the specific sub-criteria below and those set forth in *Exhibit SSE-MLS-2*.

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

Q8. What are the Project's plans for waste disposal?

A8. As there will be no buildings associated with the Project, no on-site wastewater disposal system is required for the Project and thus a Wastewater System and Potable Water Supply Permit is not required.

Any metal or cardboard generated from the Project construction will be recycled. All construction waste that cannot be recycled will be disposed of in an approved sanitary landfill. During operation of the Project, there are no anticipated activities that will generate waste materials requiring disposal.

Project operations will not generate solid wastes, will not involve the injection of waste materials into groundwater or wells, and will not generate sanitary waste. With respect to stormwater runoff from Project construction or operation, see my testimony below under Soil Erosion and under Question 12.

As shown in *Exhibit SSE-TH-2*, the only grading proposed for the Project is for the elevated transformer and switchgear pad, and access road. The elevated pad will require imported structural fill and topsoil. The grading will impact approximately 0.05 acres of the site. There is no grading proposed underneath the array footprint.

1 Approximately 0.05 acres of vegetative clearing are proposed around the
2 proposed access road. These areas will be stumped and grubbed. An additional
3 approximately 0.01 acres of vegetative management is proposed for the overhead power
4 interconnection. For this area, trees and bushes will be cut flush with the existing ground
5 but stumps will remain. All areas of vegetative clearing and management are shown on
6 the Project's Site Plan and EPSC Plan (Sheet C-103) provided in *Exhibit SSE-TH-2*.
7 Tree trunks and large limbs will be removed from the site and utilized for firewood.
8 Smaller debris and limbs will be ground into chips and used in temporary and final
9 stabilization practices around the site. All stumps that are removed from the site will be
10 disposed of in an approved stump dump facility. As mentioned above, stumping is only
11 proposed for clearing areas necessary to install the access road.

12
13 **Water Conservation, Sufficiency of Water Supply, and**
14 **Burden on Existing Water Supply – 10 V.S.A. §§ 6068 (a)(1)(C), (a)(2), (a)(3)**

15 **Q9. Please describe any use of water during construction and operation of the Project.**

16 A9. The Project may use a small amount of water during the construction phase if required
17 for dust control and for occasional cleaning of panels during the operational phase. In
18 both instances, any small amount of water needed will be brought to the site. Otherwise,
19 the Project will not utilize any water supplies (on-site or off-site) during construction or
20 operations and will not require connection to a well or municipal water supply.
21 Therefore, the Project will not result in any adverse impacts on water conservation or
22 sufficiency of supply, or place any adverse burden on existing water supply.

23

Soil Erosion – 10 V.S.A. § 6086(a)(4)

Q10. Please discuss whether a construction stormwater permit is needed for the Project.

A10. The Project will be subject to an Agency of Natural Resources (“ANR”) Moderate Risk Construction Stormwater General Permit or Individual Construction Stormwater Permit (“INDC”). If the Project elects to concurrently disturb more than five acres, then an INDC permit will be required. Alternatively, if less than 5 acres of concurrent disturbance will occur, then a Moderate Risk permit will be required. The Project will be constructed in accordance with the Vermont Standards & Specifications for Erosion Prevention and Sediment Control, June 19, 2025. No work shall commence until the Project receives its Moderate Risk or INDC permit.

The earth disturbances that will occur during construction include installation of the access road, electrical equipment pads, transformer pad and associated secondary oil containment, stormwater best management practices, electrical switchgear, the grading associated with the access road and elevated transformer pad, underground trenching for the electrical conduit, construction staging areas, prime ag soils stockpile areas, concentrated work areas, vegetative clearing and grubbing, fencing, and miscellaneous other disturbances for construction vehicle travel and post installation. This construction work will potentially disturb up to ±15.08 acres. The majority of this disturbance is for construction traffic. All areas of construction disturbance, as well as the existing topography, are shown on the Project’s Site Plan and EPSC Plan (Sheet C-100, and C-103) provided in *Exhibit SSE-TH-2*.

1 Stormwater runoff and erosion control methods that will be used during
2 construction include: temporary soil stabilization with mulch within 14 days of initial site
3 disturbance, a temporary stabilized construction entrance, and silt fence downslope of all
4 proposed disturbances and when work is proposed within 100' of a downslope wetland.
5 Construction will also be phased so that no more than five acres of concurrent
6 disturbance will occur if the Project applies for a Moderate Risk Construction Stormwater
7 Permit. No more than 10 acres of concurrent disturbance shall occur if the Project
8 applies for an INDC permit. These are established and proven measures accepted by
9 ANR to prevent soil erosion from occurring and address any potential construction-
10 related stormwater runoff effectively before it reaches receiving waters. Implementation
11 of these measures will prevent undue soil erosion and protect water quality.

12
13 **Q11. Will the Project require an operational stormwater permit?**

14 A11. No. The Project will create ±0.10 acres of impervious surfaces due to the proposed gravel
15 access drive and concrete equipment pads for the transformer and miscellaneous
16 electrical equipment. There are no existing impervious surfaces on the Project parcel.
17 Following construction, there will be 0.10 acres of total impervious surface on the parcel.
18 As there is less than half an acre of new impervious surface added to the parcel as a result
19 of the Project, no operational stormwater permit will be required. *Exhibit SSE-TH-2*.

1 **Q12. Will the Project cause unreasonable soil erosion or the reduction in the capacity of**
2 **the land to hold water so that a dangerous or unhealthy condition may result?**

3 A12. No. The implementation of erosion prevention and sediment control measures outlined
4 above during construction and consistent with the EPSC Plans and details provided in
5 Sheets C-103, C-104, and C-105 of *Exhibit SSE-TH-2* will ensure that all sediment is
6 contained on the site during construction. The Project will be constructed in accordance
7 with the Vermont Standards & Specifications for Erosion Prevention and Sediment
8 Control, June 19, 2025. Thus, the Project will not cause unreasonable soil erosion or
9 reduction in the capacity of the land to hold water so that a dangerous or unhealthy
10 condition could result.

11
12 **Primary Agricultural Soils – 10 V.S.A. § 6086(a)(9)(B)**

13 **Q13. Will the Project have an undue adverse impact on any Primary Agricultural Soils,**
14 **as defined by 10 V.S.A. § 6001(15)?**

15 A13. No, the Project will not have an undue adverse impact on primary agricultural soils
16 (“PAS”). There are ±25.49 acres of mapped PAS on the Project parcel, with ±15.08 acres
17 of mapped PAS within the limits of disturbance (“LOD”) that are potentially subject to
18 disturbance. Approximately 0.31 acres of PAS will be disturbed to create the access road
19 and install the equipment pads, the minor associated grading, and conduit trenching. Soils
20 disturbed for trenching will be separated by their horizons and re-laid in the same order
21 following installation of the buried lines/conduit. If sand bedding is used, then the PAS
22 shall be removed by horizon and stored in a PAS stockpile area as shown on the site plan.

1 All other PAS removed during construction will be stockpiled within the Project fence
2 line and preserved on site in accordance with the Vermont Agency of Agriculture Food
3 and Markets guidelines for the life of the Project. See proposed stockpile location in
4 *Exhibit SSE-TH-2*. At Project decommissioning, these soils will be restored to the site
5 in accordance with the Vermont Agency of Agriculture, Food and Markets' guidelines.
6 Additionally, the imported structural fill and topsoil used to construct the elevated
7 equipment area will be removed from the site. As the soils will be maintained on site and
8 returned at the end of the Project lifetime, there will be no permanent impacts to PAS
9 soils and no undue adverse impacts to these soils.

10
11 **Floodways – 10 V.S.A. § 6086 (a)(1)(D)**

12 **Q14. Is the Project within a floodway or floodway fringe?**

13 A14. Yes. The majority of the Project area except for a section of the access road is located
14 within a Federal Emergency Management Agency ("FEMA") Special Flood Hazard Area
15 (Zone AE), as shown on FIRM Map No. 50027C0714E. However, the Project is not
16 located in the FEMA floodway or ANR river corridor.

17
18 **Q15. What mitigation measures, if any, have been taken?**

19 A15. Savage Solar has coordinated the design of the Project with the Vermont Watershed
20 Management Division and has obtained a Flood Hazard Area and River Corridor
21 ("FHARC") Permit (#FP-8-0031-GP). The Permit review revised Williams River
22 Corridor boundary (as indicated on the Site Plan, *Exhibit SSE-TH-2*) and authorizes the

1 Project to be located within the 100-year floodplain, provided that all solar modules and
2 electrical equipment are installed a minimum of 1 foot above the base flood elevation and
3 outside the regulatory floodway. The Project incorporates these design features, and
4 Savage Solar has also coordinated with the Watershed Management Division to locate the
5 soil stockpile in an area of the site that will not impact or impede floodwaters.
6

7 **Q16. Will the Project result in any undue adverse impacts with respect to floodways or**
8 **flood waters?**

9 A16. No, with the mitigation design features described above, the Project will not interfere
10 with flood flows or adversely affect floodplain storage, as further indicated by the
11 issuance of the FHARC permit. Therefore, the Project will not have any undue adverse
12 impacts on floodways, floodway fringes, or river corridors, nor will the Project endanger
13 the health, safety, or welfare of the public or riparian owners as it relates to flood events
14 or fluvial erosion.
15

16 **Q17. Does that conclude your testimony at this time?**

17 A17. Yes, it does.