

**STATE OF VERMONT
PUBLIC SERVICE BOARD**

Docket No. _____

Petition of Addison Solar Farm, LLC, pursuant to)
30 V.S.A. § 248, for a certificate of public good)
authorizing the installation and operation of a one)
MW solar electric generation facility located at)
Route 7 and Monkton Road, Ferrisburgh, Vermont,)
known as the “Ferrisburgh Solar Farm Project”)

**PREFILED DIRECT TESTIMONY OF
ERNEST A. POMERLEAU AND LEIGH W. SEDDON**

1 **Q. Please state your names, occupations, and business addresses.**

2 Pomerleau Response: My name is Ernest A. Pomerleau, and I am the President of
3 Pomerleau Real Estate and a member of Addison Solar Farm, LLC (“ASF”). My
4 business address is 69 College Street, Burlington, Vermont 05401.

5 Seddon Response: My name is Leigh W. Seddon, and I am Vice President for
6 Engineering for Alteris Renewables, Inc., with Vermont offices located at 64 Main
7 Street, Montpelier, Vermont 05602.

8

9 **Q. What is the purpose of your testimony?**

10 Response: Our testimony supports the Petition of Addison Solar Farm LLC for
11 section 248 approval to construct and operate a one (1) Megawatt (MW) solar
12 electric generation project, to be known as the Ferrisburgh Solar Farm Project
13 (“FSF” or “Project”), in Ferrisburgh, Vermont. We describe the construction and
14 operation of the Project, and provide testimony on its compliance with the section
15 248(b) criteria.

16

1 **Q. Please describe your professional background, qualifications and experience.**

2 Pomerleau Response: I have been involved in the real estate development business
3 for 40 years, and through Pomerleau Real Estate, own and manage 2 million square
4 feet of commercial property. I am also involved in numerous business and civic
5 organizations, and was the Chair of the Governor's Commission on Climate Change.

6 Seddon Response: Since 1980 I have worked as a solar energy system designer and
7 contractor. As Founder and President of Solar Works, Inc., and now as Vice-
8 President for Alteris Renewables which acquired Solar Works, I have designed and
9 managed construction of photovoltaic and solar thermal systems throughout North
10 America.

11 Our resumes are attached as *Exhibits ASF-EP/LS-1a and -1b*.

12
13 **Q. What is your connection to the Addison Solar Farm Project?**

14 Pomerleau Response: The Project is being developed by Addison Solar Farm LLC, a
15 Vermont limited liability corporation that I am a member of. Addison Solar Farm
16 LLC is incorporated in Vermont with its principal place of business at 69 College
17 Street, Burlington, Vermont.

18 Seddon Response: Alteris Renewables, Inc. has been hired by Addison Solar Farm
19 LLC to design and construct the Ferrisburgh Solar Farm photovoltaic facility. In
20 this capacity, I will oversee electrical and mechanical design of the plant, and support
21 construction and commissioning of the plant.

22

23

1

Project Description and Overview

2 **Q. Please provide an overview of the Project.**

3 Response: The Ferrisburgh Solar Farm Project is a proposed one (1) megawatt
4 (MW) solar electric generation project on a portion of a 16+/- acre undeveloped
5 parcel of land located at the southwest corner of Route 7 & Monkton Road in
6 Ferrisburgh, Vermont. See the Project site map and plan, cross section, birdseye
7 simulation, and photos-- *Exhibit ASF-EP/LS-2, Figs. a-e*. The parcel has a
8 southern slope, enhancing its value as a site for solar electric production.

9 Once constructed, FSF will be one of the largest solar energy installations in
10 the State of Vermont and in the Northeast.

11 The Project's location along Route 7, a relatively high traffic road, and its
12 proximity to Vergennes Union High School, offers an excellent opportunity to
13 inform and educate the public about a form of commercial scale renewable energy
14 that is new to Vermont. Consequently, ASF will include an education component
15 through an information kiosk and associated parking, and through education
16 partnerships with the adjacent Vergennes Union High School. We have discussed
17 the Project with the principals of the high school, and they have expressed strong
18 interest in incorporating the construction and operation of the solar project into the
19 school's curriculum.

20 The Project is being developed under the "Standard Offer" program.
21 Legislation passed last year provided incentives to encourage in-state renewable
22 electric generation projects, including changes to the Vermont Sustainably Priced
23 Energy Development (SPEED) program. Under the new SPEED "Standard Offer"

1 program, Pomerleau Real Estate recently received one of a limited number of project
2 slots to develop this solar energy project, and executed the Standard Offer contract
3 with the SPEED Facilitator. The Standard Offer contract provides for the sale of
4 the Project's output and other attributes, including RECs, at a fixed price of
5 \$0.30/kWh for a period of 25 years. Pomerleau Real Estate subsequently assigned
6 its rights to the Project to Addison Solar Farm LLC. See *Exhibit ASF-EP/LS-10a-b*.

7

8 **Q. Please summarize the benefits the Project will provide to Vermont.**

9 Response: The Ferrisburgh Solar Farm, as a renewable energy resource, would
10 contribute to the State meeting its energy and sustainability goals. The Vermont
11 Legislature has established an aggressive goal – “by the year 2025, to produce 25
12 percent of the energy consumed within the state through the use of renewable
13 energy sources, particularly from Vermont's farms and forests.” One method to
14 achieve these goals is through the SPEED Standard Offer program, as discussed
15 above, under which all of Vermont's utilities share in the purchase of electricity from
16 Standard Offer projects such as Ferrisburgh Solar Farm. This type of system
17 encourages individuals and businesses to invest in new renewable energy systems
18 connected to the State's electric grid by offering stable, long-term pricing.

19 The more energy produced by solar, the less energy will be needed from
20 electric generation plants that emit air pollutants, thereby helping to reduce acid rain,
21 ozone depletion, health problems from toxic air, and global warming. In addition,
22 because solar energy projects have no ongoing fuel costs, they can be stably-priced

1 over the long term and thus benefit the entire region by making electricity prices less
2 dependant on volatile fossil fuel market prices.

3 The Ferrisburgh Solar Farm will also contribute positively to the local and
4 State economy through the almost exclusive use of in-state suppliers, contractors,
5 and consultants, and the payment of local and state property taxes.

6 Finally, ASF is committed to providing an important educational resource
7 concerning the role of a renewable energy project in the working Vermont
8 landscape. This will be accomplished through an on-site informational kiosk and
9 learning partnerships with the adjacent Vergennes Union High School and possibly
10 other area schools.

11

12 **Q. Please state the Project's capacity and anticipated energy production.**

13 Response: The nameplate capacity of the Project is 1.04 megawatts (MW) DC, at
14 Standard Test Conditions, prior to conversion to AC. The expected net energy
15 output of the Project (after DC to AC conversion) is 1,200+/- megawatt hours of
16 electricity (MWh) (1,200,000 kWh) per year. This is the equivalent of the annual
17 electricity consumption of roughly 170 homes, based upon the average residential
18 electricity use in Vermont.

19

20 **Q. Please describe the Project equipment.**

21 Response: The Project's equipment consists of the following: individual
22 polycrystalline solar photovoltaic panels, a metal support structure under the panels
23 to create south facing collector arrays, electrical lines in underground conduit

1 connecting the panels to the inverters and switch gear enclosure, and underground
2 electrical lines from the interconnection transformer to the GMP distribution
3 system. The individual panels making up each solar array will be either 200 watts or
4 270 watts each, depending upon the model ultimately chosen. In either case the
5 overall footprint of the solar field will remain the same; the only difference in the site
6 plan will be slightly wider spacing between solar arrays and fewer rows if the 270
7 watt panels are used.

8 See *Exhibits ASF-EP/LS-3, Figs. a-d* for pictures and specifications of the
9 solar panels and inverters.

10 Approximately 5,200 individual 200-watt solar panels will be used (or 3,872 if
11 the 270 watt panel is used). The solar panels will be attached to a fixed mounting
12 system composed of steel and aluminum support pieces. The mounting structure will
13 be arranged in east to west rows with panels placed two high on each row. The
14 panels will be tilted at 30 degrees and facing solar south (195 degrees magnetic). The
15 mounting structure support poles will be driven into the ground to a depth of
16 approximately five feet, without concrete foundations in order to minimize soil
17 disturbance and any potential visual impacts. The lowest part of the panels will be
18 approximately 4 feet off of the ground to allow for snow pack and also maintenance
19 of the surrounding field. The top of the panels will be a maximum height of
20 approximately 9 feet high off the ground (10.5 feet if the 270 watt panels are used).
21 See *Exhibit ASF-EP/LS-2, Fig. b*. The layout incorporates setbacks from the
22 property lines and buffers from the Class 3 wetlands.

1 The entire solar field will be surrounded by a six foot high chain link fence
2 for security and safety. In addition, motion-activated lighting will be used around the
3 solar field, and lighting in the kiosk/parking area.

4 The inverter is the power conditioning system that converts the DC current
5 generated by the solar panels into AC current before it is sent to the medium voltage
6 distribution line of the interconnecting utility, Green Mountain Power. The inverter
7 section consists of four 260 kW inverters housed in a pre-fabricated, UL listed,
8 enclosure, approximately 10 x 35 feet in size. *See Exhibit ASF-EP/LS-3, Fig. d.*
9 This enclosure will be located at the western edge of the field as shown on the
10 Project Site Map. All electrical conduits and lines will run underground
11 (approximately 4-6 feet in depth) from the panels to the inverter enclosure. A
12 medium voltage transformer located adjacent to the inverter enclosure transforms
13 the 480-volt inverter output to 12.47 kV for interconnection to the GMP system.

14
15 **Q. Please describe in more detail the electrical system, including collector and**
16 **feeder lines and interconnection with GMP.**

17 Response: The electrical system consists of groups of solar panels wired in series to
18 produce 400 volts DC. These “strings” are then wired to fused combiner boxes
19 located on the ends of rows to aggregate multiple strings into a “subarray”. From
20 these combiners, underground DC wiring runs to the inverter/switchgear enclosure.
21 At the enclosure, individual subarray circuits are connected to disconnect switches,
22 overcurrent protection, and finally the DC input side of the inverters. The inverter
23 AC output is 480-volt three phase power. The AC output of all four inverters is

1 combined at an AC distribution panel where it is metered and then fed to the 12.47
2 kV medium voltage transformer attached to the enclosure. The output of the
3 transformer will run underground to Monkton Road where it will be connected to
4 GMP's distribution line. It is expected that a new service pole will be set on the NW
5 corner of the property to bring 3-phase service across Monkton Road to the site.
6 A one-line diagram of the electrical system is attached as *Exhibit ASF-EP/LS-4*.

7

8 **Q. Please describe the site on which the Project will be located.**

9 Response: As depicted on the Site Plan, the solar array will occupy approximately 8
10 acres of a 16+/- acre site owned by an affiliate of ASF. Currently the land is open
11 field, with one barn along the Monkton Road side that will remain.

12 The inverters and related equipment will be located on site in a pre-fabricated
13 enclosure, and on-site electrical lines will be undergrounded.

14 Access to the site will be from an existing entrance on Monkton Road and
15 onto a new gravel access road running to the inverter enclosure.

16 The information kiosk and associated parking (~4 spaces) will be located in
17 the northwest corner of the site, and will utilize the same entrance. Improvements
18 to this kiosk area will include either paving or laying gravel.

19 See the Project site map and plan, cross section, birdseye simulation, and
20 photos-- *Exhibit ASF-EP/LS-2, Figs. a-e*.

21

22 **Q. Please discuss the anticipated Project construction activities and schedule.**

1 Response: Construction of the solar plant is expected to take approximately 12
2 weeks following receipt of all permits. The first phase of construction (approximately
3 4 weeks) will include site work to provide access to the inverter location,
4 underground 3-phase primary power from Monkton Road, and a perimeter fence
5 around the solar array. The second phase of construction will involve construction
6 of the solar array support structures. Since the support structures require no
7 concrete foundation, construction equipment in the field will be limited to
8 lightweight pile or auger driving equipment and a trenching machine. The final phase
9 of the construction will involve securing the solar modules, wiring to the inverter
10 enclosure, and installation of the data acquisition system. Following completion of
11 these activities, the system will be tested and commissioned for continuous
12 operation.

13 The basic parameters of the construction work include the following working
14 assumptions:

- 15 ■ No earth moving, grading or excavation other than to install underground
16 conduit. Solar panel support structures to be pile driven and thus very
17 limited earth disturbance required.
- 18 ■ Native soils to remain in place. Site to remain vegetated and able to be
19 routinely mowed.
- 20 ■ The only trees/brush to be removed are those along an interior fence line.
- 21 ■ A 25' setback to a Class 3 wetland and 150'+ setback to an off-site stream;
- 22 ■ Property line setbacks of approx. 60' westerly, 25' easterly, and 50' southerly.

- 1 ▪ No permanent access drive throughout the solar array is required, with the
2 exception of a roughly 520 foot gravel access road from the site entrance to
3 the inverter enclosure.

4 In terms of the post-construction condition of the field, all soils on site will
5 remain in place. Addison Solar Farm LLC is also exploring the feasibility of
6 maintaining the fields using sheep, goats, or similar grass grazers, in order to reduce
7 or eliminate the use of power equipment that relies on gasoline and oil.

8

9 **Q. Please discuss the operation and maintenance activities for the Project.**

10 Response: The operation of the solar plant is totally automatic and requires no on-
11 site personnel. The plant will be continually monitored via the internet to confirm
12 proper operation and performance. Energy metering will also be accomplished by
13 remote telemetry.

14 On-site maintenance activities will be limited to periodic vegetative
15 management, snow removal in winter to provide access to the inverter enclosure,
16 and annual equipment and wiring inspections.

17

18 **Q. What is the latest date that the Petitioner can begin construction of the**
19 **Project, and what is the reason for this deadline?**

20 Response: ASF must order the solar panels, inverters, and other equipment by no
21 later than July/August and begin construction no later than October in order to
22 complete construction and become operational by the end of December. An in-
23 service date of no later than 12/31/10 is required in order to be eligible for the

1 Vermont Business Solar Tax Credit. The tax credit is a critical and necessary
2 financial component of the Project. In both the SPEED legislation which set the
3 initial price for Standard Offer projects, and in the subsequent Board proceedings
4 reviewing those prices, project costs as well as reasonably available financial
5 incentives were to be considered in establishing the prices that could be charged by
6 these projects. As the Vermont Business Solar Tax Credit is set to expire on
7 December 31, 2010, ASF will be required to have the Project constructed and
8 operational by that date in order to be eligible for the credit.

9 **To be absolutely clear, without the Vermont tax credit this project (and**
10 **many others on the Standard Offer queue) will not be financially viable and**
11 **will not go forward.**

12
13 **Q. Has the Petitioner provided 45 day notice to the Ferrisburgh Selectboard and**
14 **Planning Commission, and the Addison County Regional Planning Commission?**

15 Response: Yes, ASF provided the required notice with accompanying information
16 and plans, by letter dated December 23, 2009. Courtesy copies were also sent to
17 adjoining landowners, the Department of Public Service, the Agency of Natural
18 Resources, and the Public Service Board. A copy of the 45 day notice package is
19 attached as *Exhibit ASF-EP/LS-5*.

20
21 **Q. Please describe Addison Solar Farm LLC's efforts to date to mitigate any**
22 **potential impacts of the Project.**

1 Response: ASF's project team has engaged in an iterative design process to identify
2 any potential impacts and avoid and/or minimize such impacts. In addition, ASF
3 has met with adjoining neighbors to learn of any concerns they have. Further, as
4 reflected in the site plan and the exhibits and testimony of Scott Mapes and Mark
5 Kane, the Project has been designed to: (i) employ Low Impact Development (LID)¹
6 techniques during construction to avoid stormwater impacts, including minimizing
7 earth disturbance and maintaining native soils and vegetation; (ii) avoid wetlands and
8 incorporate a buffer; (iii) incorporate a voluntary setback from property lines; (iv)
9 maintain existing trees and other vegetation wherever feasible to provide a buffer
10 and screening from neighbors; (v) use a site entrance that minimizes intrusion to
11 neighboring properties; (vi) utilize support structures for the solar panels that
12 minimize visual impacts; (vii) maintain the existing barn to improve screening; and
13 (viii) utilize a galvanized chain link fence that will have a minimal visual profile.

14

15 **Q. Please describe Addison Solar Farm LLC's plans to decommission the Project**
16 **at the end of its useful life.**

17 Response: The Standard Offer Contract has a term of twenty-five years. At the end
18 of that period, ASF will assess whether: (i) it is financially viable to continue to

¹ Scott Mapes can speak more directly to this issue, but we understand that Low Impact Development (LID) "is an alternative land development strategy to manage stormwater that incorporates sound land use planning and innovative engineering practices to retain or restore the natural hydrologic regime within the developing watershed. LID encourages decentralized stormwater management that treats stormwater close to its source. . . . LID differs from traditional development in that it integrates stormwater management planning and natural resource protection at the beginning of the development planning process . . ." *Beyond the Regulations-Stormwater Management through LID and Good Design* (University of Vermont Extension, 2008) www.uvm.edu/~seagrant/.../assets/Current%20Issues4-11.doc.

1 operate the Project; or (ii) a section 248 amendment should be filed to repower the
2 Project with new solar panels, or (iii) the Project will be decommissioned. If
3 decommissioned, the solar panels would be sold for reuse or be returned to the
4 manufacturer for recycling. The solar panel support structures, underground
5 electrical wiring, inverter building, and educational kiosk will be removed from the
6 site. This will effectively restore the site to pre-development conditions.

7

8

SECTION 248 CRITERIA

9

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

10 **Q. Will the Project unduly interfere with the orderly development of the region?**

11 Response: The Project will not unduly interfere with the orderly development of the
12 region, and will not cause any direct impacts on the capacity of the region to
13 develop. The Project will not cause an undue burden on public roadways, or other
14 types of municipal or state services or infrastructure. It will not utilize land or
15 resources that are otherwise needed or planned for other forms of development
16 within the region. The use of the project site for a solar project is compatible with
17 nearby land uses (light commercial, residences, school) and is zoned as Highway
18 Commercial (HC), a district that allows a wide variety of commercial, retail and light
19 industrial (warehouse) uses.

20

The Project is also consistent with any relevant land conservation measures
21 of the Ferrisburgh Town Plan, and is consistent with the Addison Regional Plan.

22

See the prefiled direct testimony of Mark Kane.

1 Wednesday January 20, 2010. *See Exhibit ASF-EP-LS-6.* On February 4th GMP
2 issued formal notice that the Project is eligible for the so-called “Fast Track” process
3 under the Board’s interconnection rules. *See Exhibit ASF-EP-LS-7.*
4 Consequently, under PSB Rule 5.506, the interconnection application is deemed
5 approved and no Feasibility Study, System Impact Study, or Facilities Study will be
6 required. ASF and GMP will now proceed to drafting and executing an
7 Interconnection Agreement.

8 The costs of any electrical system modifications required to interconnect the
9 Project to the GMP distribution system will be borne by ASF.

10
11 **30 V.S.A. § 248(b)(4) – Economic Benefit to the State**

12 **Q. Please describe the economic benefits of the Project to the State and its**
13 **residents, including the creation of short and long-term employment; the cost of**
14 **construction; and estimated annual revenue and property taxes generated by the**
15 **Project.**

16 Response: The Ferrisburgh Solar Farm will contribute positively to the local and
17 State economy through the almost exclusive use of in-state suppliers, contractors,
18 and consultants, and the payment of local and state property taxes. The total
19 development and capital cost of the Project is in the range of \$5-6 million dollars,
20 operating costs in the range of \$50,000 to \$75,000 per year, and combined property
21 taxes approximately \$30,000+/- per year.

22 During the development and construction phases, ASF will have retained
23 (directly or through contractors) dozens of individuals to work on engineering,

1 environmental, aesthetic, legal/permitting, and construction-related tasks. During
2 the operations phase, several individuals employed by Addison Solar Farm LLC,
3 Alteris, and Draker Laboratories will be involved in operating, maintaining, and
4 monitoring the Project.

5 As noted above, the Project is part of the SPEED Standard Offer Program
6 that was established by the Legislature to provide economic and environmental
7 benefits to Vermonters through the development of in-state renewable resources
8 that provide power to the Vermont utilities at long term fixed prices that are not tied
9 to market variability associated with fossil fuel prices.

10

11 **30 V.S.A. § 248(b)(5) – Environmental Considerations**

12 **Q. Will the Project have an undue adverse effect on aesthetics, historic sites, air**
13 **and water purity, the natural environment, and the public health and safety, with due**
14 **consideration being given to the criteria specified in 10 V.S.A. § 1424a(d) and §**
15 **6086(8a)(1) through (8) and (9)(K)?**

16 Response: No, it will not have an undue adverse effect on aesthetics, historic sites,
17 air and water purity, or the natural environment. See the prefiled testimony of Scott
18 Mapes and Mark Kane. A discussion of the following issues under section 248(b)(5)
19 is provided below: inverter noise and emissions, traffic, educational and municipal
20 services, public investments, and public health and safety.

21

22 **Air Pollution - 10 V.S.A. § 6086(a)(1)**

1 **Q. Will the Project result in undue air pollution with respect to noise or**
2 **conducted or radiated emissions from the inverters?**

3 Response: No, the Project will not result in undue air pollution with respect to noise
4 or conducted or radiated emissions from the inverters.

5 The PVPowered™ inverters will comply with UL1741 (*Standards for Inverters,*
6 *Converters, Controllers and Interconnection System Equipment for Use with Distributed Energy*
7 *Resources*) and FCC Class A standards for conducted and radiated emissions.

8 The inverters will generate some noise during daytime operations, with the
9 highest sound levels during midday. The inverters will not generate sound during the
10 evenings. Based upon manufacturer specifications, inverter-generated sound levels
11 will have a peak of 65 dBA at full power operation and 60 dBA during lower power
12 operations in the morning and afternoon.

13 It is important to note that these manufacturer specs do not account for the
14 attenuation in sound levels that will occur due to the inverters being fully housed
15 inside a PV power vault enclosure.

16 As the Public Service Board found in Docket No. 7376 (VPPSA Swanton
17 peak generation facility), noise limits from industrial sources (including generation
18 facilities) have been set in Vermont at 70 dBA at the property boundary and 55 dBA
19 at any residence or outdoor area of frequent human use. The Board also observed
20 that the U.S. Environmental Protection Agency has a residential noise guideline of
21 55 dBA Ldn (equivalent to a continuous noise limit of 48.6 dBA), to protect public
22 health and welfare with a margin of safety.

1 Based upon the expected sound levels from the inverters, and the attenuation
2 of sound levels as one moves away from the source (roughly 6 dB for every doubling
3 of the distance), the Project will comply with the noise criteria noted above. The
4 expected sound levels from the inverters during full operation would be as follows
5 (again, without accounting for the attenuating effect of the inverter enclosure):

- 6 • Less than 55 dBA at the closest property line (65 feet away);
- 7 • Less than 49 dBA at the middle of the school parking lot (130 feet away);
- 8 • Less than 43 dBA at the closest residence (320 feet away); and,
- 9 • Less than 40 dBA at the closest classroom building at Vergennes Union High
10 School (400 feet away).

11 These are conservative estimates, and the actual sound levels will be lower
12 due to the attenuating effect of the inverter enclosure.

13
14 **Q. Will the Project cause unreasonable congestion or unsafe conditions with**
15 **respect to transportation systems?**

16 Response: The Project will not cause unreasonable congestion or unsafe conditions
17 with respect to transportation systems. No permanent access drive throughout solar
18 array is required except from the entrance to the inverter enclosure (520'). Access by
19 construction equipment will be from the existing access driveway off of Monkton
20 Road. The Project will be located entirely outside the right-of-way of U.S. Route 7.
21 A small parking area will provide space for 4 cars in the event that a passerby wishes
22 to stop and view the Project.

1 The amount of construction-related vehicle traffic is expected to be less than
2 1,000 total vehicle trips to the site and delivery of 16 tractor trailer loads of
3 equipment, spread out over three months. This traffic is expected to utilize Route 7
4 and should have no appreciable effect on daily traffic volume, which is presently in
5 the range of 7,000 vehicle trips per day based upon VTtrans data.² The solar panels,
6 mounting system, conduits and inverter are all of appropriate size, shape and weight
7 to be transported to the site on Route 7 and other state or local roads using standard
8 road delivery methods. No oversize/overweight loads requiring special permits for
9 transportation are expected to be needed.

10

11 **Q. Will the Project cause an unreasonable burden on Ferrisburgh or Vergennes**
12 **to provide educational services?**

13 Response: The Project will not cause an unreasonable burden on educational
14 services. No full-time permanent jobs will be created as a result of the Project, and
15 thus no new school-aged children would enter the system. The Principal of the
16 Vergennes Union High School has confirmed the lack of impacts. See ***Exhibit***
17 ***ASF-EP/LS-8*** (School Questionnaire).

18 Rather, the Project will provide a benefit to local schools by providing
19 educational experiences including tours of the Project, development of specific
20 curriculum, and posting Project output and weather data online.

21

² See www.aot.state.vt.us/Planning/Documents/TrafResearch/Publications/2008RouteLogAADTsFinal.pdf.

1 **Q. Will the Project cause an unreasonable burden on the Town of Ferrisburgh to**
2 **provide municipal services?**

3 Response: No, the Project will not cause an unreasonable burden on the Town of
4 Ferrisburgh to provide municipal services. It will not require any municipal water or
5 sewer, nor any unique fire, police, or rescue services, and will be installed to conform
6 to all applicable electrical and fire codes. The Ferrisburgh Town Clerk has confirmed
7 the Project's lack of impacts. See *Exhibit ASF-EP/LS-9* (Municipal
8 Questionnaire).

9
10 **Q. Will the Project unnecessarily or unreasonably endanger the public or quasi-**
11 **public investment in adjacent lands, services or facilities, or materially jeopardize or**
12 **interfere with the public's use and enjoyment of those lands, services or facilities?**

13 Response: The public investments adjacent to the Project include Route 7, Monkton
14 Road, and the Vergennes Union High School. The Project site is located entirely
15 outside any highway right of way, and will be set back 60 feet from the school
16 property line. As noted above, the Project will not create any adverse burdens on
17 these public roads nor on the High School.

18
19 **Q. Will the Project pose an undue adverse effect to public health and safety?**

20 Response: No, the Project will not pose an undue adverse effect to public health
21 and safety. It does not present any unique risks to the public. As noted above, all
22 inverter/switchgear equipment is located in a UL listed, code approved electrical
23 enclosure. In addition, a perimeter fence with appropriate electrical warning signs

1 will enclose the entire solar plant. The electricity will be transmitted from the Project
2 to the existing GMP distribution system at a voltage that does not pose undue risks
3 related to electromagnetic fields. Finally, the solar panels have an anti-reflective
4 coating (in order to absorb rather than reflect the sun's energy) that will prevent
5 undue glare from impacting passing cars.

6

7 **30 V.S.A. § 248(b)(6) – Integrated Resource Planning**

8 **Q. Is the Project consistent with the principles for resource selection expressed**
9 **in an approved least cost integrated plan?**

10 Response: The Public Service Board has previously ruled that this provision does
11 not apply to projects sponsored by private developers rather than regulated
12 distribution utilities.

13

14 **30 V.S.A. § 248(b)(7) – Comprehensive Energy Plan**

15 **Q. Does the Project comply with the Vermont Twenty Year Electric Plan?**

16 Response: Yes, the Project complies with the Twenty Year Electric Plan (“Electric
17 Plan”). A section 202(f) letter has been sent to the Department of Public Service
18 requesting its confirmation of compliance.

19 The current version of the Electric Plan (2005) was drafted before the
20 Legislature enacted the Standard Offer program and thus does not account for the
21 renewable energy incentives and long term stable pricing reflected in that program.
22 However, the Standard Offer program under which the Project is being developed in
23 effect implements the Electric Plan – specifically, its recommendations that the State

1 should evaluate “financial incentive mechanisms to foster renewable energy
2 deployment,” and “other creative solutions to promoting the commercialization and
3 use of clean, renewable technologies.” Electric Plan at 5-23, 10-26. The Standard
4 Offer program and the Project serve important goals set out in the Electric Plan to
5 diversify supply resources, maintain appropriate contributions from renewable
6 resources, and reduce Vermont’s dependence on fossil fuels and other resources that
7 are subject to dramatic price changes and possible supply disruptions. Electric Plan
8 at 1-5, 10-20, 10-26.

9

10 **30 V.S.A. § 248(b)(10) – Transmission Facilities**

11 **Q. Can the Project be served economically by existing or planned transmission**
12 **facilities without undue adverse effect on Vermont utilities or customers?**

13 Response: Yes, the Project can be served economically by existing or planned
14 transmission facilities without undue adverse effect on Vermont utilities or
15 customers. The Project will interconnect with GMP’s existing 13.4 kV distribution
16 line located on Monkton Road. See response above regarding compliance with
17 section 248(b)(3).

18 The costs of any electrical system modifications required to interconnect the
19 Project to the GMP distribution system will be borne by ASF.

20

21 **Q. Does this conclude your testimony at this time?**

22 Response: Yes it does.