APPENDIX A:

Certified Abutters List

The following are abutters within 300 feet of the property located at 103 Briar Hill Rd, Williamsburg Ma and further identified as Map A, Lot 2.

This property is owned by Hull Forest LP with a mailing address of 101 Hampton Rd, Pomfret Center, CT 06259.

Name	Street Address	Mailing Address	Town	State	Zipcode	Map & Lot
Town of Williamsburg	106 Briar Hill Rd	PO Box 447	Haydenville	MA	01039	A-1
Paul Mock, Jr	91 Briar Hill Rd	same	Williamsburg	MA	01096	A-23
Stephen Krasofski	86 Briar Hill Rd	same	Williamsburg	MA	01096	A-56
Sylvia Sofinowski Rev Trust	84 Briar Hill Rd	PO Box 1178	Northampton	MA	01061-1178	A-20/55
John Cotton	70 Briar Hill Rd	PO Box 953	Williamsburg	MA	01096	A-54
Richard & Ann Turner	60 Briar Hill Rd	same	Williamsburg	MA	01096	A-50/53
Jeffrey & Jennifer Marney	61 Briar Hill Rd	57 Briar Hill Rd	Williamsburg	MA	01096	A-15.2
Hull Forest LP	0 Old Goshen Rd	101 Hampton Rd	Pomfret Center	CT	06259	A-8.2
Mark Chereski & Sandra McGuire	94 1/2 Old Goshen	same	Williamsburg	MA	01096	A-8.1
Tedric Eisman & Emily Cohen	98 Old Goshen Rd	same	Williamsburg	MA	01096	A-58
Williamsburg Boy Scouts	130 Old Goshen Rd	Ed Severence, 199 Main Rd	Chesterfield	MA	01012	A-5

We ceritfy, to the best of our abilities, that this is a list of abutters to the above described property within our municipality.

Williamsburg Board of Assessor's 8/14/2017

Patriot Properties

Town of Goshen

09/01/2017

3:20:22PM

Abutters List

Filter Used: DataProperty.ParcelID = `9-0-14-0` OR DataProperty.ParcelID = `9-0-19-0` OR DataProperty.ParcelID = `9-0-9-x` OR DataProperty.ParcelID = `9-0-21-0`

for 9-0-20-0

Abutters List

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	State	Zip
9-0-14-0	665 EAST ST	WILLIAMS PHEBE		665 EAST ST	WILLIAMSBURG	MA	01096-9773
9-0-19-0	0 EAST ST	HULL FORESTLANDS LP		101 HAMPTON ROAD	POMFRET CENTER	CT	06259
9-0-21-0	705 EAST ST	SOTO DEBORAH L.	PROCACCINI ELIZABETH L.	234 OLD GOSHEN RD	WILLIAMSBURG	MA	01096
9-0-9-X	0 EAST ST	HULL FORESTLANDS LP		101 HAMPTON ROAD	POMFRET CENTER	CT	06259

End of Report

Board of Assessors

Nina M. Papineau

Sept. 1, 2017

APPENDIX B:

Protected Species Review Report, August 2017

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

Protected Species Review:
103 Briar Hill Road, Williamsburg, MA

Prepared for

Dynamic Energy Solutions, LLC

Prepared by

SWCA Environmental Consultants

August 2017

PROTECTED SPECIES REVIEW:
103 BRIAR STREET, WILLIAMSBURG, MA

Prepared for

Dynamic Energy Solutions, LLC
225 Cedar Hill Street
Marlborough, MA 01752
Attn: John Motta

Prepared by

SWCA Environmental Consultants
15 Research Drive
Amherst, MA 01002

August 30, 2017

CONTENTS

APPENDICES

TABLES

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1. INTRODUCTION

A large-scale ground-mounted solar installation is proposed at 103 Briar Hill Road in Williamsburg, Massachusetts (hereinafter referred to as the Project). The access route is located west of the property and is located in the Town of Goshen. SWCA Environmental Consultants (SWCA) reviewed relevant databases to determine what protected species may be affected by construction activities and to make recommendations regarding regulatory concurrence.

2. STATE-PROTECTED SPECIES

SWCA reviewed the NHESP Priority Habitats of Rare Species[1] GIS datalayer to determine if project review by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) is required for this project. Under the Massachusetts Endangered Species Act (MESA), project review is required when construction is planned to occur within mapped Priority Habitat.

No portion of either property currently contains Priority Habitat; therefore, no action is required under State regulations (Appendix A: Figure 1). SWCA submitted a MESA Request to the NHESP and received correspondence confirming the absence of regulated rare species habitat within the Project area (Appendix B).

3. FEDERALLY-PROTECTED SPECIES

3.1. Regulations

Federally-protected species are managed by the Endangered Species Program of the United States Fish and Wildlife Service (USFWS). Section 7 of the Endangered Species Act (ESA) requires that proposed actions do not jeopardize the continued existence of any “listed species” (threatened or endangered plants or animals) or result in the destruction or adverse modification of designated critical habitat. The Migratory Bird Treaty Act (MBTA) makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. The Bald and Golden Eagle Protection Act (BGEPA) prohibits anyone, without a permit, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

3.2. Database Review

SWCA conducted a database search for all federally-designated threatened or endangered species, candidate species, and otherwise protected species through the USFWS New England Office website[2]. Following their consultation procedures, SWCA determined that Northern Long-eared Bat (*Myotis septentrionalis*) (NLEB), a Federally-threatened species, has the potential to occur within the Project Area. No other Threatened and Endangered Species are of concern in the Towns of Goshen and Williamsburg. SWCA also accessed the USFWS Information for Planning and Conservation (IPaC) website[3], to search for Critical Habitat and migratory bird species of particular conservation concern that have the potential to

occur in the Project area (Appendix C). The IPaC report listed 12 migratory bird species of conservation concern (Table 1). There are no Critical Habitats designated at this location.

3.3. Habitat Assessment

3.3.1. Northern Long-Eared Bat

NLEB spend the winter in caves and mines (hibernacula)[4]. During the summer, bats roost singly in live trees and snags that contain small cavities or crevices. Almost any mature tree could provide roosting habitat for this species. During site reconnaissance, mature trees were observed in the vegetated areas adjacent to the gravel pit; therefore, there is potential roosting habitat for NLEB at this location.

The USFWS ruled that any tree-removal activities that result in incidental take of bats when the activity occurs within 0.25 mile of a known hibernaculum or 150 feet of a known maternity roost tree (June 1 through July 31) are prohibited[5]. SWCA reviewed the NHESP database for locations of documented NLEB habitat and there are no known habitats in the vicinity of the Project area[6]. However, submittal of a Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form is required if a project will involve the removal of any trees. Currently, the proposed project does not involve the cutting of trees, and a "no species present" letter satisfies the regulatory concurrence requirement of the Project (Appendix D).

3.3.2. Migratory Birds

Seventeen migratory bird species of conservation concern having the potential to occur on the property, and 15 of these species are designated as potentially breeding on the property. Nesting habitat, breeding season, and whether or not there is potential breeding habitat on the property for these 15 species are outlined in Table 1. Many migratory bird species additionally breed during the month of August.

If construction is planned within any bird nesting seasons (December – August), nesting surveys should be conducted so that birds are not disturbed or destroyed by construction activities. If a nest is found during surveys, we recommend that construction be postponed until no active nests are present or that the USFWS is consulted to determine how to proceed.

Table 1. Migratory bird species of conservation concern having the potential to breed within the Project area.

Species	Nesting Habitat	Breeding Season	Potential Habitat On Site
American Bittern	Vegetation of large freshwater marshes.	Late April – mid-June	No
Bald Eagle	Tall trees or cliffs within 4 km of coastal areas, bays, large rivers, lakes, or reservoirs.	December - July	No
Black-billed Cuckoo	Tree groves, forest edges, moist thickets, overgrown pastures, shrubs; nests close to or on the ground.	May - July	Yes

Blue-winged Warbler	Brushy hillsides, second growth, partly open situations with saplings, bogs, woodland edge and clearings, stream edges, overgrown pastures, swamps; nests close to the ground.	May - July	Yes
Canada Warbler	Moist thickets of woodland undergrowth, bogs, tall shrubbery along streams and swamps, and deciduous second growth; nest on or near the ground.	May - July	Yes
Least Bittern	Built over shallow marshes.	May - June	No
Louisiana Waterthrush	Mature forest along streams, floodplain forest; nest along stream banks in under brush or roots of fallen trees.	April - June	Yes
Olive-sided Flycatcher	Forest, esp. burned over areas with snags. Also, small bogs, swampy edges of lakes, marshy streams, and beaver meadows.	May - July	Yes
Peregrine Falcon	Rocky cliffs, tall buildings, bridges.	May - July	No
Pied-billed Grebe	Ponds, sloughs, and marshes.	April - June	No
Prairie Warbler	Brushy second growth, dry scrub, pine barrens, burned over areas.	May - July	Yes
Upland Sandpiper	Extensive, open tracts of grassland habitat.	April - July	No
Willow Flycatcher	Brushy areas of willow and similar shrubs, thickets, swamps, wetlands, streamsides, and open woodlands.	May - July	Yes
Wood Thrush	Deciduous or mixed forests with dense tree canopy and well-developed understory.	May - July	Yes
Worm Eating Warbler	Well-drained upland deciduous forests of understory patches of mountain laurel or other shrubs, deciduous woods near streams.	May - July	Yes

Note: Habitat requirements and breeding seasons were obtained from NatureServe7.

4. SUMMARY

For state-protected rare species habitat, no action is required since the Project does not coincide with NHESP Priority Habitats for Rare Species.

Regulatory concurrence with the USFWS, is required for the Federally-threatened Northern Long-eared Bat if any tree-cutting activity will occur during construction. Currently, the proposed project does not involve the cutting of trees, and a "no species present" letter satisfies the regulatory concurrence requirement of the Project.

If construction is planned within any bird nesting seasons, nesting surveys should be conducted on the property so that so that birds are not disturbed or destroyed by construction activities. If a nest is found during surveys, we recommend that construction be postponed until no active nests are present or that the USFWS is consulted to determine how to proceed.

5. REFERENCES CITED

[1] 2017 NHESP Priority Habitats of Rare Species.
http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/prihab.html

[2] USFWS New England Field Office, Endangered Species Consultation.
https://www.fws.gov/newengland/EndangeredSpec-Consultation_Project_Review.htm. Accessed July 17, 2017.

[3] USFWS Information for Planning and Conservation (IPaC). Accessed July 17, 2017.
https://ecos.fws.gov/ipac/

[4] USFWS Northern Long-eared Bat (*Myotis septentrionalis*) Fact Sheet.
https://www.fws.gov/midwest/endangered/mammals/nleb/pdf/NLEBFactSheet01April2015.pdf

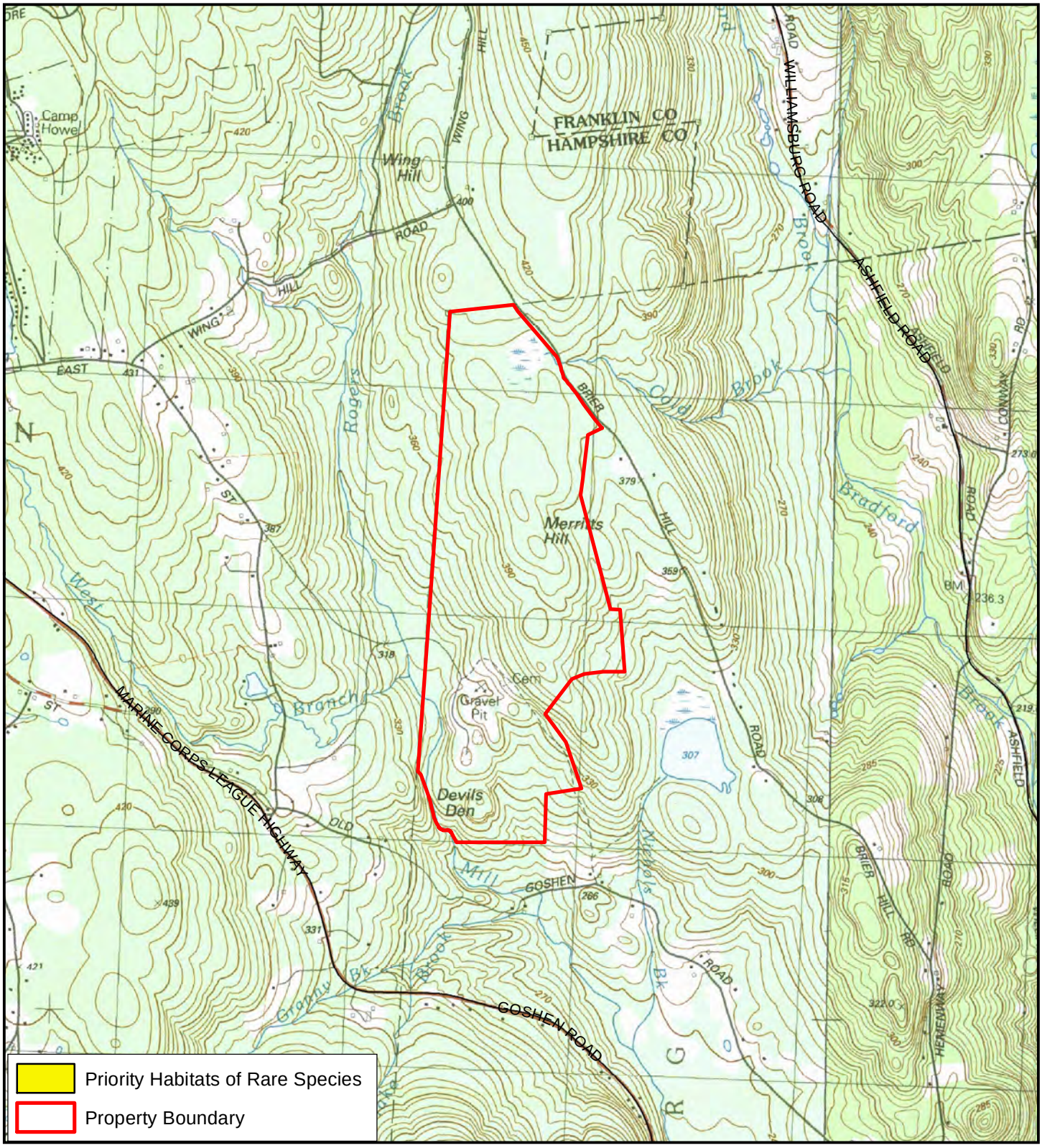
[5] USFWS. 2016. 4(d) Rule for the Northern Long-Eared Bat. Federal Register Vol. 81, No. 9 (Thursday, January 14, 2016).

[6] Northern Long-eared Bat Locations in Massachusetts. Accessed July 17, 2017.
https://mass-eoeea.maps.arcgis.com/apps/Viewer/index.html?appid=de59364ebbb348a9b0de55f6febdfd52

[7] NatureServe. http://www.natureserve.org/.

APPENDIX A:

Figures



SWCA ENVIRONMENTAL CONSULTANTS

NHESP

103 Briar Hill Road
Williamsburg, MA

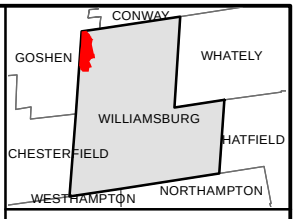
17 Aug 2017
SWCA Project No.:43889

Data Source: Office of Geographic Information (MassGIS)

NHESP Priority Habitats of Rare Species, August 2017

0 0.25 0.5 Miles

N



Latitude 42.43223° N
Longitude 72.7675° W

APPENDIX B:

NHESP Correspondence

MASSWILDLIFE

DIVISION OF
FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

Jack Buckley, *Director*

August 28, 2017

Lori Johnson
SWCA Environmental Consultants
15 Research Drive
Amherst MA 01002

RE: Project Location: 103 Briar Hill Road
Town: WILLIAMSBURG
NHESP Tracking No.: 17-37048

To Whom It May Concern:

Thank you for contacting the Natural Heritage and Endangered Species Program of the MA Division of Fisheries & Wildlife (the "Division") for information regarding state-listed rare species in the vicinity of the above referenced site.

Based on the information provided, the Natural Heritage has determined that at this time the site is not mapped as Priority or Estimated Habitat. The NHESP database does not contain any state-listed species records in the immediate vicinity of this site.

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. If you have any questions regarding this letter please contact Emily Holt, Endangered Species Review Assistant, at (508) 389-6385.

Sincerely,

Thomas W. French

Thomas W. French, Ph.D.
Assistant Director

APPENDIX C:

IPaC Reports

IPaC **U.S. Fish & Wildlife Service**

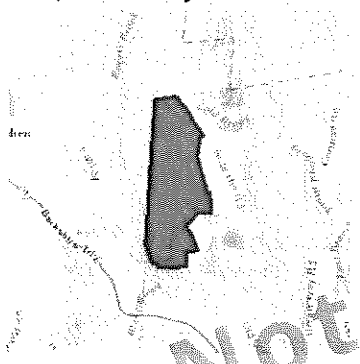
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Hampshire County, Massachusetts



Local office

New England Ecological Services Field Office

(603) 223-2541
(603) 223-0104

70 Commercial Street, Suite 300
Concord, NH 03301-5094

http://www.fws.gov/newengland

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Northern Long-eared Bat Myotis septentrionalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service[3]. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Conservation measures for birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Year-round bird occurrence data http://www.birdscanada.org/birdmon/default/datasummaries.jsp

The migratory birds species listed below are species of particular conservation concern (e.g. Birds of Conservation Concern) that may be potentially affected by activities in this location. It is not a list of every bird species you may find in this location, nor a guarantee that all of the bird species on this list will be found on or near this location. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To view available data on other bird species that may occur in your project area, please visit the AKN Histogram Tools and Other Bird Data Resources. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

NAME	SEASON(S)
American Bittern Botaurus lentiginosus https://ecos.fws.gov/ecp/species/6582	Breeding
Bald Eagle Haliaeetus leucocephalus https://ecos.fws.gov/ecp/species/1626	Year-round
Black-billed Cuckoo Coccyzus erythropthalmus https://ecos.fws.gov/ecp/species/9399	Breeding
Blue-winged Warbler Vermivora pinus	Breeding
Canada Warbler Wilsonia canadensis	Breeding

Least Bittern Ixobrychus exilis https://ecos.fws.gov/ecp/species/6175	Breeding
Louisiana Waterthrush Parkesia motacilla	Breeding
Olive-sided Flycatcher Contopus cooperi https://ecos.fws.gov/ecp/species/3914	Breeding
Peregrine Falcon Falco peregrinus https://ecos.fws.gov/ecp/species/8831	Breeding
Pied-billed Grebe Podilymbus podiceps	Breeding
Prairie Warbler Dendroica discolor	Breeding
Purple Sandpiper Calidris maritima	Wintering
Short-eared Owl Asio flammeus https://ecos.fws.gov/ecp/species/9295	Wintering
Upland Sandpiper Bartramia longicauda https://ecos.fws.gov/ecp/species/9294	Breeding
Willow Flycatcher Empidonax traillii https://ecos.fws.gov/ecp/species/3482	Breeding
Wood Thrush Hylocichla mustelina	Breeding
Worm Eating Warbler Helmitheros vermivorum	Breeding

What does IPaC use to generate the list of migratory bird species potentially occurring in my specified location?

Landbirds:

Migratory birds that are displayed on the IPaC species list are based on ranges in the latest edition of the National Geographic Guide, Birds of North America (6th Edition, 2011 by Jon L. Dunn, and Jonathan Alderfer). Although these ranges are coarse in nature, a number of U.S. Fish and Wildlife Service migratory bird biologists agree that these maps are some of the best range maps to date. These ranges were clipped to a specific Bird Conservation Region (BCR) or USFWS Region/Regions, if it was indicated in the 2008 list of Birds of Conservation Concern (BCC) that a species was a BCC species only in a particular Region/Regions. Additional modifications have been made to some ranges based on more local or refined range information and/or information provided by U.S. Fish and Wildlife Service biologists with species expertise. All migratory birds that show in areas on land in IPaC are those that appear in the 2008 Birds of Conservation Concern report.

Atlantic Seabirds:

Ranges in IPaC for birds off the Atlantic coast are derived from species distribution models developed by the National Oceanic and Atmospheric Association (NOAA) National Centers for Coastal Ocean Science (NCCOS) using the best available seabird survey data for the offshore Atlantic Coastal region to date. NOAANCCOS assisted USFWS in developing seasonal species ranges from their models for specific use in IPaC. Some of these birds are not BCC species but were of interest for inclusion because they may occur in high abundance off the coast at different times throughout the year, which potentially makes them more susceptible to certain types of development and activities taking place in that area. For more refined details about the abundance and richness of bird species within your project area off the Atlantic Coast, see the Northeast Ocean Data Portal. The Portal also offers data and information about other types of taxa that may be helpful in your project review.

About the NOAANCCOS models: the models were developed as part of the NOAANCCOS project: Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf. The models resulting from this project are being used in a number of decision-support/mapping products in order to help guide decision-making on activities off the Atlantic Coast with the goal of reducing impacts to migratory birds. One such product is the Northeast Ocean Data Portal, which can be used to explore details about the relative occurrence and abundance of bird species in a particular area off the Atlantic Coast.

All migratory bird range maps within IPaC are continuously being updated as new and better information becomes available.

Can I get additional information about the levels of occurrence in my project area of specific birds or groups of birds listed in IPaC?

Landbirds:

The Avian Knowledge Network (AKN) provides a tool currently called the "Histogram Tool", which draws from the data within the AKN (latest,survey, point count, citizen science datasets) to create a view of relative abundance of species within a particular location over the course of the year. The results of the tool depict the frequency of detection of a species in survey events, averaged between multiple datasets within AKN in a particular week of the year. You may access the histogram tools through the Migratory Bird Programs AKN Histogram Tools webpage.

The tool is currently available for 4 regions (California, Northeast U.S., Southeast U.S. and Midwest), which encompasses the following 32 states: Alabama, Arkansas, California, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Hampshire, New Jersey, New York, North, Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia,

and Wisconsin.

In the near future, there are plans to expand this tool nationwide within the AKN, and allow the graphs produced to appear with the list of trust resources generated by IPaC, providing you with an additional level of detail about the level of occurrence of the species of particular concern potentially occurring in your project area throughout the course of the year.

Atlantic Seabirds:

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAANCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Facilities

Wildlife refuges

Any activity proposed on National Wildlife Refuge lands must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGES AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location overlaps the following wetlands:

FRESHWATER EMERGENT WETLAND
PEM1F

FRESHWATER FORESTED/SHRUB WETLAND
PFO1/4E

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

APPENDIX D:

USFWS Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301-5087
http://www.fws.gov/newengland

January 20, 2017

To Whom It May Concern:

This project was reviewed for the presence of federally listed or proposed, threatened or endangered species or critical habitat per instructions provided on the U.S. Fish and Wildlife Service's New England Field Office website:

http://www.fws.gov/newengland/EndangeredSpec-Consultation.htm (accessed January 2017)

Based on information currently available to us, no federally listed or proposed, threatened or endangered species or critical habitat under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area(s). Preparation of a Biological Assessment or further consultation with us under section 7 of the Endangered Species Act is not required. No further Endangered Species Act coordination is necessary for a period of one year from the date of this letter, unless additional information on listed or proposed species becomes available.

Thank you for your cooperation. Please contact Maria Tur of this office at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Thomas R. Chapman
Supervisor
New England Field Office

APPENDIX C:

Historical and Cultural Resource Assessment, August 2017

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

Amherst Office
15 Research Drive
Amherst, Massachusetts 01002
Tel 413.256.0202 Fax 413.256.1092

August 10, 2017

Mr. John Motta
Dynamic Energy
225 Cedar Hill Street, Suite 200
Marlborough, MA 01752

RE: Historical and Cultural Resource Assessment
Williamsburg Solar Project

Dear Mr. Motta:

As part of the environmental due diligence conducted for the Williamsburg Solar Project (Project), New England Environmental, a division of SWCA Environmental Consultants (NEE) conducted a review of the project area to determine the likelihood of the project encountering historic or cultural resources. As the project will not require a formal review by the Massachusetts Historical Commission (MHC), which serves as the state historic preservation office for the Commonwealth of Massachusetts, this document is intended for planning purposes only.

Project Description

Dynamic Energy is proposing to install a 5-6 MW DC solar system on approximately 20 acres of a parcel currently used for sand and gravel operations. Figure 1, the Locus Map, illustrates the area of land evaluated as part of this historical and cultural resource assessment.

Database Review

A detailed records review was undertaken to create a land-use history of the project area, and identify any cultural resources within the proposed project APE. The review focused on local histories, and historic maps and atlases. The MHC's Massachusetts Cultural Resource Information System (MACRIS) was also reviewed for recorded cultural and historical resources within or directly adjacent to the project area. The MACRIS shows the location of above ground historic properties listed or eligible for listing in the National Register of Historic Places (NRHP), historic districts listed in the NRHP, listings on the State Register of Historic Places, local historic district study reports, and properties listed on the Inventory of Historic Assets of the Commonwealth. Additionally, environmental data, such as geological and soil information, was reviewed to determine the likelihood of the project impacting archaeological resources.

Land Use History

Historic maps, atlases, and aerial photographs provide a depiction of the project area and allow for a better understanding of the landscape history of the project LOD. Similar to the surrounding towns, Williamsburg was founded in the late eighteenth century, with an agrarian focus. In the early nineteenth century, as the region became more populated, factories started to take advantage of the fast flowing Mill River. By 1825 several textile and other garment factories had been built along the Mill River near Williamsburg. The region would grow steadily throughout the nineteenth century, but declined in the late nineteenth century due to a devastating flood caused by the breaking of two dams in 1874, which caused heavy damage to the factories that lined Mill River. The industrial sector of the region went into a steady decline following the flood.

For much of the town's history, the project area has been rural. In the early nineteenth century a road passed through the project area, and the project LOD was probably cleared and farmed. The last depiction of the road in the documentary record occurs in the 1854 *Map of Hampshire County, Massachusetts*. The 1873 F.W. Beers & Co. *County Atlas of Hampshire Massachusetts* does not depict the road or any of the farmsteads identified in the 1854 map, potentially indicating that between 1854 and 1871 the road fell into disuse and the structures depicted on the 1854 map were abandoned. Throughout the remainder of the nineteenth century and early to mid-twentieth century, the area is depicted as being undeveloped. The only major development to have taken place in the project area in the twentieth century is the excavation of gravel pit, as depicted by 1972 Goshen, Massachusetts, 7.5-min US Geological Survey (USGS) quadrangle. The 1972 map also depicts a cemetery within the gravel pit likely associated with farmsteads that were abandoned in the mid-nineteenth century. The cemetery is discussed in detail in the following section.

In summary, outside of the construction of the gravel pit, there has been little to no historic development within the project area. While historic remains from the farmsteads associated with the now abandoned road may have been present in the project area, the gravel pit has obliterated any remains that may have been present.

Historical Architectural Resources

A review of historic maps and atlases, and the MHC MACRIS identified one resource in the project area, the Old Williamsburg Road Cemetery. Completely surrounded by the gravel pit, the cemetery contains five headstones with dates that ranged from 1788 and 1826. Several of the headstones depict the stylized death's head motif that was popular during the late eighteenth century, but in general the graveyard is poorly maintained. It is unclear how many graves are present due to the poor preservation of the burial yard. The remote nature of the graveyard likely indicates that it was a family plot as opposed to a community graveyard. The NRHP status of the graveyard is undetermined.

Archaeological Resource Probability

The archaeological probability of the project area is extremely low due to the extensive and deep disturbance caused by the excavation of sand and gravel sediments throughout the project area. The chance of encountering intact buried cultural deposits is extremely low.

Conclusion

Based on the background research, the project LOD may have once contained historic and potentially archaeological resources, but the extensive disturbance associated with the excavation of the gravel/sand pit has destroyed any evidence of these resources, if they were present. A late eighteenth to early nineteenth century cemetery is present with the project area. It is recommended that all project related activities avoid impacting the graveyard and the area, not already impacted by the gravel pit, around the graveyard. Outside of any impact to the cemetery, the project has a very low probability of impacting any archaeological or historic resources.

This review was conducted by professionals who meet the Secretary of the Interior's Professional Qualification Standards (36 CFR 61) for archaeology and historic preservation.

If you have any questions about this material, please do not hesitate to contact our office.

Sincerely,

New England Environmental

Jonathan Libbon, M.A., RPA
Principal Investigator

SWCA ENVIRONMENTAL CONSULTANTS

Fig 1. Locus Map

103 Briar Hill Road
Williamsburg, MA

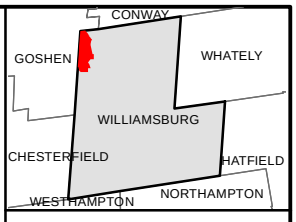
02 Aug 2017
SWCA Project No.: 43889

Data Source: Office of Geographic Information (MassGIS)

USGS Color Ortho Imagery (2013/2014)

0 400 800 Feet

N

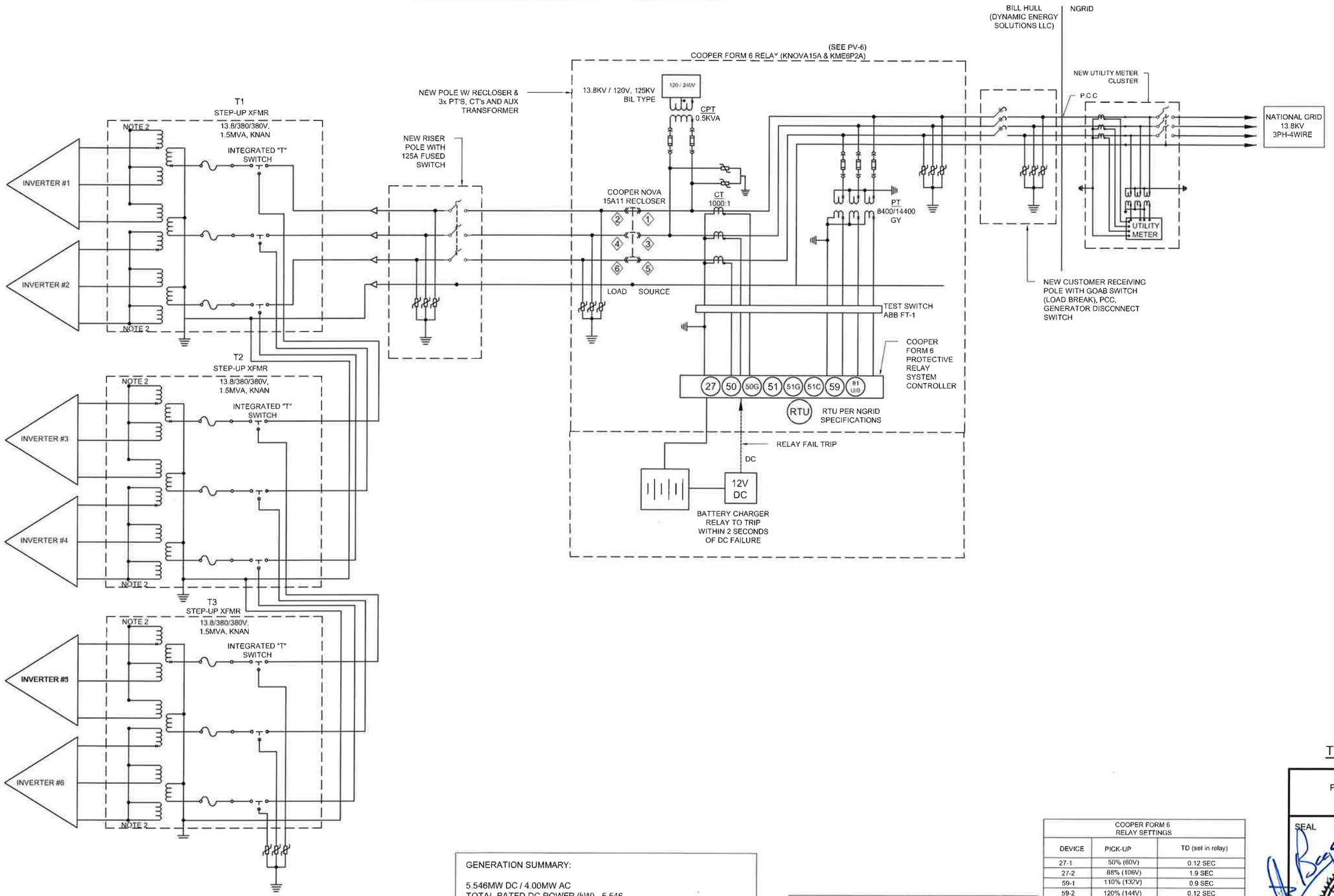


Latitude 42.42732° N
Longitude 72.76872° W

APPENDIX D:

Three-Line Diagram

SEE PV-4 FOR DETAIL SPECIFICATIONS



GENERATION SUMMARY:

5.546MW DC / 4.00MW AC
TOTAL RATED DC POWER (kW) - 5,546
NUMBER OF MODULES - 325 WATTS (PER MODULE) -17,064
NUMBER OF 325 WATTS MODULES IN SERIES PER STRING - 18
NUMBER OF STRINGS IN PARALLEL FOR 325 WATTS MODULES - 948
INVERTER RATING (kW) - 4*750KW , 2 * 500KW =4000KW
NET OUTPUT- 4,000kW @1PF = 167A @ 13.8KV.

NOTES:

1. INVERTERS SHALL BE UL1741 LISTED.
2. SECONDARY & TERTIARY WINDINGS, NEUTRAL ACCESSIBLE, UNGROUNDED.

COOPER FORM 6
RELAY SETTINGS

DEVICE	PICK-UP	TD (set in relay)
27-1	50% (60V)	0.12 SEC
27-2	88% (106V)	1.9 SEC
59-1	110% (132V)	0.9 SEC
59-2	120% (144V)	0.12 SEC
81U-1	57.0 HZ	0.12 SEC
81U-2	58.5 HZ	100 SEC
81O	60.5 HZ	0.12 SEC
51-C (PHASE)	60 AMP (@88% V L-N)	0.2 SEC
51-C (GND)	30 AMP (@88% V L-N)	0.4 SEC

THREE-LINE DIAGRAM

HENDRIK J. BURGER
PROFESSIONAL ENGINEER
1368 SHEEP HILL ROAD
POTTSTOWN, PA 19465

SEAL

9/6/17

COMMONWEALTH OF MASSACHUSETTS
HENDRIK J. BURGER
ELECTRICAL
No. 52075
REGISTERED
PROFESSIONAL ENGINEER

Dynamic Energy™
PHONE: 877-805-8884
FAX: 610-276-5403
WWW.DYNAMICENERGYUSA.COM
1550 LIBERTY RIDGE DRIVE
SUITE 310
WAYNE, PA 19087

BILL HULL - GRAVEL PIT
699 EAST STREET
GOSHEN, MA 01096

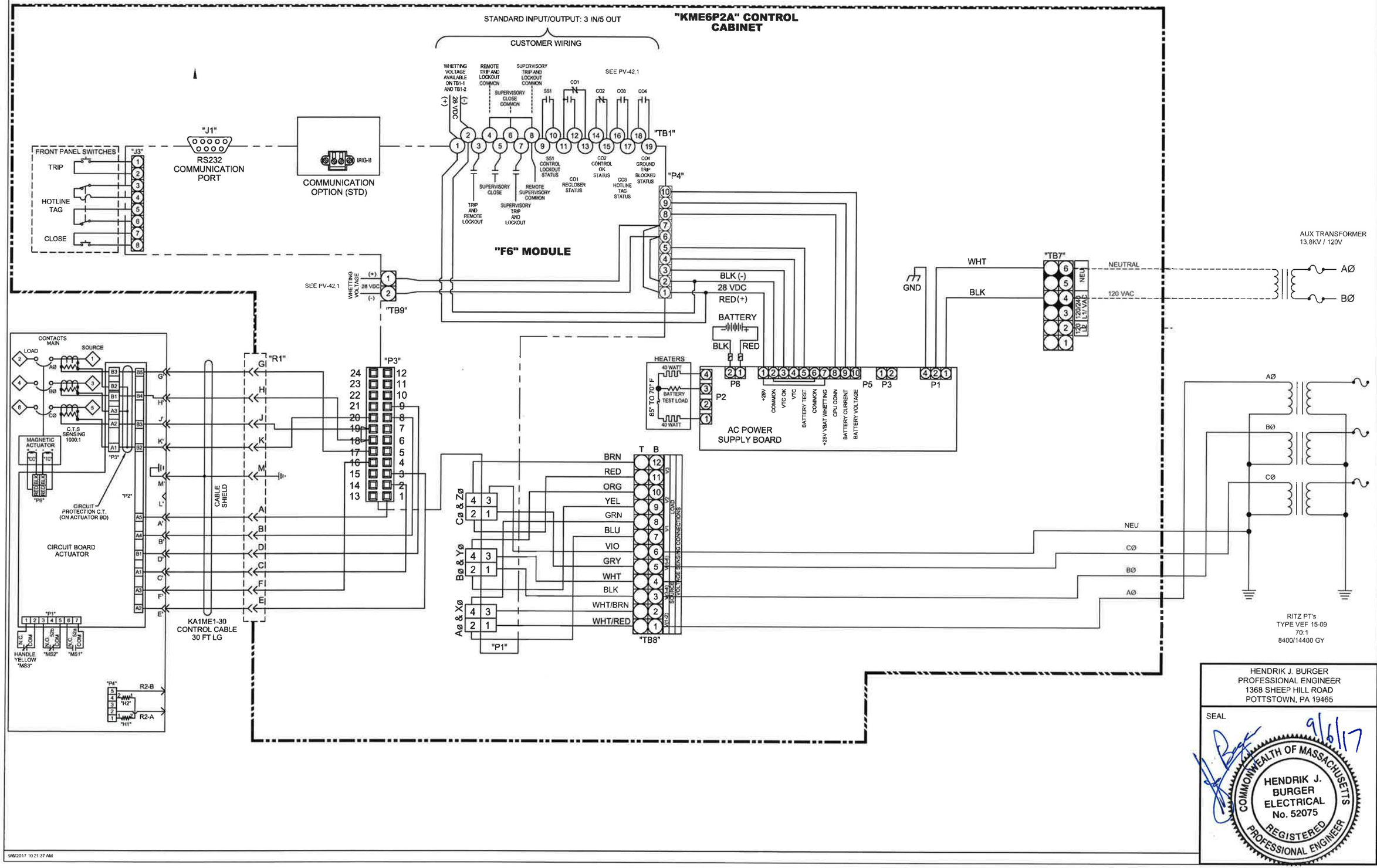
REV. #	DESCRIPTION:	DATE
-		
1	UPDATED WITH UTILITY COMMENTS	05-08-2017
2	REDUCED AC SIZE TO 4.000kW	08-11-2017
3	ADDED THREE LINE DIAGRAM	08-30-2017

PROJECT NUMBER: —
DRAWN BY: CMG
CHECKED BY: GLB & HJB
DATE: 04-10-2017

DRAWING NAME
THREE-LINE DIAGRAM

DRAWING NUMBER
PV-5

COOPER FORM 6 RECLOSER RELAY INSTALLED IN COOPER KME6P2A CONTROL CABINET



Dynamic Energy™
PHONE: 877-809-8884
FAX: 610-276-5403
WWW.DYNAMICENERGYUSA.COM
1550 LIBERTY RIDGE DRIVE
SUITE 310
WAYNE, PA 19087

BILL HULL - GRAVEL PIT
699 EAST STREET
GOSHEN, MA 01096

REV. #	DESCRIPTION:	DATE:
1	UPDATED WITH UTILITY COMMENTS	05/08/2017
2	REVISED AC SIZE TO 4500W	08/11/2017
3	ADDED THREE LINE DIAGRAM	08/30/2017

PROJECT NUMBER:
DRAWN BY: CMG
CHECKED BY: GLB & HJB
DATE: 04/10/2017

DRAWING NAME
RECLOSER THREE LINE DIAGRAM

DRAWING NUMBER
PV-6

HENDRIK J. BURGER
PROFESSIONAL ENGINEER
1368 SHEEP HILL ROAD
POTTSTOWN, PA 19465

SEAL

9/6/17

COMMONWEALTH OF MASSACHUSETTS
HENDRIK J. BURGER
ELECTRICAL
No. 52075
REGISTERED
PROFESSIONAL ENGINEER

9/6/2017 10:21:37 AM

APPENDIX E:

Equipment Detail Sheets

YASKAWA
SOLECTRIA SOLAR

UTILITY-SCALE INVERTERS

SGI 500XTM
SGI 750XTM

FEATURES

- Compliant with NEC 2014 690.11 & 690.12 arc-fault and rapid shutdown requirements when coupled with ARCCOM combiner
- 98% CEC efficiency
- 1000 VDC
- Parallel power stages
- Fuse and breaker subcombiner options
- Modbus communications
- User-interactive LCD

OPTIONS

- Stainless steel enclosure
- Web-based monitoring
- Built-in cellular connectivity
- AC breaker with shunt trip
- Revenue grade metering
- Air filters
- Uptime guarantee

OPTIONS FOR UTILITIES

- Real power curtailment
- Reactive power control
- Voltage ride through
- Frequency ride through
- Controlled ramp rates
- DMS tie-in
- Rule 21 compliant

SOLECTRIA.COM

1000VDC UTILITY-SCALE INVERTERS

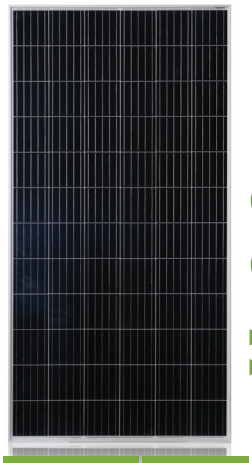
The only 1000VDC inverter available that is compliant with NEC 2014 690.11 & 690.12 arc-fault and rapid shutdown requirements. Yaskawa - Solectria Solar's SMARTGRID series inverters are optimized for high efficiency, reliability, and economy. Available in two power classes, 500 kW and 750 kW, these inverters are designed for direct connection to an external transformer for large commercial or utility-scale applications. They are robust, outdoor rated inverters that can be configured as 1 or 1.5 MW Solar Stations. Available utility-scale options include advanced grid management features such as voltage and frequency ride through, reactive power control, real power curtailment and power factor control. Listed to 1000 VDC with 98% CEC weighted efficiency, the SGI 500/750XTM inverters set a new standard for large scale power conversion.

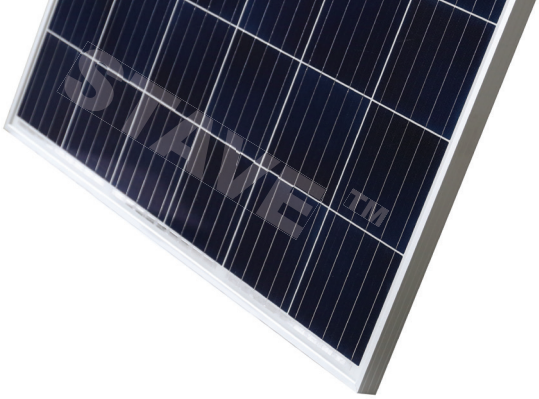
INTERTEK ETL LISTED C US

SPECIFICATIONS	SGI 500XTM	SGI 750XTM
DC Input		
Absolute Maximum Input Voltage	1000 VDC	
Max Power Input Voltage Range (MPPT)*	545-820 VDC	
Operating Voltage Range	545-1000 VDC	
Maximum Operating Input Current	965 A	1445 A
Maximum PV Power	700 kW	1050 kW
Strike Voltage	700 V	
AC Output		
Native Output Voltage	380 VAC, 3-Ph	
AC Voltage Range	-12/+10%	
Continuous Output Power	500 kW	750 kW
Continuous Output Current	760 A	1140 A
Maximum Backfeed Current	0 A	
Nominal Output Frequency	60 Hz	
Output Frequency Range	57-60.5 Hz	
Power Factor	Adjustable - 0.8 to +0.8, factory set at 1	
Fault Current Contribution (1 Cycle RMS)	912 A	1368 A
Total Harmonic Distortion (THD) @ Rated Load	‹ 3%	
Efficiency		
Peak Efficiency	98.3%	
CEC Efficiency	98.0%	
Tare Loss	89 W	123 W
Subcombiner Options		
Fuses	4 to 16 positions, 100-400 A	
Breakers	4 to 15 positions, 125-350 A	
Temperature		
Ambient Temperature Range (full power)	-40°F to +122°F (-40°C to +50°C)	
Storage Temperature Range	-40°F to +122°F (-40°C to +50°C)	
Relative Humidity (non-condensing)	5-95%	
Data Monitoring		
Optional SolrenView Web-based Monitoring	Integrated	
Optional Revenue Grade Monitoring	800 A	1600 A
Optional SolZone™ Sub-Array Monitoring (DC Current)	1 zone per protected input (up to 16 zones)	
Optional Cellular Communication	SolrenView AIR	
External Communication Interface	RS-485 SunSpec Modbus RTU	
Testing & Certifications		
Safety Listings & Certifications	UL 1741/IEEE 1547, CSA C22.2#107.1	
Testing Agency	ETL	
Warranty		
Standard	5 year	
Optional	10, 15, 20 year; extended service agreement; uptime guarantee	
Dedicated External Transformer		
Dedicated External Transformer	Required, provided by customer to Solectria's specification	
Transformer Type	Self cooled, step up, pad mount	
Output Voltage	Typical: 2.4-36.0 kV, 3-Ph	
Enclosure		
dBA (Decibel) Rating	‹ 67 dBA @ 10 m	
DC Disconnect (integrated)	Standard	
AC Disconnect/Breaker (integrated)	Optional disconnect, breaker or breaker with shunt trip	
Dimensions (H x W x D)	82 in. x 109 in. x 41 in. (2083 mm x 2769 mm x 1042 mm)	
Shading Set Back	137" (3480 mm) at 30˚ solar elevation	
Shipping Weight	3080 lbs (1398 kg)	3570 lbs (1620 kg)
Enclosure Rating	Type 3R	
Enclosure Finish	Polyester powder coated steel; optional 316 stainless steel	

*At nominal AC voltage

For Global Market





STAVE™

Crystalline PV Module

CHSM6612P Series

CHSM6612P/HV Series

- With innovational 5-busbar cells
- Increasing cell efficiency
- Reducing cell series resistance
- More power output

CHSM6612P max system voltage 1000V standard, CHSM6612P/HV max system voltage 1500V standard

310 | 315 | 320 | 325 | 330

EN

ELECTRICAL SPECIFICATIONS					
STC rated output (P_{mpp})*	310 Wp	315 Wp	320 Wp	325 Wp	330 Wp
PTC rated output (P_{mpp})**	282.5 Wp	287.2 Wp	291.9 Wp	296.6 Wp	301.3 Wp
Standard sorted output			0/+5 Wp		
Warranted power output STC ($P_{nominal}$)	310 Wp	315 Wp	320 Wp	325 Wp	330 Wp
Rated voltage (V_{mpp}) at STC	36.91 V	36.99 V	37.02 V	37.11 V	37.15 V
Rated current (I_{mpp}) at STC	8.40 A	8.53 A	8.65 A	8.77 A	8.89 A
Open circuit voltage (V_{oc}) at STC	45.15 V	45.30 V	45.45 V	45.67 V	45.86 V
Short circuit current (I_{sc}) at STC	8.92 A	9.04 A	9.25 A	9.48 A	9.52 A
Module efficiency	16.0%	16.3%	16.5%	16.8%	17.1%
Rated output (P_{mpp}) at NOCT	216.5 Wp	220.0 Wp	223.5 Wp	226.9 Wp	230.4 Wp
Rated voltage (V_{mpp}) at NOCT	33.71 V	33.74 V	33.80 V	33.86 V	33.92 V
Rated current (I_{mpp}) at NOCT	6.42 A	6.52 A	6.61 A	6.70 A	6.79 A
Open circuit voltage (V_{oc}) at NOCT	41.43 V	41.57 V	41.70 V	41.91 V	42.08 V
Short circuit current (I_{sc}) at NOCT	6.90 A	6.99 A	7.15 A	7.33 A	7.37 A

Temperature coefficient (P_{mpp})	- 0.408%/K
Temperature coefficient (I_{sc})	+0.050%/K
Temperature coefficient (I_{mpp})	- 0.003%/K
Temperature coefficient (V_{mpp})	- 0.406%/K
Temperature coefficient (V_{oc})	- 0.311%/K
Normal operating cell temperature (NOCT)	46±2°C

Maximum system voltage (IEC/UL)	1000V_{DC} / 1000V_{DC} or 1500V_{DC} / 1500V_{DC}
Number of diodes	3
Maximum series fuse rating	15 A

* Measurement tolerance +/- 3%
** Estimated

A CHINT COMPANY

ASTRONERGY

RELATED PARAMETERS

Cell type	Polycrystalline
Number of cells / cell arrangement	72 / 6 x 12
Cells dimension	6″
Packing unit	27 modules
Weight of packing unit (for container)	646 kg / 1424 lbs

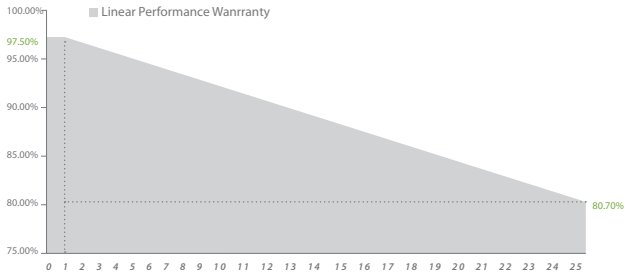
MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1954 x 990 x 40 mm 76.93 x 38.98 x 1.57 in
Frame technology	Aluminum, silver anodized
Module composition	Glass / EVA / Backsheet (white)
Weight (module only)	21.8 kg / 48.1 lbs
Front glass thickness	3.2 mm / 0.13 in
Junction box IP rating	IP 67
① Cable length (UL/IEC)	1150 mm / 45.28 in
Cable diameter (UL/IEC)	12 AWG / 4 mm^2
② Maximum load capacity	5400 Pa
Fire performance (UL/IEC)	Type 1 (UL) or Class C (IEC)
Connector type (UL/IEC)	MC4 compatible

① Option: 900(+) /600(-) mm for defined projects in advance.
② Refer to Astronergy crystalline installation manual.

QUALIFICATION AND LINEAR WARRANTIES

Product standard	IEC 61215, 61730 / UL1703
Extended product warranty	10 years
Output decline 2.5%/year performance P_{mpp} (STC)	1st year
Output decline 0.7%/year performance P_{mpp} (STC)	2nd~ 25th years

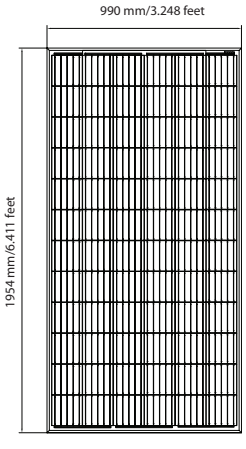


ARTICLE NUMBER

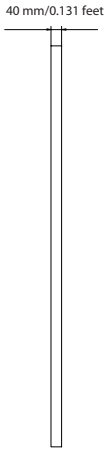
Model	Article No. (IEC)	Article No. (UL)
(STAVE) CHSM6612P-310	200794	200777
(STAVE) CHSM6612P-315	200769	200778
(STAVE) CHSM6612P-320	200770	200779
(STAVE) CHSM6612P-325	200771	200780
(STAVE) CHSM6612P-330	200772	200781
(STAVE) CHSM6612P/HV-310	500169	500152
(STAVE) CHSM6612P/HV-315	500144	500153
(STAVE) CHSM6612P/HV-320	500145	500154
(STAVE) CHSM6612P/HV-325	500146	500155
(STAVE) CHSM6612P/HV-330	500147	500156

MODULE DIMENSION DETAILS

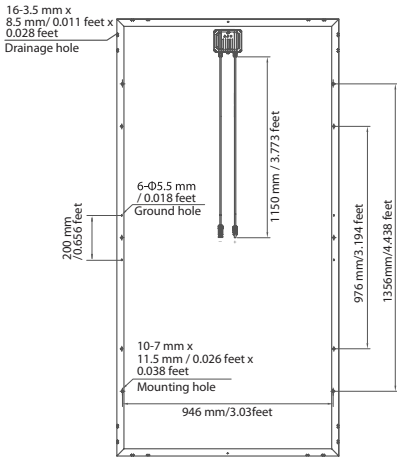
Front view



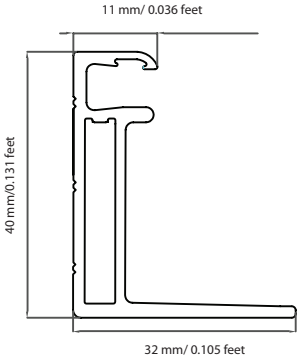
Side view



Rear view



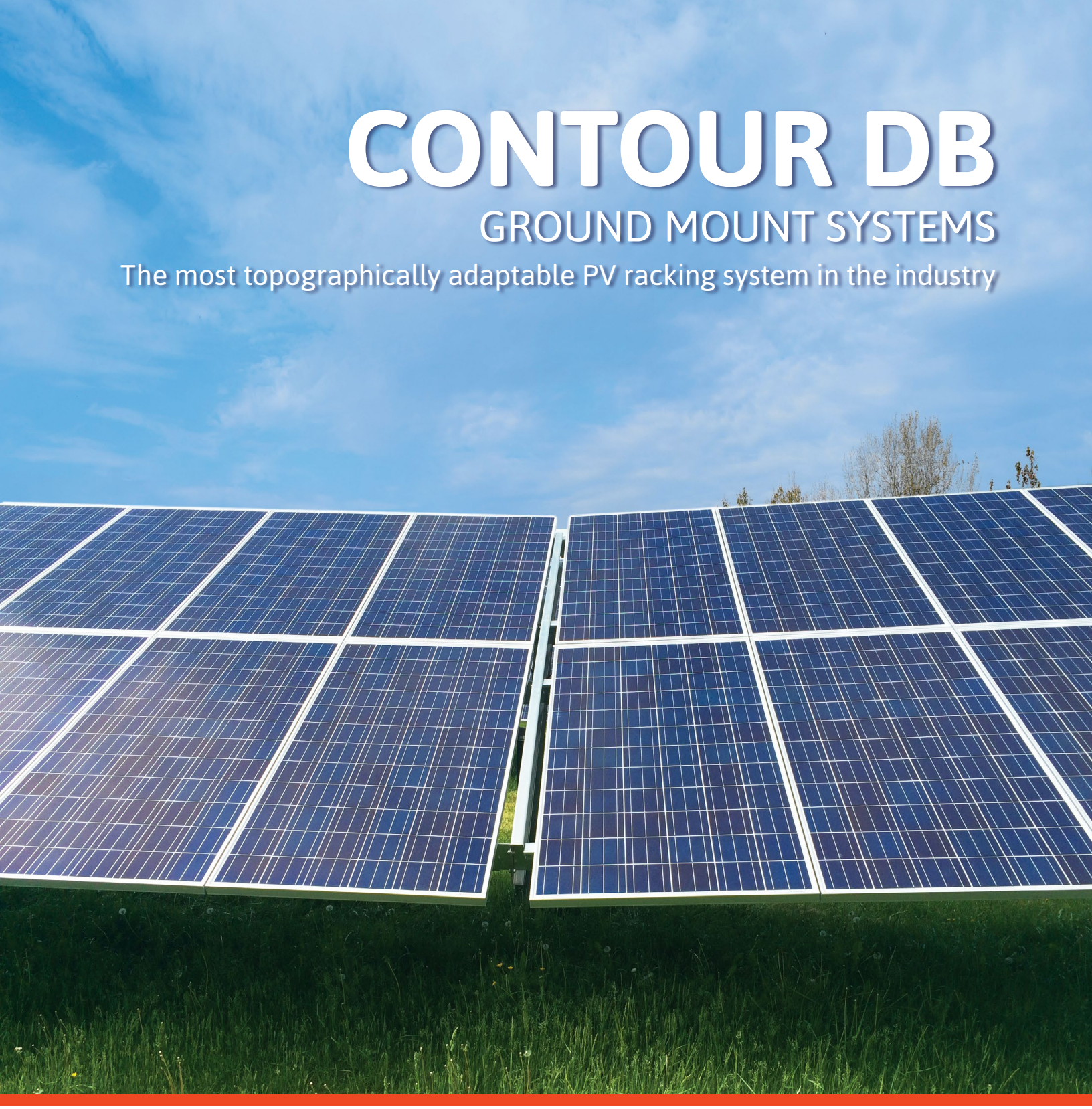
Frame cross section



CONTOUR DB

GROUND MOUNT SYSTEMS

The most topographically adaptable PV racking system in the industry



Elevating the Future for Solar

DCE SOLAR

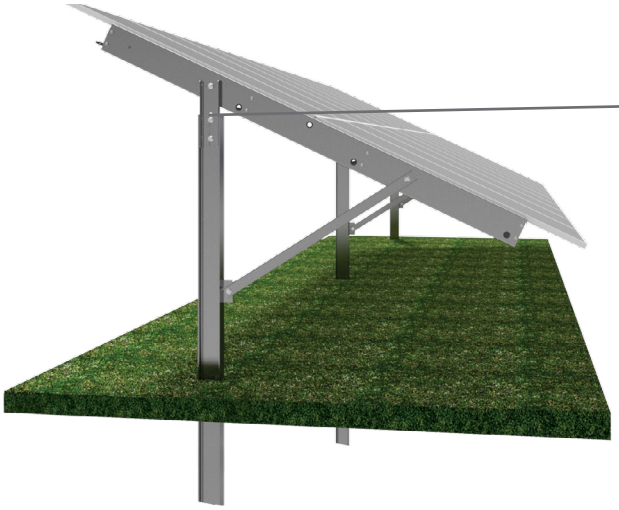
CONTOUR DB

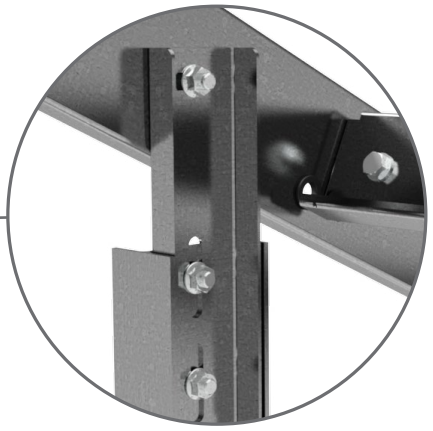
The numerous benefits of DCE Solar's Contour DB result in the lowest system cost.

- Single point purlin connection creates unmatched system compatibility with grade
- Integrated wire support system
- Integrated array grounding
- Industry leading installation time

Driven Beam

Rugged and economical I-beam foundation provides a flexible solution for all conditions, including rocky soils.

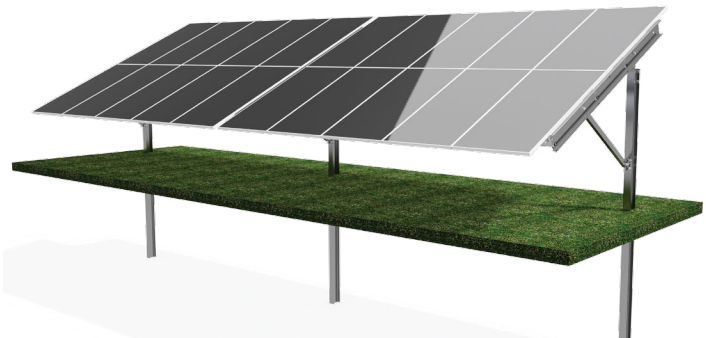


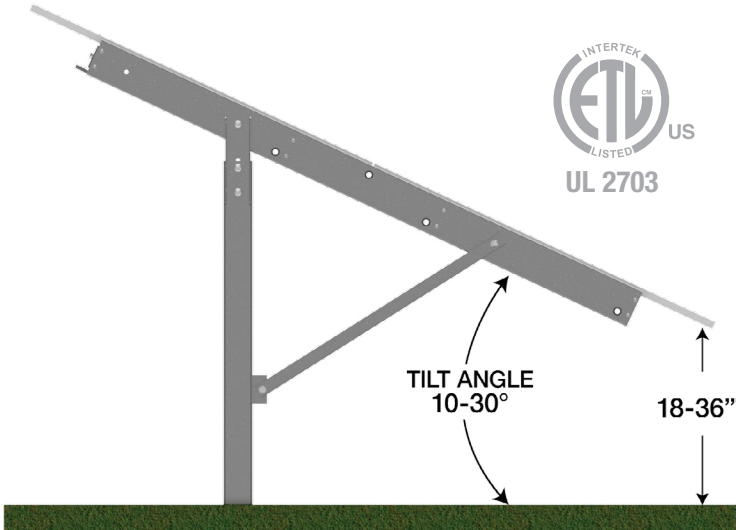


I-beam adapter provides greater vertical adjustment

Grounding and Bonding

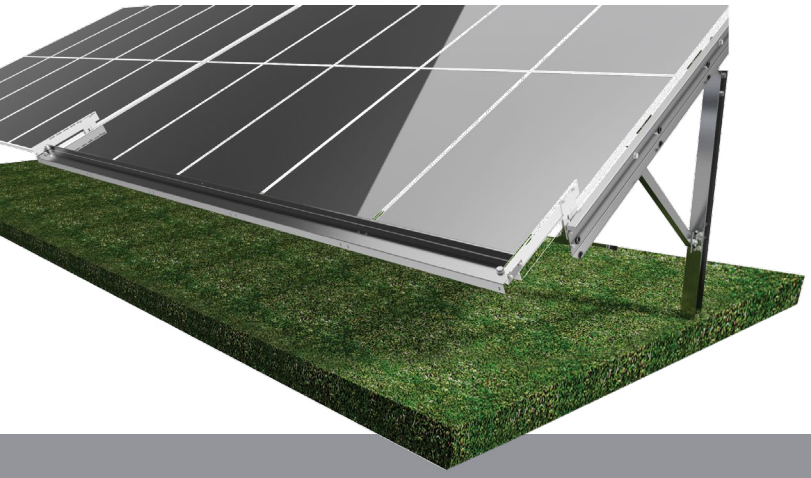
Grounding and bonding via serrated hardware certified to UL 2703 (listing available upon request).





Structural Components

All truss members are constructed from G115 galvanized steel. Driven beam and adjustment plate are hot dip galvanized to meet ASTM A123.



Assembly Jig

- Allows for greater module installation efficiency which reduces labor costs significantly
- Jig ensures perfect panel alignment the first time, negating post-installation adjustments
- Jig provided at no additional cost

UL 2703

TECHNICAL SPECIFICATIONS

Wind Load	90-150 mph
Snow Load	0-55 psf
Leading Module Height	18-36” (max from ground)
Tilt Angle	10-30 °
Module Suitability	All Major Brands
Panel Orientation	Portrait (2 High)

DCE SOLAR serves as market leader in industrial grade solar mounting hardware and consulting. DCE Solar leverages world-class engineering, fabrication facilities and American master craftsmen to create a full catalog of superior fixed-tilt mounting solutions for ground arrays and fixed-tilt solutions for roofs.

DCE SOLAR

Elevating the Future for Solar | Made in America

DCE Solar

19410 Jetton Road Suite 220 Cornelius, NC 28031 USA
Telephone: 704-659-7474 **Fax:** 704-875-0781
info@DCEsolar.com **www.DCEsolar.com**

APPENDIX F:

Notice of Lease

9.30-4.2 (b)

Hampshire County Registry of Deeds

Electronically Recorded Document

This is the first page of the document - Do not remove

Recording Information

Document Number	: 7573
Document Type	: NOT
Recorded Date	: April 24, 2017
Recorded Time	: 02:51:59 PM
Recorded Book and Page	: 12603 / 117
Number of Pages(including cover sheet)	: 4
Receipt Number	: 314225
Recording Fee	: $75.00

Hampshire County Registry of Deeds
Mary Olberding, Register
33 King Street
Northampton, MA 01060
413-584-3637
www.Masslandrecords.com

Record and return to:
Dynamic Energy Solutions, LLC
Attn: Tony Orr
1550 Liberty Ridge Drive, Suite 310
Wayne, PA 19087

NOTICE OF LEASE

In accordance with Massachusetts General Laws, Chapter 183, Section 4, notice is hereby given of the following described Lease:

Parties to Lease:

Lessor: Hull Forestlands LP

Lessee: Dynamic Energy Solutions, LLC, a Pennsylvania limited liability company

Date of Lease Execution:

February 16, 2017

Description of Leased Property:

See Exhibit A attached hereto and made a part hereof.

Term and Commencement Date:

The term is for twenty (20) years commencing on the Commercialization Date.

"Commercialization Date" means the date on which the Lessee notifies the Lessor that the solar facility, to be constructed on the Leased Property by the Lessee, is mechanically complete and capable of delivering electricity to the utility grid.

Rights of Extension

Two (2) options to extend for periods of five (5) years each.

This instrument is executed as notice of the aforesaid Lease and is not intended nor shall it be deemed to vary or govern the terms and conditions thereof.

WITNESS the execution hereof under seal this 14th day of April, 2017.

Hull Forestlands LP

Wells B. Hull G.P.

Dynamic Energy Solutions, LLC

By: Brett Thibodeau
Name: Brett Thibodeau
Title: President + COO

STATE OF Connecticut
COUNTY OF Windham

On this 14 day of April, 2017, before me, the undersigned notary public, personally appeared Mr Hull on behalf of Hull Forestlands LP, who proved to me through satisfactory evidence of identification, which was Known to me, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily for its stated purpose.

[Affix Seal]

Marcia L Williams
Notary Public:
My commission expires: April 30, 2020

STATE OF Pennsylvania
COUNTY OF Chester

On this 12th day of April, 2017, before me, the undersigned notary public, personally appeared Brett Thibodeau on behalf of Dynamic Energy Solutions, LLC, who proved to me through satisfactory evidence of identification, which was President and COO, to be the person whose name is signed on the preceding document, and acknowledged to me that he signed it voluntarily for its stated purpose.

[Affix Seal]

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
Andrew O Smith, Notary Public
New Hanover Twp., Montgomery County
My Commission Expires Oct. 4, 2019

Notary Public:
My commission expires: 10/4/19

EXHIBIT A

- DESCRIPTION OF LEASED PROPERTY-

Landowner owns the real property located in the towns of Williamsburg and Goshen, Massachusetts, more specifically described as:

Book	Page	Property ID	Town
6092	126	340001A000000020	Williamsburg MA
6092	126	9-0-20-0	Goshen MA
6092	126	9-0-19-0	Goshen MA
6092	126	9-0-9-X	Goshen MA

("***Landowner's Property***"). The metes and bounds description of Landowner's Property is as follows:

[INSERT METES AND BOUNDS]

Landowner desires to lease to Company all or a portion of Landowner's Property, as depicted in the drawing below ("**Leased Property**").

The metes and bounds description of the Leased Property shall be determined prior to the Commercialization Date.

APPENDIX G:

Operation & Maintenance Plan

SWCA ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

Amherst Office
15 Research Drive
Amherst, Massachusetts 01002
Tel 413.256.0202 Fax 413.256.1092

Operation and Maintenance Plan, Williamsburg East Street Solar 1, LLC

Operations and maintenance shall begin once the Utility has provided approval to operate for the solar system

Maintenance Schedule will consist of regular site visits within the first ninety (90) days of the system operation with one (1) report and base line reading for all electrical equipment to be completed at ninety (90) days. The ninety (90) day report will be the beginning of the bi-annual maintenance service. The maintenance shall be scheduled for every six (6) months starting in April or October depending on which is closer to the date of the ninety (90) day report.

Access to the site shall be provided from the existing access road. Locks shall be installed on all existing and new gates. Access shall be provided to the Williamsburg Fire Department with the use of a lock box located outside of the most exterior gate.

The following tasks will be conducted during the inspections:

1. Repairs to the solar energy collecting and distribution equipment will be made as needed. For the inverters, this will include:
    a. Evaluating the invertors and equipment following installation to confirm proper installation.
    b. Confirm the inverters are secure and properly grounded.
    c. Confirm the termination is to manufacturer specifications.
    d. Confirm all wires are color coded correctly and remain protected from physical damage.
    e. Confirm the equipment is free from debris, moisture, rust and damage.
    f. Confirm the inverters seals are intact.
    g. Confirm Arc shields are installed.
    h. Confirm placards are installed.
    i. Maintain service clearance to the inverters and maintain access to all filters.
    j. Confirm the coolant pressure is acceptable.
    k. Confirm the ground fault fuses are intact and check any fault codes that are displayed.
    l. Evaluate any thermal anomalies observed.
    m. Annually, an IV Curve Trace will be conducted and inferred scans.
2. Inspections of the perimeter fence, solar array and connecting infrastructure will be made by the maintenance contractor during each visit.
3. Repairs to the security fence, including fence within the 100-foot buffer zone to wetlands, and along common parcel boundaries shall be made as necessary.
4. The fence panels will be maintained at approximately 6-inches off the ground to permit movement of ground dwelling animals.

5. Access roads will be maintained as needed.
6. Any erosion in the access roads shall be repaired and stabilized.
7. The seed mix proposed for use beneath the panels is Ernst Solar Array Seed Mix, which includes low growing plant species. The area beneath the panels will be cut once a year at the end of October. Any larger woody vegetation or vegetation that has self-seeded near the solar panels, and blocks sun from the panels, will be removed as needed.

APPENDIX H:

Certificate of Liability Insurance,

Interconnection Initial Review Memo and

Decommissioning and Financial Surety Plan

DYNAM-3 OP ID: NK

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 07/10/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Brown & Brown Insurance 2000 Midlantic Dr. - Suite 440 Mount Laurel, NJ 08054 Brian DiLuigi	CONTACT NAME: Lisa MacDonald PHONE (A/C, No, Ext): 732-504-2001 FAX (A/C, No): 732-504-2011 E-MAIL ADDRESS: lmacdonald@bbdvins.com
INSURED Dynamic Energy Solutions, LLC Dynamic Solar LLC 1550 Liberty Ridge Dr Ste 310 Wayne, PA 19087	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : HDI Global Ins Co INSURER B : Endurance American Insurance C — 10641 INSURER C : Hartford Fire Insurance Co — 19682 INSURER D : INSURER E : INSURER F :

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY PRO-JECT LOC OTHER:			EGGCR000258317	04/01/2017	04/01/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 1,000,000 $ 100,000 $ Excluded $ 1,000,000 $ 2,000,000 $ 2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS X Hired Car Phys Dmg			EAGCR000258317	04/01/2017	04/01/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
C	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $			EXC30000083301	04/01/2017	04/01/2018	EACH OCCURRENCE AGGREGATE	$ 10,000,000 $ 10,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		EWGCR000258317	04/01/2017	04/01/2018	X PER STATUTE OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	Rented Leased Equi			39 MS AN3451	04/01/2017	04/01/2018	Limit	100,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

CERTIFICATE HOLDER

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Brian DiLuigi

Initial Review
Prepared by: Nicolae Gari

Revision Number: 0.0
Preparation Date: 06/07/2017

nationalgrid

Interconnecting Customer:	Dynamic Energy Solutions, LLC	Application(s):	Two (2):
4,998	kW Inverter Based Interconnection Project		24028610
1,000	kW Inverter Based Interconnection Project		24028638
5,998	kW(AC) Inverter Based Combined Interconnection Proje	Const. WR(s):	23982996
Project Address:	adjacent to 699 East Street, Goshen MA 01032		

I. Executive Summary:

A. The Interconnecting Customer has submitted an application for the interconnection of the generating system described herein to the National Grid (Company) Electric Power System (EPS). Reviewed as outlined in:

M.D.P.U. 1320 & National Grid's Electric Service Bulletin (ESB) 756 Appendix C

The application **requires** further study based on the results of this review.

B. Study Cost: $ 48,500 *(see Exhibit E provided by National Grid for terms & conditions)*

This cost must be paid in full before National Grid initiates the impact study. The study agreement must be signed and returned within 15 business days of its issuance to the Interconnecting Customer. The impact study will be completed in 55 business days. An additional 5 business day maybe required if substantial modifications are required. The Company will inform the Interconnecting Customer about incremental study time after the Company commences the impact study. ISO-NE proposed plan application will be required with additional time (up to 90 days) as the cumulative DG size is greater than 5MW (AC).

The need for 3V0 Ground Fault Detection may be required on the substation transformer and will be evaluated during the study. Unintentional islanding on the circuit may not occur and will be evaluated during the study.

II. The Company's Electric Power System (EPS):

A. Table of Information for Nearest Feeder

Feeder Number:		09-909W3	Radial or Network?	Radial
Substation Name:	Florence Jct		Feeder Voltage at Substation:	13.8 kV
Substation Transformer Number:		2TR		
Feeder Phase & Voltage at/near Site of Proposed DG:				
Voltage:	13.8 kV		Feeder extension or upgrade	
Phase:	3Φ		required to serve the site?	Yes

B. Is the existing service equipment compatible with the proposed generating system? Yes

C. Interconneted and In-Process DG

The following describes the interconnected and in-process DG on the subject feeder, as of the time of this report. Note that the following values are provided for informational purposes, based on the current status of the feeder and available information at the time of writing of this report, and are not binding.

Total Interconnected DG on the Subject Feeder:	3258
Total In-Process DG on the Subject Feeder:	7918

D. Additional Interconnection Details

This combined interconnection proposal consists of two separate interconnection applications (24028610 and 24028638) proposed on adjacent parcels near 699 East Street location from Goshen MA.

.

7.97kV single phase tap circuit is adjacent to the site. The customer proposed POI is near existing Pole#62 from East Street. The POI location will be determined during the impact study. Approximate circuit distance to 13.8 kV three phase main feeder from the site: 800 ft south on Pole#355 from Berkshire Trail E (Main Road). There is one recloser installed in line between DG location and substation location. There are four switched capacitors installed on the proposed feeder with 2,400 kVAr total capacitance value. 99.9% of generators proposed/interconnected on the proposed feeder are UL 1741 listed/certified generators therefore unintentional islanding study is not a concern at this time.

III. The Description of Interconnecting Customer's Facility:

The proposed design of the generating Facility described herein is subject to change based on the requirements identified by National Grid prior to the execution of the Interconnection Service Agreement.

A. Description of Generating Facility

The proposed 5,998kW system consists of: UL1741 certified equipment

Quantity	Manufacturer	Model	Generator Type	kWAC Nameplate	Phase/VAC
3	Eaton	Eaton 1670	Inverter	1666	three / 356
20	Chint Pw Syst.	SCA50-KTL	Inverter	50	three / 480

Refer to the attached line diagram for system configuration and protection equipment details.

B. Point of Common Coupling (PCC)

The point of common coupling (PCC) for this interconnection application will be the

That point where customer-owned cables connect to the bidirectional utility primary meter. This interconnection project will be capable of exporting power beyond the PCC onto the Company's Electric Power System (EPS).

C. Corrections to Proposed Design

The proposed design documentation does not require corrections before the next step in the process. Further design changes may be identified during the study (if applicable).

IV. Requirements:

A. General Requirements

1. In addition to any specific requirements identified herein, the Interconnecting Customer is required to comply with all applicable requirements described in the Interconnection Tariff & National Grid's Electric Service Bulletin 750 Series.
2. The Customer shall provide documentation from the inverter manufacturer for the islanding detection method to be used by the inverter(s). The documentation shall be sufficient to determine whether the islanding detection method is active (perturbing the utility system and looking for a response), or passive (monitoring grid parameters without perturbing the system), and describe how the islanding detection method functions, including what parameters (i.e. phase, frequency, VARs,) are perturbed and monitored.
3. The Company recommends installing surge arrestors on the Customer side of the Point of Common Coupling for the protection of Customer-owned equipment during possible overvoltage conditions.

B. Specific Requirements

1. Net Metering Eligibility

24028610 application does not qualify for Net Metering services. Although the 24028638 system meets certain eligibility requirements, National Grid's Net Metering Tariff is closed to new applicants at this time. Although Net Metering Service is not available now, additional Net Metering capacity may or may not become available in the future. Please consult www.massaca.org for Net Metering Cap updates.

2. Other Requirements

Any DG equal or above 5MW (cumulative), a proposed plan application (PPA) and transmission studies required to go to Stability and Transmission Task Forces and Reliability Committee:
i. National Grid will determine if any Substation / Transmission upgrades required after completion of distribution System Impact Study.
ii. Transmission Owner and Task Forces need to agree if transmission study will/will not be required.
iii. Transmission Owner submits PPA if generator is not a NEPOOL participate.
iv. If generator is NEPOOL participant, Transmission Owner must review PPA first.
v. A stability model will likely be required

V. References:

National Grid's Massachusetts Distributed Generation Website:
http://www.nationalgridus.com/masselectric/business/energyeff/distributed_generation.asp
Additional guidance documents and information can be found on the National Grid Distributed Generation Website.

VI. Attachments:

A. Interconnecting Customer's proposed design diagram(s) at the time of the review
B. Customer Documentation Checklist (if corrections have been identified)

--- End of main document - Refer to any attachments on the following pages ---

Dynamic Energy, LLC
103 Briar Rd., Williamsburg, MA
Decommissioning Plan
8/22/17

Provided by:
Dynamic Energy Solutions, LLC
484.318.8800 / www.dynamicenergyusa.com

Table of Contents

Executive Summary

The 103 Briar Rd. Solar Array, 5.546 MW DC/ 4MW AC decommissioning plan has been prepared to take into account all activities related to removal and restoration of this site during and after decommissioning. The decommissioning plan provides all necessary steps for the decommissioning phase of the project.

Decommissioning involves the removal of all surface and sub-surface equipment. All structures including their foundations, perimeter fencing, all electrical equipment and material shall be removed.

The Decommissioning of the project will follow all local, state and federal guidelines for removal, recycling and disposal of all equipment. As with any construction, a company representative manager will be responsible for providing detailed plans for locations for recycling and disposal. They will also be responsible for providing site safety plans and meeting all safety expectations.

Introduction

The decommissioning plan shall be completed within 150 days from the initiation of the decommissioning. All guidelines set forth by local, state and federal governing bodies of that time shall be followed for removal, recycling, disposal and safety. The decommissioning shall be complete when all structures have been removed from the site and the site is restored to the condition it was in prior to the erection of the solar array. All decommissioning activities shall be overseen by the authority having jurisdiction and are subject to all permitting regulations and requirements.

Decommissioning Plan Overview

Decommissioning During Construction

Construction for the solar project is expected to start upon receipt of site plan approval and issuance of construction permit. While this is not expected, and considered to be extremely unlikely, in the event that construction or operation activities cease prior to the completion of the Project, with no expectation of a re-start, the installed components will be removed, reused or recycled and the site will be restored in accordance with the Equipment Dismantling and Removal, and Site Restoration procedure described in this document. Decommissioning activities such as removal of cables and access road will be done in consultation with the landowner and the town.

Decommissioning After Ceasing Operation

In the event that operation of the solar facility stops for a period such time as may be required by the town pursuant to the legislation, with no expectation of re-starting, the installed components will be removed and recycled and the site will be restored in accordance with the Equipment Dismantling and Removal, and Site Restoration procedure described in this document. Decommissioning activities such as removal of cables and access road will be done in consultation with the landowner and the town.

Site Restoration

Once solar facility has been removed, it is expected that the site will be returned to as close to its original conditions as possible. Some minor grading may be required; topsoil (if removed) will be reapplied to allow for reseeding and growth. Site restoration will occur no more than twelve (12) months after notification of decommissioning

Decommissioning of the Solar Facility

Decommissioning Sequence

1. Obtain permit from the town of WIliamsburg
2. Disconnect all utility grid power
3. Move all disconnects to the off position
4. Disconnect all above ground wirings, cables, and electrical connections
5. Remove all PV Modules
6. Remove Inverters, racking and posts
7. Remove all electrical switchgear, transformers, and their foundations (unless determined to be of less impact to leave in place)
8. Remove DAS equipment, feeders, and conduit
9. Remove all above ground racking components and posts
10. Excavate and remove Underground feeders and conduit
11. Remove all MV feeders and utility poles
12. Remove all fencing

Decommissioning Cost

Description	Cost
Total Present Value of Decommissioning	$155,000.00
Total Decommissioning at 2% inflation for 30 years	$280,761.05