



H&B Solutions, LLC
37534 Oliver Drive
Selbyville, DE 19975

Tel: 410.292.4385

September 12, 2018

Maryland Department of the Environment
Water Management Administration
Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore, MD 21230

Re: MD Solar 1, LLC (Shugart Valley Place) – Charles County, MD
Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal, or Nontidal
Wetland in Maryland
Project No. 17004.00

To Whom It May Concern:

Enclosed is the above referenced Wetlands Permit Application for the proposed MD Solar 1 Solar Project in Charles County. It should be noted that the Applicant coordinated the field assessments performed by ECS Mid-Atlantic as well as various project components with Mr. Jeff Thompson. Mr. Thompson has walked the sites with H&B Solutions, ECS Mid-Atlantic, and representatives from the Power Plant Research Program and their consultants. A memo from Mr. Thompson is included in the application package which further confirms wetland avoidance and minimization of impacts.

As noted in the application and supporting exhibits, these impacts are principally associated with the emergency service access road which is required as part of the project by the Public Service Commission and the County Fire Marshal. Other minor impacts are associated with the utility line right-of-way and a temporary bridge providing access for heavy equipment and delivery trucks to the site during construction.

The appropriate application fee of \$750 along with a copy of the first page of the application has been sent to the appropriate PO Box as requested.

If you need anything further in these regards, please let us know.

Sincerely,

H&B Solutions, LLC

Dane S. Bauer

Enclosures

Cc: Mr. Edwin Moses (w/ enclosures)
Mr. Jason Thomas (w/ enclosures)
Ms. Anna Allie (w/ enclosures)
Ms. Melissa Hall (w/ enclosures)
Mr. Jeff Thompson (w/ enclosures)

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JOINT FEDERAL/STATE APPLICATION FOR THE ALTERATION OF ANY FLOODPLAIN, WATERWAY, TIDAL OR NONTIDAL WETLAND IN MARYLAND

FOR AGENCY USE ONLY

Application Number _____
 Date Received by State _____
 Date Received by Corps _____
 Type of State permit needed _____
 Type of Corps permit needed _____

Date Determined Complete _____
 Date(s) Returned _____
 Date of Field Review OCT 18 2018
 Agency Performed Field Review _____

RECEIVED

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- +++++
- Please submit 1 original and 6 copies of this form, required maps and plans to the Wetlands and Waterways Program as noted on the last page of this form.
 - Any application which is not completed in full or is accompanied by poor quality drawings may be considered incomplete and result in a time delay to the applicant.

Please check one of the following: 18-HT-0323 Day 45: 11-29-18 PAID \$750

RESUBMITTAL: _____ APPLICATION AMENDMENT: _____ MODIFICATION TO AN EXISTING PERMIT: _____
 JURISDICTIONAL DETERMINATION ONLY _____ APPLYING FOR AUTHORIZATION X
 PREVIOUSLY ASSIGNED NUMBER (RESUBMITTALS AND AMENDMENTS) _____
 DATE _____

1. APPLICANT INFORMATION: AI 162822 201801760

APPLICANT NAME:

A. Name: Mr. Jason Thomas B. Daytime Telephone: 832-409-8354
 C. Company: MD Solar 1, LLC D. Email Address: jason.thomas@origisenergy.com
 E. Address: 800 Brickell Avenue, Suite 1100
 F. City: Miami State: Florida Zip: 33131

AGENT/ENGINEER INFORMATION:

A. Name: Mr. Jason Loar, PE B. Daytime Telephone: (302) 424-1441
 C. Company: Davis Bowen & Friedel, Inc. D. Email Address: jpl@dbfinc.com
 E. Address: 1 Park Avenue
 F. City: Milford State: Delaware Zip: 19963

ENVIRONMENTAL CONSULTANT:

A. Name: Ms. Anna Allie B. Daytime Telephone: (703) 471-8400
 C. Company: ECS Mid-Atlantic, LLC D. Email Address: aallie@ecslimited.com
 E. Address: 14026 Thunderbolt Place, Suite 100
 F. City: Chantilly State: Virginia Zip: 20151

CONTRACTOR (If known):

A. Name: _____ B. Daytime Telephone: _____
 C. Company: _____ D. Email Address: _____
 E. Address: _____
 F. City: _____ State: _____ Zip: _____

PRINCIPAL CONTACT:

A. Name: Mr. Dane Bauer (Permit Agent) B. Daytime Telephone: (410) 812-9109
 C. Company: H&B Solutions, LLC D. Email Address: dbauer@hallandbauer.com
 E. Address: 37534 Oliver Drive
 F. City: Selbyville State: Delaware Zip: 19975

RECEIVED

OCT 15 2018

WATER AND SCIENCE ADMIN.
REGULATORY SERVICES COORD.

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2. PROJECT DESCRIPTION

a. GIVE WRITTEN DESCRIPTION OF PROJECT:

The project will consist of installation of solar panel arrays, access and maintenance roads, a substation, overhead utility connection to existing transmission lines, security fence and screening landscaping. Impacts will consist of: a road crossing over an existing stream to accommodate emergency service vehicles and to support other access and maintenance needs; a temporary bridge road crossing over Wards Run for construction access; and conversion impacts of forest to emergent wetlands for an overhead utility line easement. Appendix VI includes a table outlining the various impacts which, together are slightly over 5,000SF.

Has any portion of the project been completed? Yes No If yes, explain _____

Is this a residential subdivision or commercial development? Yes No
 If yes, total number of acres on property 540 acres

b. ACTIVITY: Check all activities that are proposed in the wetland, waterway, floodplain, and nontidal wetland buffer as appropriate.

- A. filling
- B. dredging
- C. excavating
- D. flooding or impounding water
- E. draining
- F. grading
- G. removing or destroying vegetation
- H. building structures

Area for item(s) checked: Wetland 5,765 (sq. ft.) Buffer (Nontidal Wetland Only) 20,055 (sq. ft.)
 Expanded Buffer (Nontidal Wetland Only) _____ (sq. ft.)
 Area of stream impact 1,560 (sq. ft.)
 Length of stream affected 62 (linear feet)

c. TYPE OF PROJECTS: Project Dimensions

For each activity, give overall length and width (in feet), in columns 1 and 2. For multiple activities, give total area of disturbance in square feet in column 3. For activities in tidal waters, give maximum distance channelward (in feet) in column 4. For dam or small ponds, give average depth (in feet) for the completed project in column 5. Give the volume of fill or dredged material in column 6.

	Length (Ft.)	Width (Ft.)	Area Sq. Ft.	Maximum/Average Channelward Encroachment	Pond Depth	Volume of fill/dredge material (cubic yards) below MHW or OHW
	1	2	3	4	5	6
A. <input type="checkbox"/> Bulkhead	_____	_____	_____	_____	_____	_____
B. <input type="checkbox"/> Revetment	_____	_____	_____	_____	_____	_____
C. <input type="checkbox"/> Vegetative Stabilization	_____	_____	_____	_____	_____	_____
D. <input type="checkbox"/> Gabions	_____	_____	_____	_____	_____	_____
E. <input type="checkbox"/> Groins	_____	_____	_____	_____	_____	_____
F. <input type="checkbox"/> Jetties	_____	_____	_____	_____	_____	_____
G. <input type="checkbox"/> Boat Ramp	_____	_____	_____	_____	_____	_____
H. <input type="checkbox"/> Pier	_____	_____	_____	_____	_____	_____
I. <input type="checkbox"/> Breakwater	_____	_____	_____	_____	_____	_____
J. <input type="checkbox"/> Repair & Maintenance	_____	_____	_____	_____	_____	_____
K. <input checked="" type="checkbox"/> Road Crossing	<u>40</u>	<u>6</u>	<u>240</u>	_____	_____	_____
L. <input checked="" type="checkbox"/> Utility Line	<u>140</u>	<u>33</u>	<u>4,550</u>	_____	_____	_____
M. <input type="checkbox"/> Outfall Construction	_____	_____	_____	_____	_____	_____
N. <input type="checkbox"/> Small Pond	_____	_____	_____	_____	_____	_____
O. <input type="checkbox"/> Dam	_____	_____	_____	_____	_____	_____
P. <input type="checkbox"/> Lot Fill	_____	_____	_____	_____	_____	_____
Q. <input type="checkbox"/> Building Structures	_____	_____	_____	_____	_____	_____
R. <input type="checkbox"/> Culvert	_____	_____	_____	_____	_____	_____
S. <input checked="" type="checkbox"/> Bridge (Temporary)	<u>22</u>	<u>60</u>	<u>1320</u>	_____	_____	_____
T. <input type="checkbox"/> Stream Channelization	_____	_____	_____	_____	_____	_____
U. <input type="checkbox"/> Parking Area	_____	_____	_____	_____	_____	_____
V. <input type="checkbox"/> Dredging	_____	_____	_____	_____	_____	_____

W. 1. New 2. Maintenance 3. Hydraulic 4. Mechanical
 _____ Other (explain) _____

d. PROJECT PURPOSE: Give brief written description of the project purpose:

The purpose of the project is the construction, operation and maintenance of a solar energy generation facility. The facility will generate renewable energy to support the State of Maryland's renewable portfolio standard. This project was selected by Southern Maryland Electric Cooperative to provide renewable energy for the purpose of satisfying their requirements for renewable energy. The proposed solar panels have been placed in locations so as not to disturb wetland areas and the proposed impacts are associated with grass access roads needed to maintain the solar panels, security fencing, and associated landscaping, and provide access for emergency service vehicles, as well as a bridge replacement, and an overhead power line easement.

3. PROJECT LOCATION:

a. LOCATION INFORMATION:

A. County: Charles B. City: La Plata C. Name of waterway or closest waterway Wards Run
D. State stream use class designation: _____
E. Site Address or Location: 4850 Shugart Valley Place in Charles County, Maryland

F. Directions from nearest intersection of two state roads: From the intersection of MD 484 (Poorhouse Road) and MD 425 (Mason Springs Road), continue south on MD 425 for ~2 miles, then turn left on Shugart Valley Place.

G. Is your project located in the Chesapeake Bay Critical Area (generally within 1,000 feet of tidal waters or tidal wetlands)?:
 Yes No

H. County Book Map Coordinates (Alexandria Drafting Co.); Excluding Garrett and Somerset Counties:
Map: See attached Letter: _____ Number: _____ (to the nearest tenth)

I. FEMA Floodplain Map Panel Number (if known): 24017C0145D
J. 1. 38.508581 latitude 2. -77.139950 longitude

b. ACTIVITY LOCATION: Check one or more of the following as appropriate for the type of wetland/waterway where you are proposing an activity:

- | | | |
|---|--|--|
| A. <u> </u> Tidal Waters | F. <u> </u> 100-foot buffer (nontidal wetland of special State concern) | H. <u> x </u> 100-year floodplain (outside stream channel) |
| B. <u> </u> Tidal Wetlands | G. <u> x </u> In stream channel | I. <u> </u> River, lake, pond |
| C. <u> </u> Special Aquatic Site (e.g., mudflat, vegetated shallows) | 1. <u> </u> Tidal 2. <u> x </u> Nontidal | J. <u> </u> Other (Explain) |
| D. <u> x </u> Nontidal Wetland | | _____ |
| E. <u> x </u> 25-foot buffer (nontidal wetlands only) | | _____ |

c. LAND USE:

A. Current Use of Parcel Is: 1. Agriculture: Has SCS designated project site as a prior converted cropland?
 Yes x No 2. x Wooded 3. Marsh/Swamp 4. x Developed
5. Other _____

B. Present Zoning Is: 1. x Residential 2. Commercial/Industrial 3. Agriculture 4. Marina 5. Other

C. Project complies with current zoning x Yes No

THE FOLLOWING INFORMATION IS REQUIRED BY THE STATE (blocks 4-7):

4. REDUCTION OF IMPACTS: Explain measures taken or considered to avoid or minimize wetland losses in F. Also check Items A-E if any of these apply to your project.

- | | | |
|---|---|--------------------------------------|
| A. <u> x </u> Reduced the area of disturbance | B. <u> x </u> Reduced size/scope of project | C. <u> x </u> Relocated structures |
| | | D. <u> x </u> Redesigned project |
| E. <u> </u> Other _____ | | |

F. Explanation The project avoided and minimized, to the maximum extent practicable, impacts to existing waters with the exception of crossings that were necessary to meet the purpose and need of the project. No existing waters will be filled for the

purpose of constructing arrays (all arrays purposefully avoid wetland/stream areas). Impacts are associated with providing the required emergency services and maintenance road crossing access, as well as vegetation removal within 2 forested wetland areas for utility line easement construction, thereby resulting in the minimum impacts necessary. Crossings are perpendicular to the wetlands or streams to further reduce impacts. MDE visited the site and confirmed the design maximized avoidance and minimization considerations.

Describe reasons why impacts were not avoided or reduced in Q. Also check Items G-P that apply to your project.

- | | | |
|---|--|---|
| G. <input type="checkbox"/> Cost | K. <input type="checkbox"/> Parcel size | N. <input checked="" type="checkbox"/> Safety/public welfare issue |
| H. <input checked="" type="checkbox"/> Extensive wetlands on site | L. <input checked="" type="checkbox"/> Other regulatory requirement | O. <input type="checkbox"/> Inadequate zoning |
| I. <input checked="" type="checkbox"/> Engineering/design constraints | M. <input checked="" type="checkbox"/> Failure to accomplish project purpose | P. <input checked="" type="checkbox"/> Other <u>Maintenance requirements and access needed.</u> |
| J. <input type="checkbox"/> Other natural features | | |

Q. Description Impacts to waters could not be completely avoided and still provide adequate access to all parts of the site to maintain the proposed solar arrays. Extensive streams surround and bisect the site, making crossings for access roads a necessity to utilize the site to generate the electricity necessary to accomplish the project goals and meet the project purpose. Furthermore, emergency vehicle access is required which prompt the need for road access, and existing power distribution infrastructure is located off the project's eastern boundary, which require a power line easement in this direction.

5. LETTER OF EXEMPTION: If you are applying for a letter of exemption for activities in nontidal wetlands and/or their buffers, explain why the project qualifies:

- | | |
|---|--|
| A. <input type="checkbox"/> No significant plant or wildlife value and wetland impact | B. <input type="checkbox"/> Repair existing structure/fill |
| 1. <input type="checkbox"/> Less than 5,000 square feet | C. <input type="checkbox"/> Mitigation Project |
| 2. <input type="checkbox"/> In an isolated nontidal wetland less than 1 acre in size | D. <input type="checkbox"/> Utility Line |
| E. Other (explain) _____ | 1. <input type="checkbox"/> Overhead |
| | 2. <input type="checkbox"/> Underground |

F. Check here if you are **not** applying for a letter of exemption.

IF YOU ARE APPLYING FOR A LETTER OF EXEMPTION, PROCEED TO BLOCK 11

6. ALTERNATIVE SITE ANALYSIS: Explain why other sites that were considered for this project were rejected in M. Also check any items in D-L if they apply to your project. (If you are applying for a letter of exemption, do not complete this block):

- | | | |
|---|---|---|
| A. <input type="checkbox"/> 1 site | B. <input checked="" type="checkbox"/> 2 - 4 sites | C. <input type="checkbox"/> 5 or more sites |
| Alternative sites were rejected/not considered for the following reason(s): | | |
| D. <input type="checkbox"/> Cost | H. <input checked="" type="checkbox"/> Greater wetlands impact | L. <input type="checkbox"/> Other _____ |
| E. <input checked="" type="checkbox"/> Lack of availability | I. <input type="checkbox"/> Water dependency _____ | |
| F. <input checked="" type="checkbox"/> Failure to meet project purpose | J. <input type="checkbox"/> Inadequate zoning _____ | |
| G. <input checked="" type="checkbox"/> Located outside general/market area | K. <input checked="" type="checkbox"/> Engineering/design constraints _____ | |

M. Explanation: Other sites in the vicinity would either cause greater impacts to wetlands, were not available for purchase or lease, or would not be near enough to existing power lines to be of feasible use to the project purpose. Close proximity to existing infrastructure is needed to adequately transmit renewable energy into the power grid. That, and size of available land for the solar arrays are the primary considerations in rejecting the alternative sites.

7. PUBLIC NEED: Describe the public need or benefits that the project will provide in F. Also check Items in A-E that apply to your project. (If you are applying for a letter of exemption, do not complete this block):

- | | | |
|---|--|---|
| A. <input checked="" type="checkbox"/> Economic | C. <input checked="" type="checkbox"/> Health/welfare | E. <input checked="" type="checkbox"/> Other <u>Supplemental energy generation into the grid.</u> |
| B. <input type="checkbox"/> Safety | D. <input type="checkbox"/> Does not provide public benefits | |

12. **ADDITIONAL INFORMATION:** Use this space for detailed responses to any of the previous items. Attach another sheet if necessary:

Additional supporting information can be found in the attached appendices.

The attached exhibits identify the buffer setbacks. For wetlands, 35' is shown instead of 25', so that clearing or other work does not inadvertently take place within the buffer. The County also establishes 50' buffers from County Resource Protection Zone areas.

A buffer of 100' from centerline of streams was used for Tier II streams.

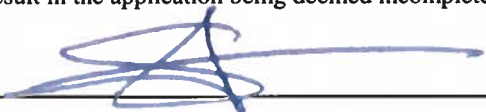
Check box if data is enclosed for any one or more of the following (see checklist for required information):

- | | | |
|--|--|--|
| A. <input type="checkbox"/> Soil borings | D. <input checked="" type="checkbox"/> Field surveys | G. <input checked="" type="checkbox"/> Site plan |
| B. <input type="checkbox"/> Wetland data sheets | E. <input type="checkbox"/> Alternate site analysis | H. <input checked="" type="checkbox"/> Avoidance and minimization analysis |
| C. <input checked="" type="checkbox"/> Photographs | F. <input type="checkbox"/> Market analysis | |
- I. Other (explain) Project description and wetland delineation maps.

CERTIFICATION:

I hereby designate and authorize the agent named above to act on my behalf in the processing of this application and to furnish any information that is requested. I certify that the information on this form and on the attached plans and specifications is true and accurate to the best of my knowledge and belief. I understand that any of the agencies involved in authorizing the proposed works may request information in addition to that set forth herein as may be deemed appropriate in considering this proposal. I certify that all Waters of the United States have been identified and delineated on site, and that all jurisdictional wetlands have been delineated in accordance with the Corps of Engineers Wetlands Delineation Manual (Wetlands Research Program Technical Report Y-87-1). I grant permission to the agencies responsible for authorization of this work, or their duly authorized representative, to enter the project site for inspection purposes during working hours. I will abide by the conditions of the permit or license if issued and will not begin work without the appropriate authorization. I also certify that the proposed works are consistent with Maryland's Coastal Zone Management Plan. I understand that none of the information contained in the application form is confidential and that I may request that additional required information be considered confidential under applicable laws. I further understand that failure of the landowner to sign the application will result in the application being deemed incomplete.

LANDOWNER MUST SIGN: _____



DATE: 09/24/2018

WHERE TO MAIL APPLICATION

Maryland Department of the Environment
Water Management Administration
Regulatory Services Coordination Office
1800 Washington Boulevard, Suite 430
Baltimore, Maryland 21230
Telephone: (410) 537-3762
1-800-876-0200

BEFORE YOU MAIL... DON'T FORGET...

- **SIGN AND DATE THE APPLICATION. THE LANDOWNER MUST SIGN.**
- **SEVEN (7) COPIES OF ALL DOCUMENTS (APPLICATION, PLANS, MAPS, REPORTS, ETC.) MUST BE RECEIVED TO BEGIN OUR REVIEW.**
- **INCLUDE FIVE COPIES OF A VICINITY MAP (LOCATION MAP) WITH THE PROJECT SITE PINPOINTED.**

- **SEND AN APPLICATION FEE OF \$750 ALONG WITH A COPY OF THE FIRST PAGE OF THE APPLICATION TO MARYLAND DEPARTMENT OF THE ENVIRONMENT, P.O. BOX 2057, BALTIMORE, MD 21203-2057. PLEASE REFER TO OUR WEBSITE <http://www.mde.maryland.gov> FOR FURTHER INSTRUCTIONS.**

Revised 7/10

SUPPLEMENTARY INFORMATION TO BE INCLUDED ON PLANS, DRAWINGS, OR VICINITY MAPS

In addition to the information indicated on the previous pages, you should include the following on the 8 1/2 x 11 site plans and any blueprints you have submitted:

1. Delineation of any wetland buffers or expanded buffers, clearly marked and differentiated.
2. Location of mitigation area, if proposed on the same site as the project.

Note: If you are proposing a complex project you may wish to submit engineering blueprints of your project with the application form to expedite review.

Mitigation Location Map: If you are proposing that nontidal wetland mitigation be done at a different location than the proposed project, you should submit a map showing the location of the mitigation site in relation to the proposed nontidal wetland losses.

WETLAND DELINEATION

Wetlands should be identified according to methods described in the publication Corps of Engineers Wetlands Delineation Manual (Wetlands Research Program Technical Report Y-87-1). Copies of the manual may be obtained by calling the U. S. Government Printing Office at 202-783-3238 and requesting document #024-010-00-683-8 at a cost of \$7.50. Wetlands must be shown on all plans submitted with the application. All wetlands on site must be delineated and shown on the overall site plan. 8 1/2 x 11 inch plans with topography showing relation of the wetlands and project impacts must be submitted. Copies of the wetland reports and data sheets used in making the determination must be included with your application submittal.

Regulatory Agencies

Federal Permits

U.S. Army Corps of Engineers
Baltimore District
Attention: CENAB-OP-R
P. O. Box 1715
Baltimore, MD 21203-1715
Telephone: (410) 962-3670

Coastal Zone Consistency Statement

MD Dept. of the Environment
Water Management Administration
Wetlands and Waterways Program
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3745

State Authorizations

MD Dept. of the Environment
Water Management Administration
Tidal Wetlands Division
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3837

MD Dept. of the Environment
Water Management Administration
Nontidal Wetlands and Waterways
Division
1800 Washington Blvd, Ste 430
Baltimore, MD 21230
Telephone: (410) 537-3768