



February 2, 2022

Mr. Andrew Johnson
Executive Secretary
Maryland Public Service Commission
6 St. Paul Street, 16th floor
Baltimore, Maryland 21202

RE: RM56– Community Solar Energy Generation Systems (CSEGS)
Request for the Commission to amend 20.62.03.05(B) of the proposed regulations to allow for the collection and public dissemination of information related to certain environmental effects of CSEGS projects

The Advocates for Herring Bay (AHB)¹ appreciate this opportunity to offer our views and recommendations on the proposed revisions to COMAR 20.62 that were published on January 3, 2022. As explained in prior filings,² AHB is participating in this proceeding because of our interest in policies that will optimize the ecological and social benefits of efforts to decarbonize Maryland’s electricity grid. Our comments on the proposed regulations focus on the new data collection requirements in 20.62.03.05(B), particularly our concern that it omits information on key environmental features of each completed project.

AHB believes it is in the public interest for the Public Service Commission (the Commission) to amend 20.62.03.05(B) to allow for the collection and public dissemination of information on certain environmental effects of CSEGS projects. Specifically, we recommend expanding the scope of 20.62.03.05(B) to include information on features related to Maryland’s key environmental priorities, such as protecting forests and wetlands, preserving land identified by the Maryland Department of Natural Resources (DNR) as Targeted Ecological Areas and Green Infrastructure, and reducing carbon dioxide emissions.

Content of Environmental Data Collection

AHB recommends collecting data that are credible, consistent, easily verifiable, and readily available to both the Commission and subscriber organizations. Thus, we propose collecting data that are either routinely reported by project sponsors to government agencies or available from state or federal websites. Because the data would be collected for informational—not regulatory—purposes, the data could be limited to operating projects. For administrative consistency, AHB suggests having subscriber organizations submit the information to the Commission and having the data included on the Maryland Energy Administration’s public website.

Based on our review of Maryland’s environmental policies and using information obtained from discussions with members of the Net Metering Working Group, AHB respectfully offers the following example of regulatory language for adding environmental information to the public data collection regulations in 20.62.03.05(B):

¹ The Advocates for Herring Bay, Inc. is a community-based environmental group in Anne Arundel County.

² See Advocates for Herring Bay, General Comments – RM56, Log Number 147, October 6, 2020; Reply Comments – RM56, Log Number 185, January 29, 2020; Reply Comments – RM56, Log Number 212, March 15, 2021; and Reply Comments – RM56, Log Number 240, August 20, 2021.

Insert new 20.62.03.05(B)(5):

(5) Subscriber organizations shall provide the Maryland Public Service Commission with the following environmental data by the Commercial Operation Date of each CSEGS facility, and the data will be provided to the Maryland Energy Administration for public publication.

*(a) acres of forest cleared within the fence line and acres of forest replanted;*³

*(b) acres of wetlands disturbed within the fence line under federal or state permit;*⁴

*(c) acres within the fence line designated by the State of Maryland as a Targeted Ecological Area or as Green Infrastructure prior to the submission of a site development plan;*⁵ and

*(d) metric tons of carbon dioxide emissions avoided annually as calculated using the most recent emissions rates published by the federal Environmental Protection Agency for the Mid-Atlantic region in the agency's AVOIDED Emissions and geneRATION Tool or its successor application.*⁶

Public Interest Benefits of Publishing Environmental Data

Expanding the scope of 20.62.03.05(B) to include environmental data would serve the public interest by promoting an understanding of the relationship between CSEGS projects and Maryland's other environmental and energy goals. In our view, having publicly accessible information on the four elements described above for each project would benefit industry stakeholders as well as consumers and policy makers. For example:

- Publishing project-specific data would allow marketers and consumers to easily identify dual-use projects that will have no or few ecological impacts. As illustrated in Attachment 5, the data on project categories in 20.62.03.05(B)(1)(j) does not answer that question because the "Small/Brownfields/Other" category combines greenfield and rooftop and other projects built on previously developed surfaces.
- Providing information tailored to the land inside the fence line would increase the accuracy of ecological assessments. As shown in Attachment 6, when projects are located on large parcels that include a mix of cleared and ecologically sensitive areas, their impacts will depend on their location within the host parcel.
- Identifying projects built on land designated by the State of Maryland as a priority for environmental preservation, such as those shown in Attachment 7, would inform future state and local investment decisions.
- Using EPA metrics to report the avoided carbon dioxide emissions from each CSEGS project would provide more consistent and reliable benchmarks on progress toward the state's decarbonization goals.

³ Developers routinely submit this information to local governments as part of the permitting process. See Attachment 1, lines J and R in the sample worksheet from DNR.

⁴ Developers routinely submit this information to the Maryland Department of the Environment or U.S. Army Corps of Engineers, as applicable. See Attachment 2 for data checklist.

⁵ This information is readily available on DNR's [MERLIN](#) or [Greenprint](#) GIS. Attachment 3 shows DNR's maps of Targeted Ecological Areas and Green Infrastructure Hubs and Corridors.

⁶ See Attachment 4 for information on EPA's [AVERT](#) tool.

Timing of Regulatory Action on Environmental Data Collection

AHB recognizes that acting on our request to add environmental data requirements would trigger additional administrative actions, including republishing the draft regulations and allowing for another comment period. While we believe our proposal warrants broad support and should be adopted expeditiously, it is not AHB's intent to delay the implementation of previously approved provisions.

If the Commission cannot act affirmatively on AHB's proposal at its February 22, 2022 meeting, we respectfully request that the Commission keep our proposed changes to 20.62.03.05(B) under active consideration and include them in the next rulemaking proceeding related to the CSEGS program.

Thank you for considering our views.

Stephen Marley
Policy Coordinator
Advocates for Herring Bay

Attachment 1

Example of Forestry-Related Data Routinely Provided by Developers

Source: [DNR Forest Conservation Worksheet](#)

FOREST CONSERVATION WORKSHEET	Note: Use 0 for all negative numbers that result from the calculations.
Net Tract Area	
A. Total Tract Area	A=
B. Deductions (Critical Area, area restricted by local ordinance or program)	B=
C. Net Tract Area Net Tract Area = Total Tract (A) - Deductions (B)	C=
Land Use Category: Medium Density Residential	
D. Afforestation Threshold (Net Tract Area [C] x _____%)	D=
E. Conservation Threshold (Net Tract Area [C] x _____%)	E=
Existing Forest Cover	
F. Existing Forest Cover within the Net Tract Area	F=
G. Area of Forest Above Conservation Threshold If the Existing Forest Cover (F) is greater than the Conservation Threshold (E), then G = F – E; otherwise G = 0.	G=
Breakeven Point	
H. Breakeven Point (Amount of forest that must be retained so that no mitigation is required)	H=
(1) If the Area of Forest Above Conservation Threshold (G) is <u>greater than</u> 0, then H = (0.2 x the Area of Forest Above Conservation Threshold (G)) + the Conservation Threshold (E);	
(2) If the Area of Forest Above Conservation Threshold (G) is <u>equal to</u> 0, then H= Existing Forest Cover (F)	
I. Forest Clearing Permitted Without Mitigation I = Existing Forest Cover (F) – Breakeven point (H)	I=
Proposed Forest Clearing	
J. Total Area of Forest to be Cleared	J=
K. Total Area of Forest to be Retained K = Existing Forest Cover (F) – Forest to be Cleared (J)	K=
Planting Requirements	
If the Total Area of Forest to be Retained (K) is <u>at or above</u> the Breakeven Point (H), <u>no planting is required</u> , and no further calculations are necessary (L=0, M=0, N=0, P=0, Q=0, R=0).	
Otherwise, calculate the planting requirement(s) as follows:	
L. Reforestation for Clearing Above the Conservation Threshold	L=
(1) If the Total Area of Forest to be Retained (K) is <u>greater than</u> the Conservation Threshold (E), then L = the Area of Forest to be Cleared (J) x 0.25;	
(2) If the Forest to be Retained (K) is <u>less than or equal to</u> the Conservation Threshold (E), then L = Area of Forest Above Conservation Threshold (G) x 0.25	
M. Reforestation for Clearing Below the Conservation Threshold	M=
(1) If Existing Forest Cover (F) is <u>greater than</u> the Conservation Threshold (E) <u>and</u> the Forest to be Retained (K) is <u>less than or equal to</u> the Conservation Threshold (E), then M = 2.0 x (Conservation Threshold (E) – Forest to be Retained (K))	
(2) If Existing Forest Cover (F) is <u>less than or equal to</u> the Conservation Threshold (E), then M = 2.0 x Forest to be Cleared (J)	
N. Credit for Retention Above the Conservation Threshold If the area of Forest to be Retained (K) is greater than the Conservation Threshold (E), then N = K – E; Otherwise N=0	N=
P. Total Reforestation Required P = L + M – N	P=
Q. Total Afforestation Required If Existing Forest Cover (F) is less than the Afforestation Threshold (D), then Q = Afforestation Threshold (D) – Existing Forest Cover (F)	Q=
R. Total Planting Requirement R = P + Q	R=

Attachment 2

Example of Wetland and Stream Impact Data Routinely Provided by Developers

Source: [Joint Application Form Maryland Department of the Environment and U.S. Army Corps of Engineers](#)

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

A. <input type="checkbox"/> filling	D. <input type="checkbox"/> flooding or impounding water	F. <input type="checkbox"/> grading
B. <input type="checkbox"/> dredging	E. <input type="checkbox"/> draining	G. <input type="checkbox"/> removing or destroying vegetation
C. <input type="checkbox"/> excavating		H. <input type="checkbox"/> building structures

Area for item(s) checked: Wetland (sq. ft.) Buffer (Nontidal Wetland Only) (sq. ft.)
 Expanded Buffer (Nontidal Wetland Only) (sq. ft.)

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

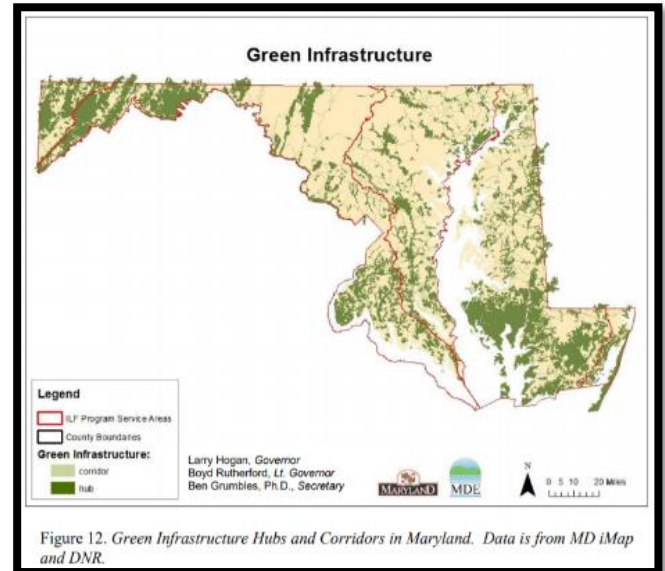
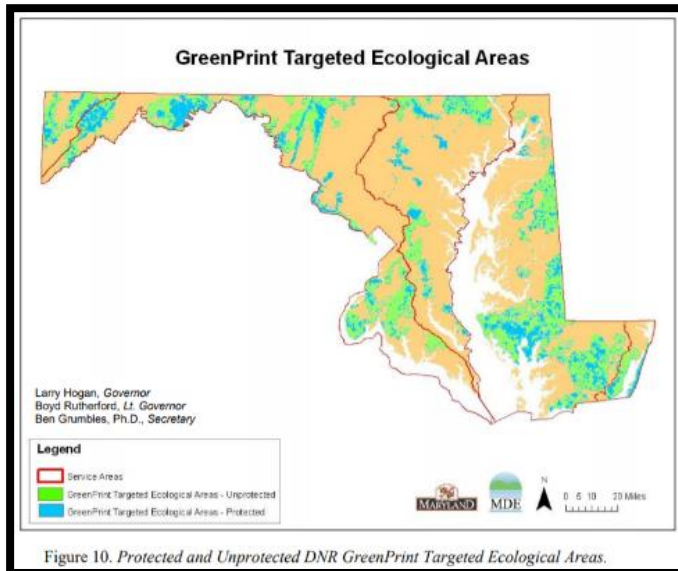
1. New 2. Maintenance 3. Hydraulic 4. Mechanical

W. Other (explain)

Attachment 3

DNR Maps of Land Designated as Targeted Ecological Areas and Green Infrastructure Hubs and Corridors

See DNR Green [Learn Why GreenPrint Lands Are Important](#)



What are Targeted Ecological Areas?

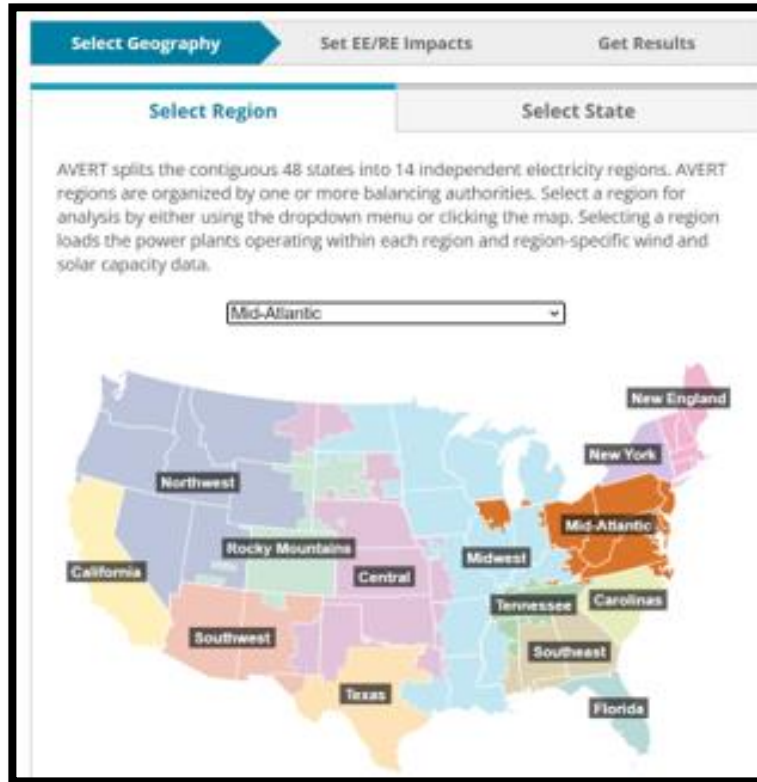
“Targeted Ecological Areas (TEAs) are lands and watersheds of high ecological value that have been identified as conservation priorities by the Maryland Department of Natural Resources (DNR) for natural resource protection. These areas represent the most ecologically valuable areas in the State: they are the “best of the best”. TEAs are preferred for conservation funding through Stateside Program Open Space.” [Quote from DNR, imap]

What is Green Infrastructure?

“The Green Infrastructure’s hub and corridor network of habitat allows plant and animal migration, reduces forest fragmentation if protected, and provides important ecosystem services, such as biodiversity, cleaning air and water, storing nutrients, and protecting areas against storm and flood damage.” [Quote from DNR, imap]

Attachment 4

Map and 2020 Emissions Rates for Mid-Atlantic Region in EPA's [AVERT](#) Tool

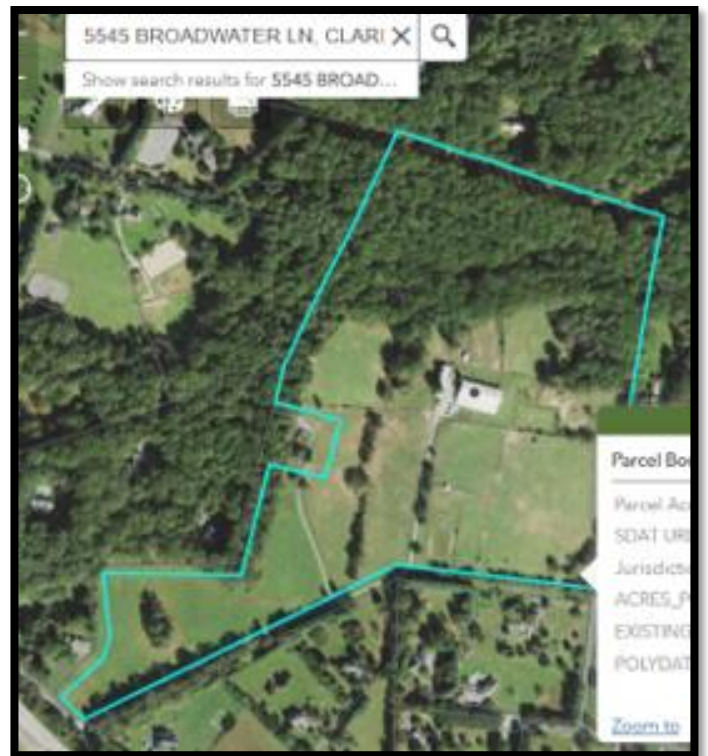
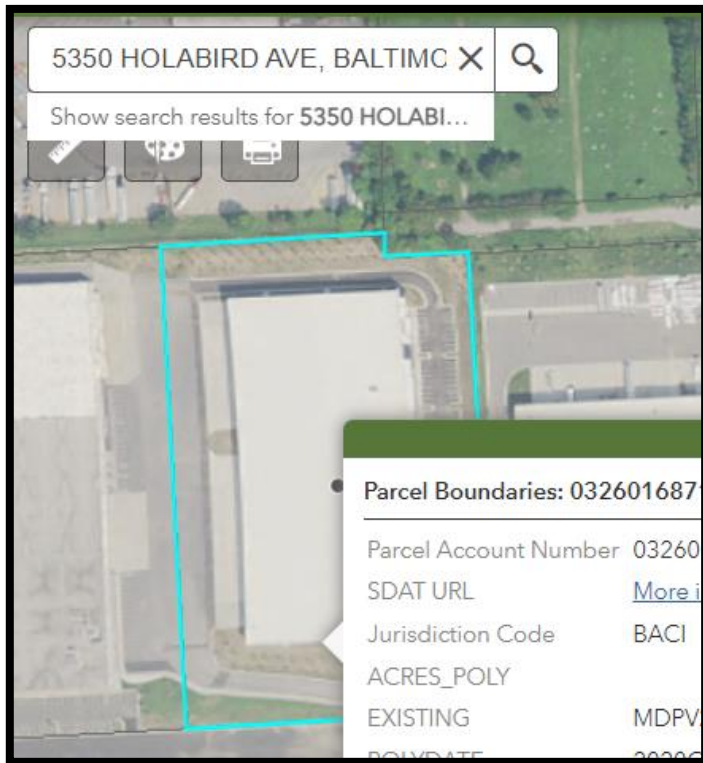
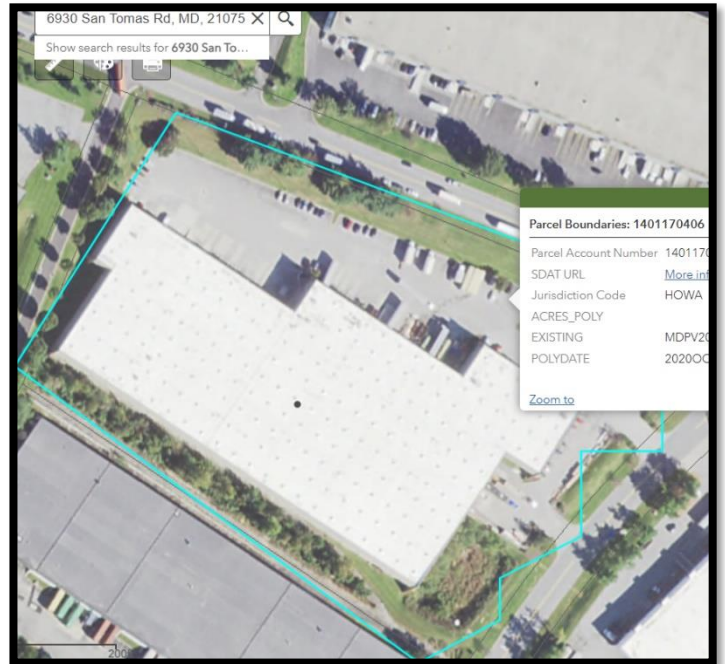
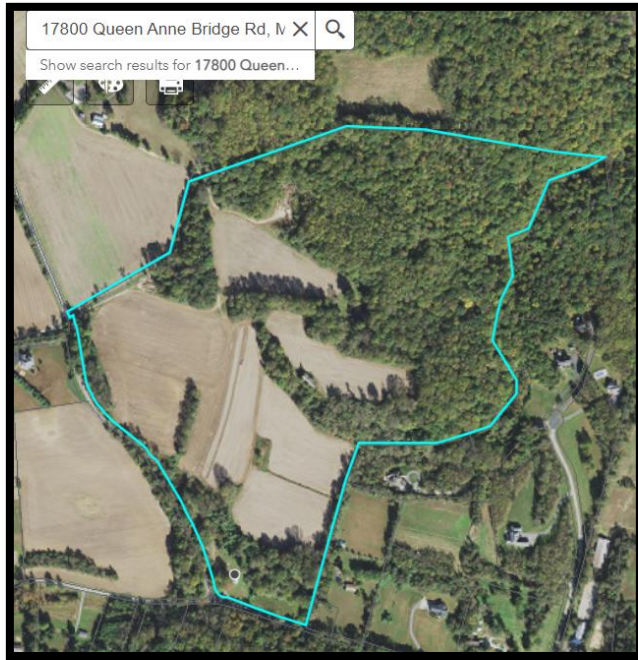


AVERT-derived Emission Rates:	Average Fossil	Marginal Fossil
SO ₂ (lb/MWh)	0.831	1.105
NO _x (lb/MWh)	0.617	0.723
<i>Ozone season NO_x (lb/MWh)</i> 	0.580	0.724
CO ₂ (tons/MWh)	0.691	0.730
PM _{2.5} (lb/MWh)	0.087	0.094
VOCs (lb/MWh)	0.015	0.019
NH ₃ (lb/MWh)	0.017	0.022

Attachment 5

Examples of Different Types of Surfaces Used for Proposed CSEGS Projects in the Small/Brownfields/Other Category

Source: DNR [Greenprint](#)



Attachment 6

Examples of Projects Installed on Parcels That Have a Mix of Cleared and Ecologically Sensitive Acreage

Sources: DNR [Greenprint](#) (preconstruction); Google Maps (post construction)



Attachment 7

Examples of Pending Projects Located in Targeted Ecological Areas (shaded in green)

Sources: DNR [Greenprint](#) (preconstruction); Google Maps (during construction)

