POTOMAC RIVERKEEPER NETWORK

3070 M Street, NW
Washington, DC 20007
202.888.2037 (main)
www.prknetwork.org

August 22, 2019

Jeff Thompson, Regional Chief
Nontidal Wetlands Division
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230
VIA Electronic Mail to
jeffrey.thompson@maryland.gov

Re: Potomac Riverkeeper Network Comments Regarding AI 18-NT-0323/201861760 – MD Solar 1, LLC, Joint Federal/State Application for the Alteration of Any Floodplain, Waterway, Tidal, or Nontidal Wetland in Maryland

Dear Mr. Thompson,

Please accept the following comments on behalf of Potomac Riverkeeper Network (PRKN) regarding AI 18-NT-0323/20186170 for MD Solar 1, LLC (Shugart Valley Place), located at 4850 Shugart Valley Place, La Plata, MD 20646, in Charles County. Thank you for giving PRKN the opportunity to submit written comments. PRKN also supports and incorporates by reference the July 22, 2019 and August 23, 2019 comments filed by Audubon Naturalist Society on this project.

I. Introduction

PRKN submits these comments as an interested party to the permitting process and request that notification of all further actions regarding this permit be sent to the address listed below. While PRKN praises Georgetown University for seeking to utilize renewable energy to provide power to the University and address the impacts of climate change, we are concerned that the proposed plan will only lead to further environmental damage and set a bad precedent for future renewable energy projects in Maryland. The harm posed by the construction of this project to water quality and the Chesapeake Bay watershed generally far outweighs the benefits accrued from using solar power due to the significant forest clearing that will deposit excess sediment into surrounding tributaries and destroy native wetlands. The Maryland Department of the Environment (MDE) should therefore deny the Wetlands Permit requested by Origis Energy under COMAR 26.23.02.04(A)(2) and COMAR 26.23.02.04(D). The planned construction will result in sediment pollution in Nanjemoy Creek – leading to completely avoidable environmental damage to the Creek, the Potomac River and Chesapeake Bay. Further, this project would severely

impact freshwater wetlands that play a critical role in absorbing pollutants and improving water quality.

II. About the Potomac Riverkeeper Network

Founded in 2000, the PRKN consists of a group of dedicated individuals who advocate and enforce clean water laws for the Potomac River and its tributaries. Since then, a number of scientists, teachers, law officers, fisherman, and paddlers have successfully worked together to protect the rights of those who depend on the Potomac River, and to enforce the rule of law when necessary. PRKN activities now benefit all 5.35 million residents of the Potomac Watershed by improving the quality of the water they drink, recreate on and in, and use in their daily lives.

PRKN's work spans the almost 15,000 square mile watershed – which consists of four states (Virginia, Maryland, West Virginia, and Pennsylvania) and the District of Columbia. This work consists of three dedicated Riverkeepers that monitor the Upper Potomac, Shenandoah, and the Potomac. The Potomac River also flows into the Chesapeake Bay and supplies 25 percent of the fresh water to the Bay. As a result, 25 percent of the Bay's nutrient pollution and 34 percent of its pollution comes from the Potomac River.[1] It is imperative that water quality in major tributaries of the Potomac, such as Nanjemoy Creek, be protected and enhanced. Tributary water quality directly affects the Potomac River and Chesapeake Bay downstream.

III. About MD Solar 1

Origis Energy (Origis) recently partnered with Georgetown University in order to develop a solar farm referred to as MD Solar 1. The current plan is to develop a 537-acre property into a solar farm – with a focus on areas in the Nanjemoy Forest. Nanjemoy Forest is an ecosystem consisting of nontidal wetlands, streams, and innumerable trees that serve to protect the forest's vast and diverse wildlife. All of these components play an essential role in maintaining the health of Nanjemoy Forest and ensure that navigable waters in the area remain protected from damaging pollutants. For example, the nontidal wetlands of Nanjemoy Forest help to protect the Chesapeake Bay due to their abilities to filter pollutants, reduce flooding, and runoff from upland areas. Any direct or indirect impacts to nontidal wetlands reduce their ability to successfully filter pollutants and improve water quality before it enters our streams and rivers.

The proposed MD Solar 1 project will clear hundreds of acres of Nanjemoy Forest and, subsequently, severely impact the wetlands around Wards Run 1 and 2 and the Potomac River. The application for the project neglects to include any information regarding the direct impacts that stem from the removal of over 240 acres of upland trees. Instead, the project application only mentions the impacts to the wetlands and Wards Run 1 and 2 that result from installation of access roads and power lines. Approval of the MD Solar 1 project will, thus, destroy not only potential habitat for endangered species and destroy forest cover, it will also degrade water quality on Ward Run 1 and 2, two streams located on the property in question.

Maryland lists these two streams as "Tier II" streams. The Clean Water Act requires states to ensure that existing instream water uses are protected, and support the protection of these waters and the fish and wildlife that depend on them.[2] According to these federal antidegradation

[1] *Our Mission*, POTOMAC RIVERKEEPER NETWORK (2016), https://www.potomacriverkeepernetwork.org/mission/.
[2] 40 CFR 131.12.

regulations, states have to develop and adopt a statewide antidegradation policy.[3] Maryland law has identified a Tier II stream as one in which the water quality exceeds the minimum designated water quality standards for that particular class of waters.[4] However, these waters still need protection in order to ensure their continued success - making it imperative to protect all Tier II streams in the State. Wards Run 1 and 2 will face negative and permanent impacts from the construction and operation of MD Solar 1. These streams flow into Nanjemoy Creek, a tributary of the Potomac River. This will not only damage the tributaries surrounding Nanjemoy Forest, it will also degrade Chesapeake Bay and its surrounding tributaries.

IV. Potomac Riverkeeper Network's Concerns Regarding MD Solar 1

a. Nonpoint Source Runoff

Nonpoint source runoff has been one of the greatest challenges associated with reducing the amount of pollutants that discharge into the Potomac River and the Chesapeake Bay. This type of runoff is typically associated with agricultural activities, but it also includes pollutant discharges from highways and logging operations. Clearing forested areas leads to excess sediment being deposited into navigable waters.[5] Nonpoint source pollution associated with forestry include the removal of streamside vegetation, road construction and use, timber harvesting and mechanical preparation for the planting of trees – with road construction and road use contributing up to 90 percent of the total sediment from forestry operations.[6] The deposited sediment discharges excess nutrients, such as phosphorus, into navigable waters; leading to eutrophication, algae blooms, depleted oxygen excessive salinity, turbidity from sediment, and toxicity that forever alters a marine ecosystem.[7] Harvesting trees in the area beside a stream can also affect water quality by reducing the streambank shading that regulates water temperature and by removing vegetation that stabilizes the streambanks.[8] These water quality changes harm aquatic life by limiting food sources, shade, and shelter by decreasing areas suitable for species who cannot tolerate warmer temperatures.[9]

Maryland's anti-degradation policy seeks to avoid environmental damages such as these. Anti-degradation policies seek to ensure that states maintain sufficient water quality standards by evaluating proposed projects to determine if they will degrade water quality.[10] According to Maryland's anti-degradation policy:

> "Certain waters of this State possess an existing quality that is better than the water quality standards established for them. The quality of these waters shall be maintained unless: (1) the Department determines a change in quality is justifiable as a result of necessary economic or social development; and (2) The change will not diminish uses made of, or presently existing, in these waters."[11]

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[3] *Maryland's High Quality Waters (Tier II)*, MARYLAND DEPARTMENT OF THE ENVIRONMENT (2017), https://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Pages/Antidegradation_Policy.aspx; 40 CFR 131.12.
[4] COMAR 26.08.02.04-1.A
[5] *Polluted Runoff: Nonpoint Source (NPS) Pollution*, EPA (2018), https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution.
[6] *Nonpoint Source: Forestry*, EPA (2016), https://www.epa.gov/nps/nonpoint-source-forestry.
[7] Jan G. Laitos & Heidi Ruckriegle, *The Clean Water Act and the Challenge of Agricultural Pollution*, 37 VT. L. REV. 1033, 1033 (2013).
[8] *Nonpoint Source: Forestry, supra*.
[9] *Id*.
[10] COMAR 26.08.02.04 and 26.08.02.04-1; 40 CFR 131.12.
[11] COMAR 26.08.02.04-1.B

MDE has yet to provide any evaluations regarding how MD Solar 1 fulfills these requirements. Instead, the justifications given fail to provide any insight regarding how the proposed project will comply with the state's anti-degradation policy.

Georgetown University hired Eastern Research Group to conduct a third-party assessment of environmental impacts, yet Georgetown has consistently refused to share that assessment with the public despite numerous requests to do so. The evaluation provided by Origis to the Public Service Commission states that Origis has agreed to keep any land disturbances other than the direct disturbances listed in the project application past a 35ft distance. But that evaluation neglects to provide information about how the construction will avoid sheet flow and sediment runoff from the clearing of trees and grading to remove slopes. Further, Origis' argument that a 35ft buffer will sufficiently protect the stream from the runoff is inadequate and misleading. The evaluation failed to analyze how increased runoff due to the deforestation will prevent sediment loading and erosion during a storm. Thus, it is highly likely that the removal of over 240 acres of forested area will lead to excess sediment discharges into the nearby bodies of water. These sediment discharges will inevitably harm the water quality of these water bodies, which will then harm the water quality of the nearby tributaries that depend on the health of Nanjemoy Forest. MDE should therefore deny the permit sought by Origis and Georgetown University based on the failure to provide any information about how the planned project will mitigate environmental damage that Maryland's anti-degradation policy seeks to avoid.

b. Wetlands

Maryland has acknowledged the importance of preserving and protecting wetlands due to the benefits they provide. These benefits include habitats for fish and other life, flood conveyance and storage, groundwater recharge, sediment control, nutrient removal, barriers to wave and erosion, timber production, recreation, education and research, and food production.[12] The Maryland Department of the Environment stated its commitment to protecting wetlands given their benefits. Specifically, the MDE has created a Wetlands and Waterways Program to protect Maryland wetlands and waterways from "loss and degradation."[13] MDE's support of MD Solar 1 illustrates the Department's inconsistencies regarding wetlands by approving a program that will inevitably harm them.

The application for the MD Solar 1 project fails to provide any analysis regarding the impacts the project will have on the conversion of nontidal wetlands to emerging wetlands. According to COMAR 26.23.02.04(A)(2), a regulated activity must first try to avoid and minimize all adverse impacts on nontidal wetlands on the site. Origis provided some methods that might minimize MD Solar 1's impact to the waterways and surrounding wetlands; but, Origis failed to consider alternatives that have the potential to avoid these impacts altogether. According to COMAR 26.23.02.04(D), an applicant shall demonstrate that there is no practicable alternative to the proposed site in order for construction to continue as planned. Origis has failed to provide an analysis about why construction in Nanjemoy Forest is the only practicable option, and, therefore, MDE should deny the issuance of a permit for construction in Nanjemoy Forest.

Origis has also failed to provide an analysis about how the removal of 240 acres of Nanjemoy Forest will not threaten surrounding tributaries. During storms, the root systems of trees and

[12] Shirley Jeanne Whitsitt, *Wetlands Mitigation Banking*, 3 ENVTL. LAW. 441, 445 (1997).
[13] *Wetlands and Waterways Program*, Maryland Department of the Environment (2019), https://mde.maryland.gov/programs/Water/WetlandsandWaterways/Pages/index.aspx.

forest undergrowth slow down and absorb rainwater. Without this filtration system, the water would carry increased sediment deposits into the wetlands and surrounding tributaries. When Origis conducted a site inspection, Origis and its contractors characterized the quality of the forest on the proposed property as "scrubby and poor."[14] However, when the Maryland Power Plant Research Program visited the site, the organization concluded that the property had "large, mature trees."[15] Origis' plan to remove these "large" trees will remove a filtration system that ensures that the tributaries and wetland do not exceed their sediment assimilative capacity. Without this filtration system, the wetlands located within Nanjemoy Forest will not be able to function as they once did, causing more environmental damage than the project intends to prevent.

c. The Piscataway Tribe

Origis, Georgetown University, and the MDE have neglected the concerns of the Piscataway Tribe when considering the construction of MD Solar 1. The Accokeek Foundation and the National Park Service have identified land in Nanjemoy Forest as significant to the Piscataway Tribe.[16] A study conducted by the Indigenous Cultural Landscapes in 2015 further concluded there are likely significant cultural resources located north of Nanjemoy Creek. MDE may not be required to consider the significance of the land to local tribes, but under the U.N. Declaration of Rights for Indigenous Peoples the tribe has a right to self-determine the land's significance to their culture.[17] Therefore, an evaluation from the Piscataway Tribe must be considered before any construction begins in Nanjemoy Forest.

Indigenous people have suffered countless injustices from the U.S. Government. If Origis, Georgetown University, and MDE continue to neglect the concerns of the local Piscataway Tribe, then these institutions will be perpetuating a shameful and harmful precedent of ignoring the concerns of indigenous people over how their ancestral lands and resources are impacted. Members of the Piscataway Tribe have already voiced their concerns regarding MD Solar 1, but their concerns have yet to be recognized.[18] At a minimum, MDE should not make a decision on this project before engaging in formal consultation with the Piscataway Tribe, in order to solicit and respond to their concerns.

V. Conclusion

PRKN commends Georgetown University for seeking to develop new renewable energy resources in Maryland and reduce its reliance on fossil fuels. Georgetown University is one of the most prestigious academic institutions in this country, and the University's desire to use renewable resources has the potential to establish a precedent amongst other academic institutions to pursue these resources as well. But if the pursuit of those resources results in local environmental harm that outweighs the environmental benefits of renewable energy, then the

[14] *Environmental Review Document Project NO. 16009.00*, H&B Solutions, LLC, p.1 and 11, https://georgetownvoice.com/wp-content/uploads/2018/12/HB-Solutions-Environmental-Review.pdf.
[15] *Project Assessment Report for Maryland Solar 1 (Shugart Valley Place Solar)*, MD Dept. of Nat. Res., p.12, http://dnr.maryland.gov/pprp/Pages/default.aspx.
[16] Scott M. Stricklan et al., *Indigenous Cultural Landscapes Study for the Nanjemoy and Mattawoman Creek Watersheds*, ST. MARY'S COLLEGE OF MARYLAND (2015), https://www.nps.gov/chba/learn/news/upload/NanjemoyMattawoman-ICL-FINAL-red.pdf.
[17] *United Nations Declaration of Rights for Indigenous Peoples*, p.3, https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.
[18] Marty Madden, *Statewide Opposition to Local Solar Farm Surfaces at Hearing*, THE BAY NET (2019), http://www.thebaynet.com/articles/0219/statewideoppositiontolocalsolarfarmsurfacesathearing.html.

whole purpose is undermined, and Georgetown risks being tainted with the stain of a controversial project that irreparably harms local natural resources. And approval of this project would set a dangerous precedent wherein the "ends" of pursuing renewable energy justify the means.

MD Solar 1 will clear 240 acres of forested land in order to create a solar farm for the students and faculty at Georgetown University. Clearing such a large amount of forested land will pollute the tributaries that depend on Nanjemoy Forest to prevent excess sediment deposits. These excess sediment deposits will lead to unprecedented nonpoint source pollution and will damage the nontidal wetlands in the area. MD Solar 1 is thus an ill-fated attempt to mitigate climate change.

In order for climate change mitigation to be successful, renewable energy projects must be sited and built in a manner that does not trade one environmental harm for another, particularly when it comes to degrading local and regional water quality. Increasing our reliance on renewable energy in this region will be a hollow victory if it comes at the expense of our rivers and contributes to the ongoing pollution of the Bay.

Sincerely,

Phillip Musegaas
Vice President of Programs and Litigation
Potomac Riverkeeper Network
3070 M St NW
Washington, DC 20007
(202) 888-4929

Cc: Ben Grumbles, Secretary, Maryland Department of the Environment
Susan Dorsey, Assistant Secretary, Maryland Department of the Environment