# SOLAR FACILITY SITING GUIDANCE WEBSITE

2022 Maryland Land Conservation Conference Renewable Energy & Land Use Panel June 1, 2022



# OBJECTIVE OF THE GUIDANCE

- One place to find Maryland-specific solar facility siting information:
  - Local government experience and approaches in developing siting ordinances.
  - State-level judicial and administrative decisions affecting local siting ordinances.



### **OVERALL GOALS**

- Make webpage as useful and helpful as possible to local governments.
- Inform development and adjustments to local solar facility siting ordinances.
- Seeking feedback to ensure the information is of maximum value and is organized and presented in the most useful way.



# REASONS FOR THE GUIDANCE

- The guidance is mainly focused on utility-scale (>2 MW) solar facilities given concerns regarding:
  - Loss of agricultural or forest land
  - Relatively long facility lifespan
  - Viewshed impacts
  - Solar glare



# REASONS FOR THE GUIDANCE

- In response to the recommendations of the 2019-2020 Governor's Task Force on Renewable Energy Development and Siting to mitigate climate change and land impacts.
- The Task Force report includes a recommendation to provide guidance to local governments to:
  - minimize the impact of solar facilities on rural lands.
  - facilitate the siting of solar facilities on developed lands and brownfields.



#### ACRES OF LAND NEEDED FOR SOLAR RPS IN MARYLAND

- Acres per MW = 8
- Acres of land required for new land-based solar = 25,487
- Agricultural land percentage (assumed) 60%
- Acres on agricultural land = 15,292
- Source: Final Report, Governor's Task Force on Renewable Energy Development and Siting. August 2020. MEA estimate.
- Maryland's RPS standard (50% renewable energy resources by 2030; 14.5% solar by 2028).



# Annapolis Renewable Energy Park



Reuse of land Closed landfill 12 MW 70 acres 50,000 solar panels



# WHAT'S ON THE WEBSITE?

- Case studies of local siting ordinances
- Key state-level CPCN and judicial decisions
- Overview of Maryland processes for reviewing, modifying and approving proposals for utility-scale solar facilities, including PSC and PPRP resources
- Links to the PPRP Smart DG+ online mapping application and Smart DG+ Zoning Guide
- Information on ensuring compatibility of utility-scale solar facilities with military installations



### **CASE STUDIES**

- Local facility siting ordinances examples from both urban and rural jurisdictions.
- Examples of solar development on brownfields.
- Best practices and lessons learned based on the experience of local governments.
- Description of ordinance development process used.



# **EXAMPLE OF CASE STUDY**

#### Solar Facility Siting Case Study

Jurisdiction: Queen Anne's County

Type: Utility-Scale, Undeveloped Land

Zoning Used: Overlay District

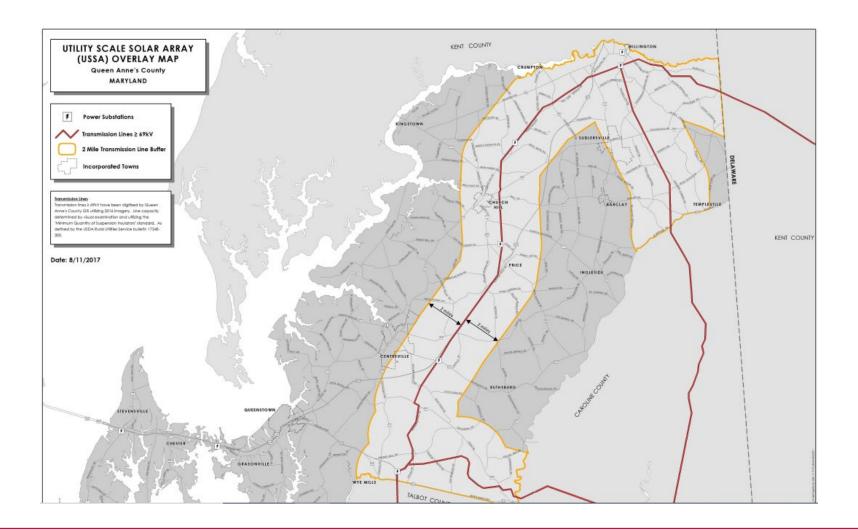
Process: Stakeholder-Driven

Description of Process:

The county asked the solar industry to identify the area of the county of interest to them. The solar industry identified the area two miles from the 69-kV transmission line that extends north to south in the county. Using the Smart DG+ tool from the Power Plant Research Program at the Maryland Department of Natural Resources, county staff created an overlay map to inform its public outreach effort. One benefit of the map is that it showed the public that not all lands in the county were of interest to the solar industry (such as the areas adjacent to 34.5 kV transmission lines).



# QUEEN ANNE'S COUNTY SOLAR OVERLAY MAP





# IMPACTFUL DECISIONS ON CPCNS

- Utility-scale solar facilities generally must obtain a Certificate of Public Convenience and Necessity (CPCN).
- CPCN decisions include those by the Maryland Public Service Commission (PSC) and Power Plant Research Program (PPRP).



# IMPACTFUL DECISIONS ON CPCNs

- Excerpts from the PSC final order and/or joint secretarial PPRP letter.
- Links to news or blog articles regarding the decision.
- Links to the source documents on the PSC website to allow tracking of case progress over time.



### **EXAMPLE OF CPCN DISCUSSION**

#### STATE OF MARYLAND

December 17, 2019

Jason M. Stanek, Chairman Public Service Commission 6 St. Paul Center Baltimore, Maryland 21202

Re: Case No. 9499, In the Matter of the Application of Morgnec Road Solar, LLC for a Certificate of Public Convenience and Necessity to Construct a 45 MW Solar Photovoltaic Generating Facility in Kent County, Maryland

#### Dear Chairman Stanek:

In accordance with Section 3-306(b) of the Natural Resources Article, and the process described in Section 7-207 and 7-208 of the Public Utility Companies Article, we are enclosing our preliminary recommendation in Case Number 9499 on behalf of the Maryland Departments of Natural Resources, Environment, Agriculture, Transportation, Commerce, Planning, and the Maryland Energy Administration. Our proposed license conditions and recommendation relate to



### **EXAMPLE OF CPCN DISCUSSION**

- PPRP decision to not oppose CPCN for Morgnec Road Solar, LLC. Kent County December 2019. The PPRP joint secretarial letter noted opposition of the project by the county, adjacent municipality, and local citizen and community groups. The PPRP joint secretarial letter did not recommend denial of a CPCN for a 45 MW utility-scale solar facility, noting the following: (1) the project would occupy land currently used for agricultural production; (2) the land in question is designated as a future growth area by the county and by the adjacent municipality; (3) the goal is for the applicant, county and town to reach agreement regarding the project's operation for a finite period of time while accommodating future growth of the adjacent municipality; (4) the PPRP's recommended licensing conditions #3 and #31 provide for the expiration of the CPCN upon the PSC's determination that it is in the public convenience and necessity that the project decommission to allow for the growth of the adjacent municipality, consistent with the comprehensive plans of the county and the town.
  - The PSC has not yet made a decision regarding the CPCN.
  - For more details on the case, including the PPRP joint secretarial letter and associated licensing conditions, see item 45 under PSC Case Number 9499 at:

    <a href="http://www.psc.state.md.us/search-results/?">http://www.psc.state.md.us/search-results/?</a>

    <a href="mailto:q=9499&x.x=14&x.y=14&search=all&search=case">q=9499&x.x=14&x.y=14&search=all&search=case</a>



# JUDICIAL DECISION: PERENNIAL

- The Maryland Court of Appeals held that the PSC is the ultimate authority in siting utility-scale solar projects under the Public Utilities Article §7-207
- conduitstreet.mdcounties.org/2019/07/19/court-of-appealsholds-solar-siting-decisions-are-made-by-the-state-not-bylocal-zoning/



#### PPRP SMART DG+

- Website links to the PPRP Smart DG+ online mapping application and Smart DG+ Zoning Guide
- https://dnr.maryland.gov/pprp/Pages/SmartDG.aspx



#### COMPATIBILITY WITH MILITARY INSTALLATIONS



Military Aviation and Installation Assurance Siting Clearinghouse Office of the Assistant Secretary of Defense for Sustainment





#### COMPATIBILITY WITH MILITARY INSTALLATIONS

- Commerce is conducting a Renewable Energy Compatible Siting Project.
- This project will help the state provide resources to the renewable energy industry to identify areas in the state that are compatible with military operations.
- Will include new map layers to incorporate into Smart DG+
- https://commerce.maryland.gov/compatibleuse



### SOLAR FACILITY SITING GUIDANCE

https://planning.maryland.gov/Pages/OurWork/envr-planning/solar-siting/solar-siting-home.aspx



# QUESTIONS?

Contact:

Jason Dubow, Manager
Resource Conservation & Management Unit
Maryland Department of Planning
jason.dubow@maryland.gov

