Agricultural Solar Stakeholder Group Meeting
Thursday, November 18, 2021; 9:00 am - 12:00 pm

Meeting Registration Link:

https://mainestate.zoom.us/webinar/register/WN_MCVJo2bzRO2tjHvr0pqrhg

Desired Outcomes

By the end of this meeting we will have:

- Discussed all major components of a draft final report and identified areas requiring modification or addition
- Provided an opportunity for public input

Agenda

What	When
Welcome; Agenda and Ground Rules Review – Jo D.	9:00 - 9:05
Overarching Reactions to Draft Report	9:05 - 9:20
Draft Report Discussion	9:20 - 10:20
Public Input	10:20-10:30
Break	10:30 - 10:40
Draft Report Discussion cont'd	10:40 - 11:40
Next Steps, Public Comment Period, and Final Meeting: Thurs., Dec. 16, 9:00 am – 12:00 pm	11:40 - 12:00

Note: Agenda item times are subject to change based on the progress of the group.

Agricultural Solar Stakeholder Group Ground Rules

1. Meetings start and end on time.
2. Come prepared, having read all meeting materials in advance.
3. Be present and engaged.
4. Strive for equal air time, enabling everyone to participate fully.
5. Listen with curiosity and an openness to learning and understanding.
6. Adopt a creative problem solving orientation.
7. Commit to working toward consensus.
8. Meetings and materials are public, and comments are on the record.
9. Humor is welcome; it's OK to laugh while addressing a serious topic.

Decision-making: Decisions by the Stakeholder Group are advisory and represent recommendations to the Department of Agriculture, Conservation & Forestry and the Governor's Energy Office. The Stakeholder Group will strive to make decisions by consensus. Where not possible, recommendations supported by the majority will be advanced and other perspectives will be noted.

Meeting Schedule:

Th. 11/18	https://mainestate.zoom.us/webinar/register/WN_MCVJo2bzRO2tjHvr0pqrhg
Th. 12/16	https://mainestate.zoom.us/webinar/register/WN_5I5XIFfPTZuzYxPZGGraYA

Recommended Agricultural Solar Siting Policy Tools

Tool & Tool Description *Including suitability for DG and/or utility-scale development.*	**How Tool Could Encourage Co-Located[1] Development**	**How Tool Could Encourage Dual-Use[2] Development** *Note: Conversation about whether dual-use development is economically or logistically feasible in Maine is ongoing.*	**Land Use Considerations** *How could the tool encourage solar development in particular locations?*	**Implementation Mechanism** *Including implementation opportunities and obstacles.*	**Tool Pros**	**Tool Cons**
Dual-Use Pilot Program Establish fixed-length and capacity pilot program for the siting of projects that meet program criteria for dual-use.	Potentially provides an opportunity for DACF to work with PUC and other agencies to define co-location in Maine. Projects meeting co-location criteria may be provided with financial incentive, location-based waiver, or other benefit as determined by the program.	Potentially provides an opportunity for DACF to work with PUC and other agencies to define dual-use in Maine. Projects meeting dual-use criteria may be provided with financial incentive, location-based waiver, or other benefit as determined	Can dictate specific siting criteria that limits project size or siting on selected land-use categories unless it is a dual-use project, or could incentivise the siting of projects as dual-use when on farmland.	Legislation with agency rulemaking regarding program criteria.	Provides opportunity to conduct necessary research on compatible crops and other co-location systems to determine best practices for dual-use within a defined pilot program timeframe or capacity limit.	This may cause questions around how to determine the program criteria with the limited research data available. Projects considered for the dual-use program will require greater review of added project requirements and could also require on-

[1] "Co-location" involves traditional ground-mounted solar installations (designs that have not been modified to increase flexibility and compatibility for agricultural use) that host non-agricultural plantings with additional environmental benefits. For example, co-location could include the grazing of animals as part of planned vegetation management, planting pollinator habitat, or planting ground cover or other plant species to benefit the surrounding ecosystems. Co-location could also involve siting a more traditional solar installation on a portion of farmland, while retaining other portions of the farm property for agricultural use. This may prove to be one way to help support the continued viability of farm operations; but it is not dual-use solar. *The stakeholder group agreed upon this definition at their July 22, 2021 meeting.*

[2] "Dual-use" projects involve the installation of solar photovoltaic panels on farmland in such a manner that primary agricultural activities (such as animal grazing and crop/vegetable production) are maintained simultaneously on the farmland. To qualify as dual-use, the solar installation must (1) retain or enhance the potential for the land's agricultural productivity, both during operation of the array and after its decommissioning, (2) be built, maintained, and have provisions for decommissioning to protect the land's agricultural resources and utility, and (3) support the viability of the farming operation. *The stakeholder group agreed upon this definition at their July 22, 2021 meeting.*

		by the program.			Also lays the foundation for a permanent dual-use solar energy program, if successful.	going verification of compliance.
Current Use Taxation Treat land enrolled in the farmland current use taxation program that is housing a dual-use project as not subject to the withdrawal penalty as long as the farming operations continue to meet the farmland current use taxation requirements. There could also be a carve out for smaller solar projects that are primarily used to create energy for on-farm use. (VT) In both cases, the solar array would be treated as agricultural infrastructure or equipment. The size of the project and the corresponding acreage would influence the size of the withdrawal penalty and therefore how much of an economic incentive the removal of the penalty is for developers.	*Not applicable.*	This type of treatment would remove the added cost of the withdrawal penalty, thereby creating an incentive for developers to install a dual-use project if they are looking to site a solar project on land enrolled in the farmland current use taxation program.	This tool could encourage dual-use projects on land enrolled in farmland current use taxation that also falls within a land use category where dual-use projects are preferential.	Legislation	This would provide an economic incentive for developers to install dual-use projects on enrolled land without creating additional costs for ratepayers. Since the requirements for the farmland current use taxation program would still need to be met and agricultural production would still need to occur on the land, the removal of the withdrawal penalty does not change the nature of the current use taxation program or expand the property tax reductions to other circumstances. This would create consistency across	There could be confusion as to whether the removal of the withdrawal penalty is creating another/separate exemption from property taxes. The removal of the withdrawal penalty would not address the pressure being placed on municipal budgets by current use taxation programs, and could be seen as a reduction in municipal revenue that would otherwise be coming to the town.

					municipalities with respect to how dual-use projects are treated on land enrolled in the farmland current use taxation program.	
Permit By Rule A Permit By Rule (PBR) would be administered by the Maine DEP and would grant Site Law permits in a streamlined manner to projects that meet particular standards. This tool is a good fit for larger DG and smaller utility-scale projects (20 to ~50 acres). Arguably, larger projects should receive full Site Law review.	A PBR could encourage co-located projects by including co-location as a standard.	A PBR could encourage dual-use projects by including dual-use as a standard.	Particular land areas, such as brownfields or other developed areas, could be included in the standards. Projects that locate on or away from these areas would then meet those standards.	Rulemaking.	This tool is already being contemplated by the DEP. PBRs support regulatory efficiency, which is attractive to both the regulator and the regulated. A PBR can include several standards that serve to achieve many land use and development type goals.	A Site Law PBR would not capture projects smaller than 20 acres. This tool is arguably not appropriate for large utility-scale projects. It may be difficult to craft a PBR that is both attractive to developers and that serves the stakeholder group's goals.
Substation Hosting Capacity Mapping ***Tool Description:***	Additional information can help developers minimize interconnection costs, increasing the ability to choose higher-cost co-location sites.	Additional information can help developers minimize interconnection costs, increasing the ability to choose higher-cost dual-use sites.	Comprehensive data that indicates which areas of the grid are saturated and which have capacity for additional interconnections	Regulatory approval of interconnection tariff changes (Chapter 324). Tariff changes could be	Encourages developers to consider sites by likelihood of a successful and cost-effective interconnection, thereby bringing	Utilities have objected in the past to providing detailed hosting capacity maps, citing cost concerns and grid security risks. Not always effective to

Detailed hosting capacity maps that include analysis from the utility perspective could help developers become more efficient at targeted site selection for all sizes of projects.			can minimize land use stress in any one location.	preceded by a legislative process. Implementation would need to be actively monitored and managed by PUC staff.	more clean energy projects online faster and decentralizing the number of interconnection applications from saturated locations. Minimizing interconnection costs provides significant incentive for developers to pursue desired siting outcomes. Comprehensively mapping and updating the grid increases reliability, increases resiliency, and often brings needed three-phase power to rural locations.	rely on utilities to provide accurate and timely data. Any future tariff changes would likely not impact current queue of projects and associated grid upgrades.
"Adder" Tariff Program ***Note:*** *We recommend that the DG Stakeholder Group review this tool in concert with other siting interests and consult the Agricultural Solar Stakeholder Group.*	Provides financial incentive for developers to design on-farm arrays as co-location. Because co-location may not have significantly higher construction costs, the adder for co-location activities, such as	Provides financial incentive for developers to design on-farm arrays as dual-use. The adder may need to be large enough to compensate for the added construction	An adder could be a significant financial incentive to site dual-use on categories that provide a market-based incentive to choose dual-use.	Legislative / Rulemaking (a far less likely pathway)	If adders are significant enough, dual-use may be more profitable on farmland, vs traditional design.	Risks added costs being passed onto the ratepayers. Projects of utility scale may be less influenced by adders, due to the significant increase in

Tool Description: Compensation Rate adders would be available to eligible facilities that meet location-based or project design-based requirements.	pollinator habitat, may not need to be as high as those for dual-use.	costs associated with dual-use solar.				construction costs associated with utility scale dual-use. Will require greater review of added project requirements and on-going verification of compliance to maintain adder.
Increase Municipal Planning and Technical Capacity Planning and/or technical assistance capacity and/or financial support could be added to natural resource agencies (such as DACF, DEP, or IFW), the Governor's Energy Office, or directly to municipalities, COGs, or other networks to help municipalities and/or farmers consider and evaluate options that support solar development while minimizing impacts to important agricultural resources.	Resources could include staff resources, trainings, and informational resources to provide detailed support for the development and siting of co-located projects.	Resources could include staff resources, trainings, and informational resources to provide detailed support for the development of dual-use projects.	Resources could include staff resources, trainings, and informational resources about land use considerations.	It depends. Possibilities include legislation to create a new position(s) or funding to support a grant program.	This could help towns avoid moratoriums or otherwise not welcome solar.	Does not address cost considerations.
Mitigation Fund / In-Lieu-Fee Program ***Note:*** *With further development and information, a mitigation fund could be used in combination with other tools to support program*	The mitigation fund payment could be structured to encourage co-location by reducing or eliminating the payment for that type of project.	The mitigation fund payment could be structured as it is in NY, where the developer describes the steps that will be taken to avoid, minimize, remediate,	The program could include tiered fees based on different land use categories and related siting preferences.	Legislation to establish the program. Implementation of the program would require determining the	The mitigation fund/ILF structure provides an economic incentive for developers to minimize impacts on important agricultural and	Additional research or analysis would be needed to determine the appropriate factors for calculating the mitigation fee. There are not yet

goals in the future. ***Tool Description:*** Awarded solar projects are responsible for making an agricultural mitigation payment to a designated fund based on the extent to which the solar project footprint overlaps with important agricultural soils or natural resources. The scale of the project could relate to the scope of the impact and therefore influence the mitigation fund payment.		and offset impacts to agricultural, natural resources, and potentially conserved land and open spaces. This could encourage the producer to retain or introduce agricultural activity in the solar facility area. Dual-use projects could be encouraged through the reduction or elimination of a mitigation payment for that type of project.		monetary amounts tied to different components of the mitigation/ILF payment. And that determination would in turn need to be based on both the monetary amounts needed to support mitigation fund uses (i.e. how much money is needed to support land conservation and transmission upgrades) as well as what mitigation/ILF payments are sufficient to influence development.	natural resources. It provides a mechanism for potentially protecting other important resources or making needed system upgrades when impacts cannot be minimized with respect to a particular project.	many examples of the criteria that could be used to guide the allocation of the mitigation funds.
State Procurement Evaluation / Scoring ***Note:*** *We recommend that the DG Stakeholder Group review this tool in concert with other siting interests and consult the Agricultural Solar Stakeholder Group.*	Scoring could give favorable treatment to co-located projects. Procurements could also include a tranche specifically for co-located projects.	Scoring could give favorable treatment to dual-use projects. Procurements could also include a tranche specifically for dual-use projects.	Scoring could give favorable treatment to projects that are located on or away from particular land areas.	Legislation, followed by an RFP from the PUC that includes scoring metrics.	This could capture all projects that supply energy to ratepayers. The PUC has already created a scoring system that captures many of	This would not capture net-energy billing projects. Scoring systems are inherently coarse and may not capture the nuances of preferred projects.

Tool Description: The Maine Public Utilities Commission (PUC) would evaluate and score proposed projects' agricultural and natural resource impacts (w/ support from natural resource agencies) when selecting projects for future procurements. This tool could be used for both DG and utility-scale projects.					the values held by the stakeholder group for the failed DG procurement. The procurement failed for reasons separate from the scoring system.	