



**Office of  
Renewable  
Energy Siting**

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March 24, 2023

Hon. Liz Krueger, Chair  
Senate Finance Committee  
172 State Street  
Capitol Building  
Room 416  
Albany, New York 12247

Hon. Helene E. Weinstein, Chair  
Assembly Ways and Means Committee  
Room 923  
Legislative Office Building  
Albany, New York 12248

RE: February 14, 2023 Joint Hearing on Environmental Conservation Budget – Supplemental Information on Agricultural Resources

Dear Senator Krueger and Assemblymember Weinstein:

Thank you for the opportunity to appear before the Senate Finance Committee and Assembly Ways and Means Committee on February 14, 2023. In response to the request for additional information regarding potential cumulative impacts on agricultural resources that may result from the construction and operation of major solar facilities, the Office of Renewable Energy Siting (ORES or the Office) respectfully provides the attached information.

Thank you in advance for sharing this information with the Senators and Assemblymembers in attendance during the February 14th Executive Budget Hearing.

If you should have any further questions, please do not hesitate to contact me.

Cordially,

*Houtan Moaveni*

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Executive Director

cc: Hon. Michelle Hinchey, Chair – Senate Agriculture Committee  
Hon. Donna A. Lupardo, Chair – Assembly Agriculture Committee  
Hon. Pete Harckham, Chair – Senate Environmental Conservation Committee  
Hon. Deborah J. Glick, Chair – Assembly Environmental Conservation Committee  
Hon. Kevin S. Parker, Chair – Senate Energy and Telecommunications Committee  
Hon. Didi Barrett, Chair – Assembly Energy Committee



## **I. Executive Law § 94-c Agricultural Resources Protection Overview**

Consistent with New York’s Climate Leadership and Community Protection Act (CLCPA), and the additional enabling legislation at Executive Law § 94-c and its implementing regulations at 19 NYCRR Part 900 (Part 900), the mission of the Office of Renewable Energy Siting (ORES or Office) is to consolidate the environmental review and permitting of major renewable energy facilities (25 megawatts or greater) in New York State into a single forum that provides a coordinated and timely review of siting permit applications to help meet the State’s renewable energy goals, while ensuring the protection of the environment with consideration of all pertinent social, economic, and environmental factors, and providing opportunities for local government and community participation in the permitting process.

The Office recognizes the importance of conserving highly productive agricultural lands in the State. The Office’s regulations at Part 900, which were developed in consultation with other State agencies and authorities that provided both substantive expertise and experience, including the New York State Department of Public Service (NYS DPS), the New York State Department of Environmental Conservation (NYS DEC), the New York State Department of Agriculture and Markets (NYS AGM), and the Office of Parks, Recreation and Historic Preservation (OPRHP), require a thorough assessment of the potential significant adverse impacts of a proposed major renewable energy facility on agricultural resources. The Part 900 regulations establish a clear standard to apply in evaluating the potential impacts to agricultural resources that may result from the construction and operation of major renewable energy facilities. The protection of resources requires a balancing act that is intrinsic to new development, and major renewable energy facilities are no exception. Accordingly, this standard follows the hierarchy of avoiding, minimizing, and mitigating potential facility impacts, thus balancing the need to efficiently advance the State’s clean energy goals while protecting farmland and farmers.

Under the following provisions of Part 900, applicants must demonstrate that potential significant adverse impacts to agricultural resources would be avoided to the maximum extent practicable, and must offer minimization or mitigation measures to offset any unavoidable impacts:

### **1. Pre-application Procedures (19 NYCRR 900-1.3):**

Section 900-1.3 of 19 NYCRR requires applicants to engage in a comprehensive pre-application consultation process with the host municipalities, communities, the Office, and involved State agencies. At the earliest point in a facility’s planning and development process, applicants are required to initiate discussions with staff from the Office and NYS AGM regarding potential significant adverse impacts to agricultural resources that may result from the construction and operation of a major renewable energy facility.

**2. Exhibit 15: Agricultural Resources (19 NYCRR 900-2.16):**

Section 900-2.16 of 19 NYCRR requires applicants to provide a comprehensive analysis of a facility's potential temporary and permanent significant adverse impacts on agricultural resources, including active agricultural lands (defined as land in active agricultural production three of the last five years) and lands classified by the New York State Agricultural Land Classification system as mineral soil groups (MSG) 1 through 4.

Exhibit 15 sets forth the first Statewide requirement for the evaluation of potential significant adverse impacts of renewable energy facilities to agricultural resources. The Office's regulations require a thorough evaluation of proposed design and construction measures to avoid and minimize impacts to agricultural resources, including the stripping, stock-piling, and return of topsoil to disturbed areas; seeding of areas under the solar panels to preserve those areas for future potential agricultural use following decommissioning; using a tracking system that employs driven posts requiring minimal ground disturbance and no concrete foundations; and the co-location of access roads and collector lines where feasible.

Applicants are required to explore options for co-utilization of farming at major renewable energy facilities to allow for continued agricultural production within the facility site. The proposed activities should be consistent with and support the existing on-farm agricultural production whenever possible.

**3. Uniform Standards and Conditions (19 NYCRR 900-6):**

All major renewable energy facilities pursuant to Executive Law § 94-c must adhere to the "NYSAGM Guidelines for Solar Energy Projects – Construction Mitigation for Agricultural Lands" and "NYSAGM Guidelines for Agricultural Mitigation for Wind Power Projects," including requirements for the protection of topsoil, preservation of existing natural or man-made drainage features, and preservation of farmland that is cultivable and accessible to farm machinery to the maximum extent practicable.

To ensure farmland in New York State is protected over time, all major renewable energy facilities permitted pursuant to Executive Law § 94-c will be decommissioned and the land will be restored to its original condition at the end of the facilities' useful lifetimes. Further, applicants are required to provide financial security for decommissioning and site restoration activities, in accordance with an approved Decommissioning and Site Restoration Plan and pursuant to the NYSAGM Guidelines. Finally, an independent third-party agricultural monitor is required to oversee compliance with agricultural conditions and requirements during facility construction, as well as during facility decommissioning.

Pursuant to Executive Law § 94-c and Part 900, a siting permit is developed based on an extensive record compiled during a public permitting process. Prior to issuing a final siting permit, the Office is required, among other determinations, to make the finding that a proposed facility's potential

significant adverse environmental impacts, including but not limited to impacts to agricultural resources, are avoided, minimized, and mitigated to the maximum extent practicable. In making the required findings, ORES is directed to consider New York's CLCPA targets and the environmental benefits of the proposed major renewable energy facility.

## **II. Cumulative Analysis of Major Solar Facilities**

ORES, in close coordination with NYSAGM, conducts a thorough assessment of potential significant adverse impacts of major renewable energy facilities to agricultural resources on a case-by-case basis, and makes a determination based on the facility-specific siting permit application and associated hearing record developed explicitly for that application. With every application, ORES specifically evaluates the potential cumulative significant adverse impacts to agricultural resources during the construction and operational life of the proposed major renewable energy facility.

Below is what the Office considers to be the most accurate snapshot of cumulative impacts of major solar facilities on the State's agricultural resources. For the purpose of this report, Office staff used the most recent available agricultural and spatial data<sup>1</sup> for all major solar facilities approved as of March 2023 through the Public Service Law Article 10 and Executive Law § 94-c processes. To ensure a fair comparison of facilities, Office staff meticulously reconstructed outdated datasets presented in older permit applications using spatial analysis techniques so that the information could be reconciled with data on recently proposed facilities. Accordingly, the data reported herein may not reflect minor siting adjustments presented by applicants in their final plans, profiles, and detail drawings for construction. Finally, the data is unadjusted for any presumed beneficial return of areas not occupied by facility components to agricultural use and return of all or any portion of the relevant land to agricultural use through an agricultural co-utilization plan approved by the Office in consultation with NYSAGM in compliance with the Office's regulations at 19 NYCRR 900-2.16.

For purposes of this analysis, Office staff considered both the limit of disturbance (LOD) and permanent conversion of farmland. A facility LOD includes all areas that are temporarily and permanently impacted by the construction of a major renewable energy facility. Examples of temporary impacts on the land resulting from the construction of a major solar facility may include: the movement of equipment and vehicles; use of construction laydown areas; and installation of the solar panels, mounting posts and racking, inverters, security fencing, buried lines, access roads, and construction of the substation and operations and maintenance building. Permanent impacts on the land typically include the constructed substation building; operation and maintenance building; access roads that are to be left in place at the direction of the landowner; and buried lines, piers, and footers constructed 48 inches or more beneath the soil surface. As discussed above, applicants are required, among other requirements, to avoid, to the

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<sup>1</sup> 2019 data for the National Land Cover Data (NLCD) and the 2021 Soils Data for Mineral Soil Groups (MSG) 1-4.

maximum extent practicable, siting facility components and access roads in active farmland to allow continued agricultural activities. Areas that are temporarily impacted by the construction activities of major solar facilities would be reseeded and restored to their original conditions. Upon decommissioning, the agricultural lands impacted by major solar facilities would be restored to preconstruction condition, thereby allowing the resumption of agricultural uses if the landowners so choose.

Based on ORES staff's analysis, the cumulative LOD for all approved major solar facilities would occupy approximately 0.23 percent of all farmland<sup>2</sup> and approximately 0.16 percent of all prime farmland<sup>3</sup> in the State. Only approximately 0.006 percent of all farmland and approximately 0.004 percent of all prime farmland in the State would be permanently disturbed. Further, Table 1 depicts the cumulative limits of disturbance and permanent conversion of prime farmland as well as all farmland within each host County where major solar facilities approved pursuant to Executive Law § 94-c are located. Table 1 also includes major solar facilities approved pursuant to Public Service Law Article 10 to the extent the facilities are located in the same host Counties as Executive Law § 94-c facilities.

**Table 1. Cumulative Analysis per County**

| <b>County</b> | <b>Percentage of Cumulative LOD per Total County Farmland</b> | <b>Percentage of Cumulative LOD per Total County Prime Farmland</b> | <b>Percentage of Cumulative Permanent Conversion per Total County Farmland</b> | <b>Percentage of Cumulative Permanent Conversion per Total County Prime Farmland</b> |
|---------------|---|---|--|--|
| Cortland      | 0.46%   | 0.14%   | 0.01%  | 0.002%   |
| Genesee       | 2.33%   | 2.01%   | 0.03%  | 0.030%   |
| Jefferson     | 0.81%   | 0.80%   | 0.02%  | 0.017%   |
| Livingston    | 1.15%   | 0.64%   | 0.03%  | 0.016%   |
| Monroe        | 0.07%   | 0.04%   | 0.00%  | 0.002%   |
| Orleans       | 0.92%   | 0.36%   | 0.02%  | 0.006%   |
| Schuyler      | 0.42%   | 0.05%   | 0.01%  | 0.001%   |
| Suffolk       | 0.41%   | 0.06%   | 0.02%  | 0.002%   |

<sup>2</sup> Farmland is defined by the United States Geological Survey (USGS) National Land Cover Database (NLCD, last updated in 2019) land cover classified as Pasture/Hay and Cultivated Crops. For the analysis of aggregate agricultural impacts, NLCD is best suited as it is the most consistent data source for regional-level analysis.

<sup>3</sup> Prime farmland refers to soils classified as mineral soil groups MSG 1-4 under the NYS Agriculture Land Classification system. The Office and NYSAGM identified lands within these soil groups as the State's most fertile agricultural land and therefore the highest priority to preserve for agricultural use.

### III. Conclusion

The Office recognizes that major solar facility construction has the potential to cause temporary impacts to agricultural resources, as well as to permanently convert agricultural lands to a non-agricultural use. However, the Office finds that the major solar facilities approved pursuant to Executive Law § 94-c do not have a significant negative impact on the Statewide or countywide agricultural community given the minimal permanent conversion of agricultural lands as illustrated in Section II of this report. The Office's finding is consistent with the New York State Siting Board's precedent established under Public Service Law Article 10.

Based upon its participation in the Farmland Protection Working Group created by the Legislature,<sup>4</sup> the Office acknowledges that proposed renewable energy facilities are frequently seen as a lifeline that can often make the difference between the continuity of farming in local communities for the next generation rather than the closure of farming operations. Further, the Office notes the Legislature's findings in the CLCPA that climate change is causing an increase in "negative health outcomes" for New Yorkers and is "having a detrimental effect on some of New York's largest industries, including agriculture."<sup>5</sup> In compliance with these legislative findings, the Office notes that if climate change continues unabated, agricultural resources in New York State will be forever altered.

The Office continues to track and compile data made available from permit applications. In addition, the Office welcomes the opportunity to have more accurate, Statewide data made accessible to the Office, to inform the review of major renewable energy facilities at a cumulative level. The Office looks forward to continued discussions with all stakeholders to find pragmatic solutions that balance the need to efficiently advance major renewable energy facilities and achieve New York's climate goals while also protecting farmland and farmers.

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<sup>4</sup> See Executive Law § 94-c(8).

<sup>5</sup> See L. 2019, ch. 106, § 1 at 1(f).