



Ray Burger, Director of Planning
Town of Dryden
93 E. Main Street
Dryden, NY 13053

November 20, 2017

Re: Response to T.G Miller dated November 9, 2017; Dryden Road Solar Farm

Dear Mr. Burger,

We have reviewed the second round of comments regarding our application, as provided by T.G. Miller on November 9, 2017. Please find below and attached our responses.

1. View study is inconsistent with planting plan C150.

Response: We believe this comment relates to Viewshed #3 in Attachment H. We will revise the Viewshed #3 analysis to make the tree placement consistent with the screening to be placed along the access road. In addition, we will also revise Attachment L to make drawing C150 consistent with Viewshed #4 in Attachment H.

Comment: Viewshed 3 appears to show trees along Ferguson Road but C130 does not show trees extending east onto Lot 48. Revise viewshed or planting plan as necessary.

Response: The viewsheds and site plans have been updated for consistency, as well as reflecting comments below regarding placing screening within the subdivision lines.

2. Is a new access drive proposed on NYS Route 13? Plan 05.1 shows a drive to the AC disconnects. If so has DOT been contacted?

Response: The proposed access drive to the solar array will be from Ferguson Road (Town Road), utilizing an existing farm access road. The access drive shown on Plan 05-1 is a short access drive to the NYSEG installed utility poles and equipment at the interconnection point to the NYSEG electrical grid on NYS Route 13. This access road may be required by NYSEG for maintenance of their equipment. We will add this access drive on NYS Route 13 to Attachment L (Site Plan Set) so that Plan 05.1 and Attachment L match.

DRS did contact the NYS DOT Regional Permit Director Tina Crowley, and it was communicated that the access drive off NYS Route 13 would not pose a traffic concern or a safety concern to the NYS DOT as it is a limited use (maintenance with no high traffic generation) and not for public use. It was indicated to DRS that the Town of Dryden should review the plan and it would be a Town decision as to the proposed access drive. NYSEG would go through the standard utility permit with the NYS DOT for installation of their equipment.

Comment: Consider showing the access drive as permanent and list NYSDOT permit on Part 1 FEAF under section B.g.

Response: The short access drive off NYS Route 13 is required by NYSEG to access their utility poles. Currently DRS' plans do not show this as a permanent access drive; however, all the ground disturbance acreage accounts for this access drive. NYSEG cannot determine the nature of the access drive until

their site planning begins following local municipal approval.

3. Are there NYSEG easements and private underground electric easements required for the electric feed from each proposed lot to the point of connection? Are there existing easements on the property that should be shown on the survey? Existing overhead electric easements?

Response: DRS entered into a lease agreement with the landowner of the proposed solar facility site which grants DRS rights to install an underground feed from the solar arrays to the NYSEG interconnection point. NYSEG easement and permit division will complete any utility easement required for the project with either project owner or landowner, as applicable. There are existing NYSEG easements on the property which generally run with the existing NYSEG utility lines.

Comment: Show approximate location of proposed NYSEG easement. Provide easement from landowner to applicant for underground electric from the proposed NYSEG easement to proposed Lot 1 along the electric route. See image below. Show all existing utility easement in location of proposed plantings or verify plantings are outside of any utility vegetation clearing zones.



Response: The site plans have been updated to include (a) an approximation of existing NYSEG easements and (b) any easements required from the landowner for interconnection to the NYSEG grid. All plantings will be outside of utility vegetation clearing zones.

4. Completed
5. It doesn't appear they are applying any panel setbacks from the proposed lot lines. It would be helpful to have the lot lines and panels overlaid on the same map with setback dimensions shown from the proposed subdivision lines. FEAF Part 1 B.c has marked no ZBA. Is this correct?

Response: Based on discussions with the town, we did not include any setbacks between the two proposed subdivisions as it was our understanding that the law may be changed (possibly as soon as November) to eliminate set backs on adjacent properties on which the solar projects would be located. This would allow DRS to compact the system and allow for a greater setback from public roads. We will update the EAF to include the ZBA approval in the event the Town does not revise the existing zoning laws prior to this project being up for approval from the Town/Planning Boards.

Comment: It appears Lot 2 has been revised to be a flag lot connecting to Ferguson Road. It appears proposed Lot 1 will be a landlocked parcel. Provide road frontage for Lot 1 as required.

Response: Site plans have been revised to include frontage on Ferguson Road for both Lot 1 and Lot 2. In addition, Site plans have been revised to reflect a 50' buffer on each side of the subdivided lot line to adhere to the current zoning rules in effect requiring 50' setbacks. All calculations and acreage information reflects this 50' buffer. In the event that the zoning law is changed (which has been

indicated to DRS) to allow a lesser setback between internal subdivisions, we would be amenable to moving the south project north to remove the 2 x 50' buffer (which would also require a change in the subdivision lines). This change would reduce the footprint of the project and move the south array approximately 100' further back from Ferguson Road.

6. Is there a lease agreement for the site?

Response: Yes, there is an executed lease agreement with the project site landowner.

Comment: Please provide the Town with a copy.

Response: Lease is executed with Landowner and a redacted copy is attached hereto.

7. It appears they are proposing a common drive. If so have they submitted a common drive agreement? The survey shows "shared access". Will emergency vehicle access be required?

Response: There is a single access drive from Ferguson Road that will allow access to both projects. We have not yet submitted a common drive agreement. Our assumption was that this would be pursued after we have final site plan and subdivision approval. If there is something we should be doing now, please let us know and we are happy to submit.

Comment: If Lots 1 and 2 are proposing to use the same access then a common drive agreement will be required.

Response: A draft Common Drive Agreement is hereby provided for review and will be finalized upon approval of site plans.

With regards to emergency vehicle access, please let us know if we should contact town emergency services (i.e. fire department) and what sort of feedback we should be requesting.

Comment: Emergency access will be required. Coordinate drive width with Code Enforcement Officer. Revise SWPPP as necessary to include impervious surfaces. Update FEAF E.1.b as necessary.

Response: Per discussion with Dave Sprout, code enforcement officer for the Town, it has been determined that a new permanent driveway is not necessary for continued access to the site and that the existing farm access road will be acceptable for emergency vehicles. During construction, a temporary driveway gravel driveway will allow for safe access by construction vehicles. The temporary driveway will be returned to its current condition following construction.

8. Completed

9. There are no maps or description outlining prime farmland but it is mentioned in Part 1 under Project Description. This analysis should be expanded.

Response: Question E.3.b of the FEAF asks whether agricultural lands consisting of highly productive soils are present. The NYSDEC FEAF Workbook instructs the Applicant to identify all soils that are prime, or farmland of statewide significance, or identified as being in mineral soil groups 1 to 4. The project area contains mostly the Erie channery silt loam, 3 to 8% slopes (EbB) soil type and the Langford channery silt loam, 2 to 8% slopes (LaB), which are both listed as farmland of statewide importance by the USDA Natural Resource Conservation Service (NRCS). A small area of Bath and Valois soils, 5 to 15% slopes (BgC) exists in the north portion of the site where electrical lines will be installed. This soil type is also listed as farmland of statewide importance. Therefore, the response to Question E.3.b is "yes" for the entire project area.

The Town's solar energy systems law states that a ground-mounted large-scale solar energy system shall not be located in an area of prime farmland soils as identified by the USDA-NRCS or alternative available resource, unless approved by the Town Board in conjunction with the special use permit approval process, subject to criteria listed in subsection F.3. The USDA NRCS Farmland Classification designates map units as prime farmland, farmland of statewide importance, farmland of local importance, or farmland of unique importance. Prime farmland is defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. Soils of unique, statewide, or local importance are not considered prime farmland. Neither the Town's solar energy system local law nor the Town's zoning regulations provide a town definition for prime farmland. The Town solar energy system law specifically states "prime farmland", and therefore, using the USDA NRCS definition of prime farmland, the project is not located over prime farmland. The FEAF Endnote 6 has been revised to add information regarding the classification of the farmland soil types.

Comment: Revise FEAF E.1.b Use the "other" row to identify acreage of land with soil groups 1-4. Revise FEAF part E.3.b to include all soil groups 1-4 to be consistent with the SEQR handbook.

Response: The FEAF has been revised to reflect the comments noted. Please note that the acreages represented in the EAF include both the total acreage of soil groups 1-4 (59 acres) for the entire subject parcel and also the acreage of the soils in the project area (7.47 acres). Furthermore, it should be noted that all impacts to soil groups 1-4 will be temporary. Upon decommissioning of the site, the property can be returned to an agricultural use.

10. Landscaping appears to fall outside of proposed subdivision lot lines. Is there a separate maintenance agreement for plantings? Lots lines should be shown on all drawings.

Response: We do not currently have a separate maintenance agreement for the plantings but we can get one in place with the landowner to address this issue. We will update the plans to reflect all proposed lot lines. Please refer to the revised drawings C130 and C150.

Comment: A long-term maintenance plan must be provided for the vegetative screening that will be required as mitigation of visual impacts. The maintenance plan must be specific; defining heights at which vegetation will be trimmed for shading purposes, establishing time limits for replacing damaged or dying plantings and requiring replacement plantings to be of equal height or diameter to the initial planting. The method of enforcing the maintenance plan will need to be determined. Consider shifting the proposed plantings placed along proposed lot line to be fully within the leased lots.

Response: The screening has been relocated within the leased lots. A long term screening maintenance plan is attached hereto.

11. Is there a preference on chain link fence or agricultural fence? They are proposing 8 feet tall chain link fence.

Response: Our preference is chain link but if the Town would prefer an agricultural fence we can accommodate.

Comment: Consider use of agricultural fence to allow passage of smaller animals and for visual mitigation.

Response: DRS will provide fencing that will allow for passage of small animals and to mitigate visual impact.

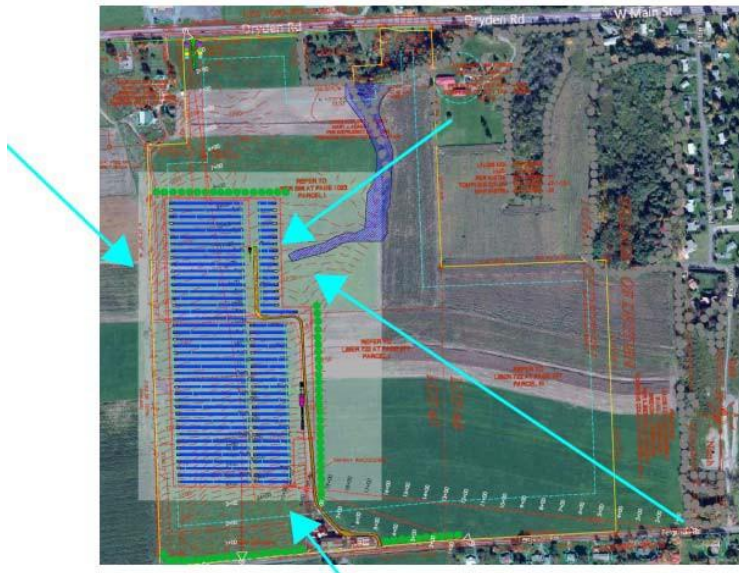
12. **Expand the viewshed study to include cumulative impact of two large scale solar projects within the same proximity, specifically 2150 Dryden Road. Are there any residences that are able see both solar projects?**

Response: DRS has driven the area and from what can be inferred from publically available information does not believe any residents will have a materially impacted view of both projects. In particular, a review of aerial imagery suggests that 2150 Dryden Rd has existing vegetation to the east and west that should soften views of the proposed solar projects. We will provide visual simulations from Willow Glen Cemetery and Ferguson Rd at the southeast corner of the subject parcel, at the request of Ray Burger, under separate cover.

13. **It appears the existing farm access road will be truncated with the proposed project. Will the farm road be rerouted and if so where?**

Response: The landowner may re-route farm access either down the west boundary of the property or the east side of the array. We have no control over what the landowner does on the non-leased areas of his property. There will be no farm vehicles that will utilize the portion of the array access road that passes through the arrays.

14. **Revise line of sight profiles to accurately resemble solar panel direction and full extent of panel coverage over the profile view. Revise visual simulations showing new site arrangement. Provide an additional visual simulation along Ferguson Road between viewshed #3 and #4 for the residences located in this area. It would be preferable if the view could be from an actual residential property verse a view from the street. Note height of plantings shown in visual simulation or consider provide multiple simulation for height at time of planting and at height at full growth. Provide additional line of sight or visual simulations for properties located at 2215 and 2235 Dryden Road and 215 Ferguson Road.**



Response: Revised line of sight studies as well as update visual simulations from public areas will be provided under separate cover.

15. **Incorporate a commitment and requirement to mitigate glare, if any, that is realized from**

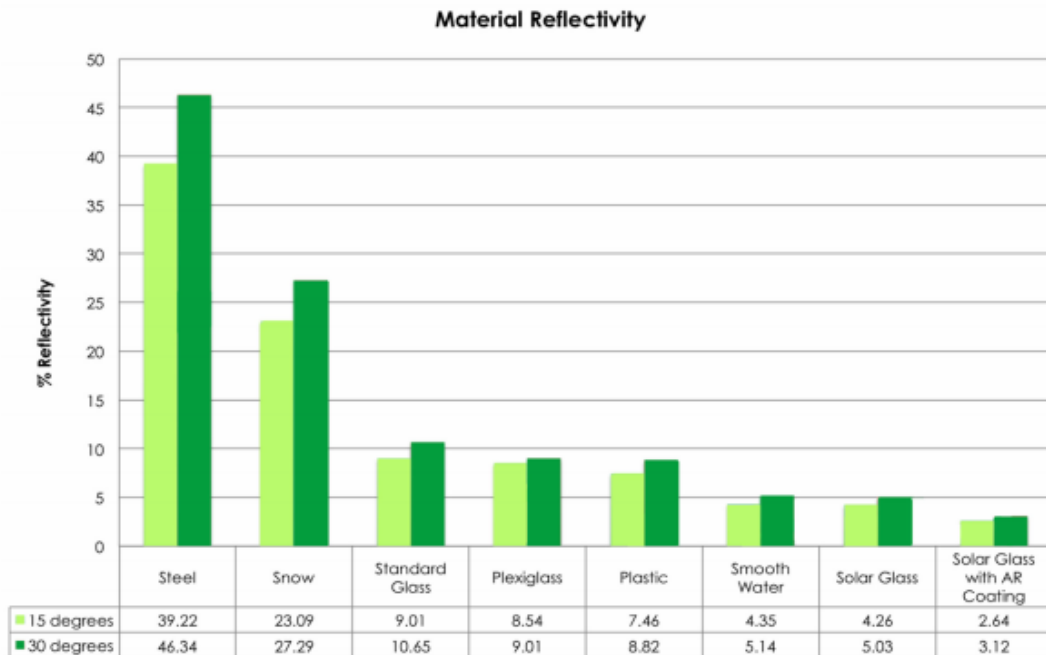
within the existing residential structures that immediately adjoin or are in close proximity to the solar array property boundary. This would require the applicant to install additional vegetative screening of the species and height needed at appropriate line-of-sight locations to intercept the glare. The term of this condition should be at least five years following the date the arrays are fully operational.

Response: DRS’ vegetation and screening plan incorporates mitigation of glare and we do not anticipate any residences having any material issues with glare from the projects based on the panel orientation and location of nearby homes. Please see Section 4.1.3 of our Project Memorandum for further discussion on glare.

Glare occurs when sunlight is reflected off of a flat, shiny surface. Solar panels are flat and somewhat shiny, but they are designed to capture light — not reflect it.

The reflectivity of solar panels is considerably lower than standard window glass because solar panels use high transmission, low iron glass that absorbs more light, reducing the amount of reflectance and improving the efficiency of the panel.

The amount of glint and glare produced from a solar PV system will vary according to the angle of the panels, with lower angles producing less glint and glare. This is illustrated in the below graph, the figures for which were taken from a technical report produced by SunPower (SunPower Solar Module Glare and Reflectance, 2009).



Photovoltaic panels actually cause less glare than standard home window glass. And research has shown that they reflect less light than snow, white concrete and energy-efficient white rooftops: http://www.fsconline.com/downloads/Papers/2014%2011%20Solar_Glare.pdf

Solar cells are coated with an anti-glare coating designed to absorb sunlight. The panel glass is often stippled, or textured with tiny indentations, to lessen the amount of sunlight that is reflected. Glare studies have evaluated the potential glare impacts from solar panels and determined that panels with a single layer of anti-reflective coating reflect less than 5% percent of the sunlight striking it.

Several US airports feature solar arrays on their own or adjacent premises, including the existing Cornell project near the Ithaca-Tompkins County Airport.

In the event the Town has any remaining concerns, we are amenable to agreeing to a stipulation in any Special Use Permit to specifically address any particular resident complaint regarding glare to the extent it is justified.

16. Trenching for underground electric cables or conduits shall follow the NYS Department of Agriculture and Markets “Minimum Construction Standards for Water/Sewer Transmission Mains Located Wholly or Partially in an Agricultural District”.

Response: We’ve reviewed the trenching requirements in the “Minimum Construction Standards for Water/Sewer Transmission Mains Located Wholly or Partially in an Agricultural District”, and given the nature of our project, do not believe these standards apply. All trenching is designed in accordance with the National Electric Code (NEC) 2014, the code that applies to NY State solar projects. We also reference our topsoil protocols, which are included on sheet C550 in the previously provided plans. Topsoil will be removed and stored in stockpiles sufficiently removed from other excavation or disturbance to avoid mixing.

17. How will vegetation below the panels be maintained? Will the site be grazed?

Response: We are amenable to utilizing sheep grazing to maintain the vegetation under the solar panels, with the contingency that such method is acceptable to the projects’ investors and does not impede our ability to procure appropriate insurance policies on the projects. DRS already plans to utilize sheep grazing in another project located in Callicoon, NY, and is otherwise familiar and comfortable with doing so for the Dryden projects. In the event that utilizing sheep grazing creates untenable financing or insurance liabilities, a local landscaping firm will be utilized for the upkeep of the project site as needed. Such maintenance is expected to be semi-annually to maintain vegetation growth under and around the modules such that shading does not occur.

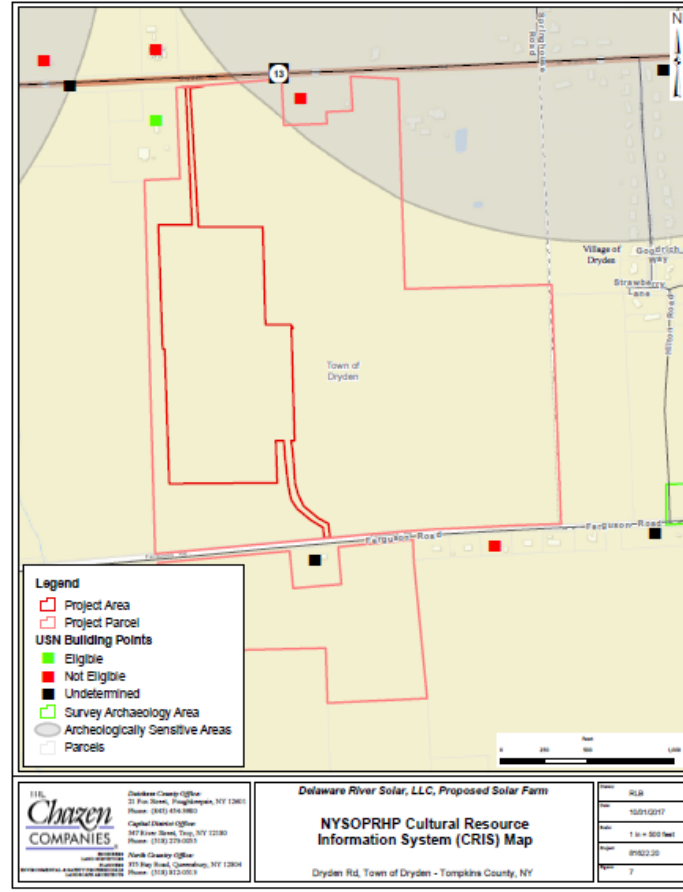
18. Revise NOI within the SWPPP as follows:

- a. **#12. Site is within a watershed with AA classified waters.**
- b. **#13 complete**
- c. **#22 Verify**
- d. **Sign Page 6 and 14**
- e. **#42 mark as Yes**
- f. **#43 mark as Yes**

Response: The NOI has been revised to address these items.

19. Provide an official confirmation letter from NYSOPRHP that the project will not have an impact on historic or archeological resources.

Response: Based on DRS’ site assessment, there is no impact on historic or archaeological resources, please see CRIS map below. A confirmation letter from the NYSOPRHP has been requested and will be provided to the Town when received.



20. Revised attached FEAF Part 1 as noted.

Response: FEAF as revised is attached.

Please feel free to contact us with any other questions and we can be available anytime at your convenience to discuss.

Sincerely,

Pete Dolgos
 Senior Vice President
 Delaware River Solar, LLC