

**PETITION NO. 1313** – DWW Solar II, LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the proposed construction, maintenance and operation of a 26.4 megawatt AC solar photovoltaic electric generating facility on approximately 289 acres comprised of 5 separate and abutting privately-owned parcels located generally west of Hopmeadow Street (US 202/CT 10), north and south of Hoskins Road, and north and east of County Road and associated electrical interconnection to Eversource Energy’s North Simsbury Substation west of Hopmeadow Street in Simsbury, Connecticut. } Connecticut  
} Siting  
} Council  
December 21, 2017

**Opinion**

**Introduction**

On June 29, 2017, pursuant to Connecticut General Statutes (CGS) §§16-50k and 4-176, DWW Solar II, LLC (DWW) submitted a petition to the Connecticut Siting Council (Council) for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need (Certificate) is required for the construction, maintenance and operation of an approximately 26.4 megawatt (MW) alternating current (AC) solar photovoltaic electric generating facility located on approximately 289 acres comprised of 5 separate and abutting privately-owned parcels located generally west of Hopmeadow Street (US 202/CT 10), north and south of Hoskins Road, and north and east of County Road in Simsbury, Connecticut (Tobacco Valley Solar Project). DWW is a subsidiary of Deepwater Wind LLC, a developer of renewable energy projects.

As it applies to this petition, CGS §16-50k<sup>1</sup> states in relevant part, “...the Council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling... (B) the construction or location... of any grid-side distributed resources project... with a capacity of not more than sixty-five megawatts, as long as such project meets air and water quality standards of the Department of Energy and Environmental Protection.” The project would have a capacity of approximately 26 MW and would be a “grid-side distributed resources” facility, as defined in CGS §16-1(a)(37).

On November 12, 2015, pursuant to Section 1(c) of Public Act (PA) 15-107 and Sections 6 and 7 of PA 13-303, the Department of Energy and Environmental Protection (DEEP) issued notice of a Request for Proposals (RFP), in coordination with Rhode Island and Massachusetts, for Class I renewable energy sources (Tri-State RFP). The proposed project was submitted in response to the Tri-State RFP. On June 27, 2017, DEEP issued its final determination in the RFP and selected 9 out of 31 proposed projects to enter into long-term power purchase agreements (PPA) with the electrical distribution companies (EDCs) for a combination of energy and environmental attributes. The proposed project was not selected by DEEP. In the Tri-State RFP, Massachusetts and Rhode Island selected 11 out of 31 proposed projects to enter into long-term PPAs with the EDCs. Of those projects selected, one was DWW’s Tobacco Valley Solar (TVS) Project. DWW entered into a PPA with Massachusetts utilities for the sale of electricity and renewable energy credits.

**Public Benefit**

Pursuant to CGS §16-50p, a public benefit exists when a facility is necessary for the reliability of the electric power supply of the state or for the development of a competitive market for electricity. PA 05-1, An Act Concerning Energy Independence, portions of which were codified in CGS §16-50k, established a rebuttable presumption that there is a public benefit for electric generating facilities selected in RFPs. This project was selected in a Tri-State RFP.

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<sup>1</sup> CGS §16-50k was modified by Public Act 17-218 effective July 1, 2017. Public Act 17-218 does not apply to the proposed project because the petition was received by the Council on June 29, 2017.

### **Proposed Project**

As proposed, the Project consists of the installation of approximately 109,888 fixed 340 Watt solar photovoltaic panels and associated ground equipment on five parcels with a collective acreage of 289 acres. According to Town property cards, three of the site parcels (Parcels 1, 3 & 4) are zoned industrial and the remaining two parcels (Parcels 2 & 5) are zoned residential. All five parcels are currently owned by River Bend Development CT, LLC. DWW has secured an option to purchase all five parcels from the landowner.

Collectively, the five parcels consist of 131 acres of active agricultural fields, 151 acres of deciduous and evergreen woodland, of which 36 acres is forested wetland, and 7 acres of non-forested wetlands and ponds. Unimproved dirt roads interconnect the agricultural fields and provide access from public roadways. A 115-kV Eversource right-of-way traverses Parcel 2 and Parcel 3. A municipal sewer easement is located on Parcel 3 and Parcel 5. There are no buildings on the parcels except for three abandoned barns on Parcel 1 and two abandoned barns on Parcel 3.

The Project Site is bound to the west by residential development and Squadron Line School, a Town elementary school, the north by Town-owned open space and undeveloped land, the east by residential development and undeveloped land, and the south by Town-owned open space and residential development. To date, no applications for development per current zoning designations on any of the five parcels have been submitted to Town agencies.

The project development area, including the solar fields, equipment pads, and access roads, would be located on 156 acres of the 289-acre Project Site. The project area is divided into three distinct sections: the North Solar Field located generally north of the Eversource right-of-way (Parcels 1 and 2), the Middle Solar Field located south of the Eversource right-of-way and north of Hoskins Road (Parcels 3 and 4), and the South Solar Field located south of Hoskins Road (Parcel 5).

The solar field areas would be accessed by 20-foot wide gravel driveways extending from public roadways, including an existing access from County Road that leads to the North Solar Field, a new, defined access road from County Road near Hoskins Road that enters the Middle Solar Field and a new, defined access road that enters the South Solar Field from Hoskins Road.

A 20-foot wide gravel access road would be established around the perimeter of each solar field area. The solar field perimeter access roads would be located inside of the perimeter fenceline, with access controlled by chain link swing gates. The project access roads would consist of compacted substrate covered with a geotextile fabric and 12 inches of crushed stone. The main access roads would extend to access roads that go around the perimeter of each solar field area. The total length of the project access roads is 4.2 miles

### *Electrical Interconnection*

The Project would be interconnected with the 23-kV distribution system at Eversource's North Simsbury Substation located off Dorset Crossing. An interconnection agreement with Eversource is being finalized to determine the exact route of the interconnection and whether the connection would be on the distribution side or transmission side of the grid. Two underground interconnection routes are being examined by DWW and Eversource; a northern cable route that would extend east from the North Solar Field then south, into the substation; and the southern cable route that would extend northeast from the Middle Solar Field along a public road. There would be 14 concrete inverter/transformer pads located throughout the Project to convert the DC power (37.4 MW) produced by the solar panels to AC power (26.4 MW) that would be transmitted to the substation for use on the regional electric grid.

### *Project Alternatives*

DWW investigated other parcels that were reasonably available within the Connecticut, Rhode Island and Massachusetts region over a 2 year period with the intent of securing properties to bid into a variety of RFPs. Some of the RFPs, such as the Tri-State RFP, had minimum capacity requirements that required large parcels, or a combination of parcels such as the TVS Project, in order to meet bid requirements. DWW's criteria in selecting sites include, but are not limited to, landowner availability, favorable topography, avoidable environmental constraints, and proximity to a transmission or distribution substation.

Three properties were investigated in Connecticut but were ultimately rejected due to wetland constraints, access and property constraints, presence of endangered species, and on-site contamination. DWW also searched for brownfield sites, but none were found that were large enough to host a project of this size.

During the proceeding, the Department of Agriculture (DOAg) suggested a clustered, low impact development with rooftop solar, passive solar or geothermal on a portion of the property with the remaining areas of forestland, wetlands and farmland protected with a conservation easement. This type of project does not exist on a grid-scale within the surrounding area and would not be a feasible alternative because of the proposed project size and the acreage required to produce the amount of electricity agreed upon through the Tri-State RFP.

The total amount of power to be delivered in accordance with the PPAs is 26.4 MW AC. The Project was also sized to be economically viable from a construction/operation aspect. Reduction in the size of the Project could have both contractual and financial consequences. The Project was bid at a certain size and financial assumptions were modeled to comport with the Project of that size.

### **Public Safety**

The proposed project would comply with the National Electrical Code (NEC 2017) and all applicable safety and fire protection codes and standards. In the event of a fault within the facility, the system would have all protection systems including fuses, breakers, and reclosers that would isolate a section of the array or the entire solar facility, if necessary. DWW would train emergency responders to safely respond to an emergency at the solar facility. First responders would have a universal key to enter facility gates and facility shut off switches. The facility would be constructed to applicable building codes, including those pertaining to snow loading and wind loading. Decommissioning of the project at the end of its useful life would include solar facility infrastructure removal plans and site restoration plans. The Council will require that a detailed Decommissioning Plan that addresses all of the facility materials/components be provided in the Development and Management (D&M) Plan for the Project.

The Project Site is located 0.8 miles southwest of the Simsbury Airport. DWW notified the Federal Aviation Administration (FAA) of the Project and the FAA subsequently issued a Determination of No Hazard to Air Navigation. The FAA did not request a glare analysis in its determination.

Access to the site would be controlled by a seven-foot high chain link fence. Access drive entry gates would control access to the solar field perimeter access roads.

The primary or dominant source of noise for the proposed project would be from the 14 inverters. The collective noise from the inverters would be in compliance with the DEEP Noise Control Standards. Noise resulting from Project construction is exempt from the DEEP noise standards.

## **Environmental**

### *Historic and Archaeological Resources*

DWW performed an archaeological assessment of the Project Site upon consultation with the State Historic Preservation Office (SHPO). Based on initial archeological field assessments, no additional archaeological examination was recommended and construction would have no adverse effect on archaeological resources.

Five abandoned tobacco barns exist on the Project Site and are associated with a past use of the area by Cullman Brothers, Inc., one of the largest growers of tobacco leaf wrappers in the state in the early part of the twentieth century. All five barns date from the early portion of the twentieth century and are eligible for the National Register of Historic Places. The tobacco barns have an association with the seasonal presence of minority workers during and after World War II. Dr. Martin Luther King Jr. worked on one of the farms in the Barn Door Hills/Firetown Road area and wrote about his time working and living in non-segregated Simsbury as a pivotal moment in his life. Although no evidence to date has been found that directly links Dr. Martin Luther King Jr. to the Project Site and the barns, the agricultural landscape and barns remain as important links to American history. A former dormitory where Dr. Martin Luther King Jr. purportedly stayed during his time in Simsbury was burned down by the Simsbury Fire District in the 1980s.

Due to the past history of the general area, the Town requests that DWW retain all five barns, conduct a barn condition assessment and repair the barns. Additionally, the Town requests that DWW consider allocating some space within one of the barns to be used for interpretive exhibit space on the Cullman farms and their laborers or for other educational exhibits.

The Council finds that an existing tobacco museum in a tobacco barn currently exists at Northwest Park in Windsor and any new museum would be duplicative as well as an unnecessary financial burden to DWW. It seems that that an exhibit incorporating minority workers and Dr. Martin Luther King Jr.'s time in this area can be easily added to the existing tobacco museum at Northwest Park. In regards to educational outreach, DWW indicated it is amenable to conducting an educational program specific to renewable energy at local schools and to local organizations.

DWW is consulting with SHPO regarding the disposition of the barns at the Project Site. DWW is committed to retaining the two barns adjacent to Hoskins Road (Parcel 3) and one barn on Parcel 1 that is located out of the Project limits. Two other barns located on Parcel 1 would be removed as they are within Project-related areas.

The residences at 85 Hoskins Road and 100 Hoskins Road, west of the Middle and South Solar Fields, date from the mid-nineteenth century and are examples of the Greek Revival type. Both buildings are considered eligible for listing on the National Register of Historic Places. Due to the existing agricultural fields adjacent to 85 Hoskins Road, and the current historic-agricultural character of the Hoskins Road/County Road intersection area, the Town requests that the South Solar Field (Parcel 5) be eliminated from the Project to protect this Town-recognized "Character Place".

Given these concerns, DWW could re-design the Project by re-locating all or portions of the solar panels located south of the 85 Hoskins Road residence to other areas of the Project Site (Parcels 1 & 2). The relocation would enlarge the buffer to Squadron Line School, decrease Project visibility from the historic home at 100 Hoskins Road and only leave solar panels on one side of the property at 85 Hoskins Road, consistent with other area of the Project as there are no other residences along the perimeter of the Project Site that have solar panels abutting two sides of a residential property.

### *Visibility*

The solar panels would be colored blue/black with an anti-reflection coating on the cover glass to reduce reflection as much as possible. The Project is well screened from most areas due to existing, intervening vegetation and sloping topography. The existing vegetative buffers along Berkshire Way, Litchfield Drive, Knollwood Circle, Halwood Drive, and Munnisunk Drive would limit open views toward the Project. If necessary, DWW proposes to plant native evergreens to supplement existing vegetation on or between the solar field and abutting properties. The plantings would be on an as needed basis. DWW anticipates plantings for abutting properties located on Knollwood Circle, Howard Street, Berkshire Way, and County Road.

For the Hoskins Road/County Road area and the adjacent recreational fields at Squadron Line School where there is no intervening vegetation, DWW proposes to install a 10-foot architectural fence and intermittent native tree/shrub plantings in the buffer between the fence and road. The Town requested a 10 to 12-foot tall berm system with landscaping and split-rail fencing to entirely block the facility from view.

The Council finds this request unreasonable given that the panels extend approximately 10 feet above grade and the Town's Zoning regulations allow for dense plantings to be installed to screen a multi-story building. Additionally, the berms could impact prime and important agricultural soils through disturbance and compaction, and could create water drainage issues and barriers to wildlife movement. The Council also finds the 10-foot fencing an acceptable form of screening and fencing type for this area given that a mix of fencing already exists in the general area in the form of chain link and stockade fencing. Shorter berms with landscape plantings could be used as a potential screening method as long as water control and any safety concerns are addressed. The Council will require a Visual Mitigation Plan be provided in the D&M Plan for the Project.

### *Agriculture and Soils*

The Project Site is located in the Connecticut River Valley microclimate region, an area that has a different climate and soils than most of New England that allows for a greater potential for agriculture, especially due to a longer growing season. According to the latest Natural Resources Conservation Service mapping, there are 64.7 acres of Prime Farmland and 65.1 acres of Farmland of Statewide Importance in active agricultural use at the Project Site. Forested areas of the Project Site contain 25.2 acres of Prime Farmland soils and 65.1 acres of Farmland soils of Statewide Importance.

Approximately 131 acres of the Project Site are currently leased to third parties for agricultural use. In 2016, most of the farmland in the Project area was managed for row crops such as summer squash, specialty gourds, cucumber, and melons. Tobacco and corn were grown on a portion of the site this past growing season.

Construction of the Project would remove 131 acres of agricultural land from production, disturbing approximately 40 acres of prime and important farmland soils within existing agricultural fields. DWW would establish a cover crop of grasses/forbs in the solar field areas. These semi-managed grassland/forbs could result in improvement of soil health over the 25 year life of the Project. An exact seed mix for different areas of the Project Site would be specified in the D&M Plan.

In order to maintain some agricultural use of the Project Site, DWW would be willing to discuss the possibility of leasing or utilizing the approximate 4 to 6 acre field area in the non-Project portion of Parcel 5 for agriculture. As an additional benefit, DWW is committed to establishing a one-acre area of model pollinator habitat at the Project Site, in a location to be determined, consistent with the DOAg sponsored recommendation set forth in CGS §16-50hh to establish pollinator habitat for electric transmission line right-of-ways.'

Public Act 490 is Connecticut's Land Use Value Assessment Law for Farm Land, Forest Land and Open Space Land that allows land to be assessed at its use value rather than its fair market or highest and best use value for purposes of local property taxation. The Project Site is currently enrolled in the Public Act 490 Program.

DWW offered all five parcels to DOAg, free of charge, including a perpetual agricultural conservation easement, to restrict future non-agricultural development upon decommissioning of the Project. DOAg declined the initial offer, but DOAg and DWW continue to discuss the concept of restricting future development rights of the Project Site. The Town was not included in these discussions and seeks to be an active partner in discussing the long-range use of these properties. The Town's Plan of Conservation and Development envisions a Northern Gateway development on portions of the Project Site that includes light industrial, commercial, residential development and associated roads. Given the differing overall future land use goals of the Project Site, the Council encourages DWW to continue to meet with DOAg, the Town, and local land preservation groups to determine overall land use of the five parcels at the end of the Project's life.

DWW proposes to restore the soils within the soil field areas upon Project Decommissioning. Restoration measures include de-compaction and restoration of soil to a density and depth consistent with the surrounding areas. In all areas restoration shall include, as reasonably required, leveling, terracing, mulching, and other necessary steps to prevent soil erosion, to ensure establishment of suitable grasses and forbs, and to control noxious weeds and pests. If agriculture is the intended post-project use of the site, a deep till will be undertaken to loosen any compacted soils. Although the agricultural soils may not be exactly the same quality in every area post-construction, the restored soils would be able to support future crop production. As indicated by DWW, an Agricultural Protection Plan would be submitted as part of the D&M Plan to be implemented after Project Decommissioning only if the post-construction use of the site will be agriculture. If other development plans are envisioned, such as development associated with the Town's Northern Gateway concept, the Council does not expect DWW to restore the soil to agricultural use.

#### *Core Forest*

According to the 2004 Environment Canada Report, cited by the University of Connecticut Center for Land Use Education and Research, core forest areas that are a minimum of 250 acres in size should be considered the absolute minimum needed to support sensitive edge-intolerant bird species. Four small core forest areas that would be impacted by the Project but all four are currently 20 acres or less in size and have limited value in supporting interior forest breeding bird species, therefore core forest values would not be impacted.

Approximately 24 acres of upland deciduous forest and 6 acres of upland coniferous forest will be cleared for the Project, as follows: 18.1 acres for the north solar field (Parcels 1 & 2), 7.2 acres for the middle solar field (Parcels 3 & 4), and 4.7 acres for the south solar field (Parcel 5). Stumps of trees cleared outside of the perimeter roads would be retained, lessening the effect on underlying soils and offering beneficial shrub habitat.

### *Wildlife*

DWW consulted with DEEP regarding species listed in the Natural Diversity Database (NDDDB) that may occur on or near the Project Site. The initial NDDDB listing indicated 25 State-listed species occur on or near the Project Site and includes three mammal species, seven bird species, three reptile species, one amphibian species, three freshwater mussel species, four invertebrate species and four plant species. Surveys for these species have been completed by DWW and consultation with DEEP regarding mitigation plans for affected species is ongoing.

DWW has evaluated the Project Site for the listed species, including a detailed spatial analysis of on-site habitats that are necessary to support the listed species. The assessment was performed using unique Key Habitats identifiers described in the 2015 Connecticut Wildlife Action Plan. Seven types of Key Habitats exist at the site. Based on the analysis, many of the species have habitat requirements that would be outside of the project limits.

During DWW's ongoing assessment, as of mid-October 2017, DWW determined five grassland bird species, two plant species and one amphibian species (leopard frog) do not occur on the site due to unsuitable habitat. One State-listed plant species, a perennial herb and wildflower, occurs at a single location at the Project Site. A cluster of host plants for the larva of a State-listed moth was identified at the Project Site.

State-listed reptiles that may occur at the Project Site include eastern box turtle, wood turtle, and eastern hognose snake. DWW is consulting with the DEEP Wildlife Division regarding appropriate mitigation actions that could include contractor awareness, time of year restrictions, construction barriers, work area sweeps, site monitoring, and GPS location information and reporting.

Three State-listed bat Species of Special Concern: red bat, silver-haired bat and hoary bat could occur at the site. DWW would avoid tree clearing from May 15 to July 31 to reduce the likelihood of impacting these bat species that utilize the forested areas of the site for roosting.

Construction of the Project has the potential to impact breeding birds in agricultural and forested areas. DWW proposes impact avoidance and mitigation strategies such as avoiding vegetation removal between May 1 to August 15 to minimize impacts to nesting birds and avoid potential disturbance during periods of high bird activity. Alternatively, breeding bird surveys could be conducted in areas to be cleared, and if breeding birds are found, a modified vegetation removal plan could be developed to avoid specific areas.

DWW would set aside 133 acres of open space, consisting of woodland, field and wetland habitat, for the 25-year life of the Project. The Project open space areas directly abut ten Town-owned open space parcels ranging in size from 0.4-acre to 24.6 acres. Wildlife that currently traverses the agricultural fields would have to adjust their movements to use areas along the edge of the solar fields. DWW would install the perimeter chain link fence so that a six-inch gap is maintained along the bottom end, to allow for small animal movement into the solar field areas.

The Council finds that the 133 acres of open space that are set aside is a benefit to wildlife when compared to development that could occur under traditional Town zoning where approximately 58-acres would be required to be set aside. In general, the periphery of the Project Site would be set aside in a natural state, maintaining habitat continuity between Project Site and adjacent open space areas, allowing for wildlife movement through the site and within the site. The natural area connectivity is consistent with the recommendations for development porosity as set forth in *The Farmington Valley Biodiversity Project: A Model for Intermunicipal Biodiversity Planning in Connecticut*.

### *Air Quality*

The project would have no adverse effect on air quality. During operation, the proposed project would not produce air emissions of regulated air pollutants or greenhouse gases. Thus, no air permit would be required. The proposed project would meet DEEP air quality standards. Given the loss of carbon dioxide sequestration over the life of the facility due to site development, tree clearing and the carbon dioxide emitted from the manufacture of the solar equipment versus the net carbon dioxide emissions reduction resulting from the solar facility displacing existing fossil fueled generation in the grid portfolio, the “carbon debt payback period” would be approximately 3.3 years.

### *Water Quality*

#### Wetlands and Watercourses

The Connecticut Inland Wetland and Watercourses Act (IWWA) strikes a balance between economic activities and wetlands preservation. The impact of a proposed activity on the wetlands and watercourses that may come from outside the physical boundaries of the wetlands or watercourses is a major consideration. Defined upland review areas, such as 100 feet, provide a trigger for reviewing whether a regulated activity is likely to affect wetlands and watercourses. Under CGS §22a-41(d), regulatory agencies shall not deny or condition an application for a regulated activity in an area outside wetlands or watercourses on the basis of an impact or effect on aquatic, plant, or animal life *unless such activity will likely impact or affect the physical characteristics of such wetlands or watercourses.*

A wetland survey of the Project Site was conducted in accordance with the IWWA. The survey identified nine wetland areas, four farm ponds and three brooks on the Project Site. A majority of the wetland areas consist of forested wetlands associated with Munnisunk Brook (Parcel 1), Saxton Brook (Parcels 3 & 4) and Bissell Brook (Parcel 5). No functional vernal pools were identified on the Project Site although vernal pools may exist on abutting properties and vernal pool species could disperse onto the Project Site. One farm pond had limited use by wood frog, a vernal pool species, but due to the presence of fish, anticipated wood frog egg and larvae survivability is low.

No wetlands or watercourses would be directly impacted by the project. No clearing would occur directly in wetlands or watercourses. The project was designed to maintain a buffer between the project limits and the delineated wetland areas. The buffer is generally a minimum distance of 100 feet, and according to DEEP, is sufficient to maintain wetland functions and water quality. Prior to construction, DWW would develop a Resource Protection Plan to avoid and minimize impacts to on-site natural resources, including wetlands.

#### Phase 1 Site Assessment

A Phase 1 Site Assessment concludes that Parcels 1, 3 and 5 have historically been used as agricultural fields with barns that are similar in their configuration to barns typically associated with tobacco farming. Parcels 2 and 4 have historically consisted of undeveloped woodland. Scattered debris areas were found on the Project Site but no evidence of contaminant releases from these areas were evident. The debris would be removed prior to project construction in accordance with applicable regulations. The Project Site is not subject to the Connecticut Transfer Act as the Project Site does not appear to meet the definition of an “establishment”.

A former pesticide farm disposal area was located off-site, adjacent to Parcels 3 & 4, and was remediated in 1989 and 1990. Remediation included soil removal, soil testing and groundwater testing. Due to the potential of groundwater contamination, DEEP tested private water wells in adjacent residential areas, downgradient of the disposal site. Water testing occurred from the 1990s to 2013 and results indicate contaminants associated with soil fumigants historically used for tobacco farming were found in several wells above detection limits, but at concentrations below drinking water standards.

Residual pesticides may be present in soil and/or groundwater as a result of current or historical Project Site agricultural use. In general, most pesticides adsorb to soil particles, become immobile, and do not leach. Leachable soil contaminants, if present, would have already leached into groundwater and potentially migrated to nearby receptors years ago. Most historically-applied pesticides are present in the upper six inches to one foot of soil. The driving of racking piles would displace soil particles horizontally rather than pushing soils deeper into the ground and it does not appear likely that any potential pesticide residues located on the Project Site would impact nearby wells or the aquifer as a result of Project construction. DWW indicated during the proceeding that they would be willing to conduct private well water testing on abutting properties, if requested and permitted by the property owners.

The Department of Public Health (DPH), Drinking Water Section, submitted correspondence to the Council on December 14, 2017 indicating that the Project Site is within two Level A Aquifer Protection Areas, one associated with the Aquarion Water Company Hoskins Well Field and the other associated with the Tarriffville Fire District Water Department. In its letter, the DPH offered to work with DWW, in addition to the affected water utilities, to ensure measures in the D&M Plan conform to the DPH's applicable statutes and regulations. DEEP recommended that the Project be constructed in accordance with the Connecticut Aquifer Protection Area Program Municipal Manual Best Management Practices – "Road and Highway Construction/Reconstruction in Aquifer Protection Areas" and that the D&M Plan include an Aquifer Protection Program to protect water resources. The Council will include such a provision in its Decision and Order.

#### Stormwater

DWW would file a Stormwater Pollution Prevention Plan (SWPPP) as part of its General Permit application that identifies areas for storing petroleum fuels, refueling operations, and spill containment during construction. DWW would retain qualified professionals to conduct soil and erosion control inspections of the site during construction, as required by the General Permit. DWW anticipates that inspections would be performed weekly or more frequently as needed based on precipitation or other conditions of concern.

Once DWW assumes control of the Project Site, the agricultural fields and any other bare soil areas would be seeded immediately prior to Project construction activity to establish a cover crop and root mass for erosion and dust control.

Approximately 10 acres of the Project Site would be disturbed during site grading resulting in an estimated cut of 58,700 cubic yards and an estimated fill of 21,500 cubic yards. An excess cut of 37,200 cubic yards would be used on the Project Site to construct perimeter access roads, backfill and landscaping. No soil is to be exported from the Project Site. DWW would use water and/or calcium chloride for fugitive dust suppression during construction activities.

DWW would phase construction of the project and may include phases of disturbance greater than five acres at a time. Work area phases greater than five acres may be possible, with DEEP concurrence, due to the current condition of the site as open agricultural lands and the different areas of the site that can be worked on at once. The Council will require a detailed phasing plan as part of the D&M Plan that shall include a rationale for any proposed work area phasing that exceeds five acres.

Sediment traps would be installed in conjunction with site grading and would be located at the discharge point of each Project area sub-watershed when the contributing area exceeds one acre, but is less than five acres. A temporary sediment basin, a larger version of a trap that includes a staged release discharge structure, would be constructed for areas exceeding five acres. The Council will require final stormwater design plans and its related phasing plan in the D&M Plan.

Post-construction stormwater discharge from the Project Site would be designed to meet the *2004 Connecticut Stormwater Quality Manual* and the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. Final post-construction discharge rates associated with the proposed revised project would be no greater than the existing discharge rates.

Although DWW indicated it would inspect all on-site vegetated areas at least once per year and remove any accumulated sediment and debris that could affect stormwater patterns, the Council will order DWW to submit an Vegetation Management Plan that specifies inspections of all on-site vegetated areas, at a minimum, on a quarterly basis given the lack of post-construction stormwater basins, the presence of highly erodible soils and the presence of stream corridors and wetlands within approximately 100 feet of the Project development limits, as well as plans for the frequency of mowing and any related seasonal restrictions.

### **Project Modifications**

Prior to submission of the Petition to the Council, DWW discussed the Project with the Town and attended several public information meetings to listen to neighborhood concerns. As a result of Town and neighborhood feedback, DWW reduced the Project size by approximately 18 acres in six distinct areas prior to submission of the petition to the Council. The reductions included larger buffers between residential areas and the Project limits, increasing the setback from Hoskins Road and the complete elimination of a solar field area on Parcel 2. DWW also proposed to incorporate wood chip walking paths on portions of the Project Site based on comments from area residents who currently walk on the portions of the private property. The installation of walking paths is not necessary for operation of the facility and thus the Council will not order the inclusion of walking paths within the D&M Plan. The walking paths may have to be eliminated to account for Project Site re-configuration based on final stormwater features, access road alignment, or for expansion of certain solar arrays if solar panels are relocated from other areas of the Project Site.

During the proceeding, the Town requested elimination of all solar arrays on Parcel 5, south of Hoskins Road. In response to this request, the Council finds that DWW has made a strong effort to work with the Town and has reasonably addressed neighborhood concerns by reducing the Project footprint to the greatest extent practical prior to the submission of the Petition to the Council, and has even agreed to an additional modification suggested during the proceeding by removing solar panels from the area south of 85 Hoskins Road. Further reduction of the Project would be detrimental to the Project's financial viability, and more importantly, its overall goal in reducing fossil fuel emissions from traditional power plants. That said, the Council requests that DWW explore the possibility of further reducing or even eliminating the South Solar field on Parcel 5 by considering the use of higher wattage solar panels to produce the same amount of contractually-obligated electricity on a smaller Project footprint.

### **Conclusion**

Based on the record in this proceeding, the Council finds that there would not be a substantial adverse environmental effect associated with the construction, maintenance and operation of an approximately 26.4 MW Solar Photovoltaic Project on approximately 289 acres located on five parcels located generally west of Hopmeadow Street, north and south of Hoskins Road, and north and east of County Road and the associated electrical interconnection to Eversource Energy's North Simsbury Substation west of Hopmeadow Street in Simsbury, Connecticut.

The proposed project is a grid-side distributed resources project with a capacity of less than 65 MW under CGS §16-50k, it was selected through a Tri-State RFP under CGS §16a-3f, it is consistent with the state's energy policy under CGS §16-35k, and the proposed project would meet all applicable U.S. Environmental Protection Agency and DEEP Air and Water Quality Standards. Therefore, the Council will issue a declaratory ruling for the proposed project.