STATE OF CONNECTICUT CONNECTICUT SITING COUNCIL

DWW SOLAR II, LLC PETITION FOR : PETITION NO. 1313

DECLARATORY RULING THAT NO :

CERTIFICATE OF ENVIRONMENTAL :

COMPATIBILITY AND PUBLIC NEED

IS REQUIRED FOR A 26.4 MEGAWATT

AC SOLAR PHOTOVOLTAIC ELECTRIC :

GENERATING FACILITY IN SIMSBURY

CONNECTICUT : DECEMBER 1, 2017

DEPARTMENT OF AGRICULTURE'S POST-HEARING BRIEF

The State of Connecticut Department of Agriculture ("DoAg") hereby submits its post-hearing brief in this matter. For the reasons set forth below, DoAg respectfully asks the Siting Council to deny Petition No. 1313 for declaratory ruling ("the Petition").

1. Introduction.

DoAg believes that the provisions of P.A. 17-218 apply to the Petition. Accordingly, as set forth in DoAg's August 23, 2017 Motion to Deny Declaratory Ruling and supporting papers, the Petition should be denied because DoAg will not — and cannot — represent in writing that the project will not materially affect the status of the land on which it is located as prime farmland. Rather, DoAg believes the project should be required to apply for a certificate of environmental compatibility and public need, which certificate, DoAg would argue, should also be denied because of the adverse impacts on agriculture.

On September 28, 2017, the Siting Council denied DoAg's Motion, concluding that P.A. 17-218 does not apply to the Petition. In denying the Motion, the Siting Council stated that it would "endeavor to comply with the intent of PA 17-218 without violating the due process rights of any party." (See Sept. 28, 2017 Staff Report – Department of Agriculture Motion to Deny Petition, Part C, p. 8) The Siting Council pointed out that it had already voted to hold a public

hearing in this matter. (*Id.*, p. 7) It stated that "impacts to agriculture are under consideration" and thus, not only is submission of an application for a certificate not required, it is also not necessary. (*Id.*, p. 8)

It is appropriate for the Siting Council to consider the impacts of the project on agriculture. See FairwindCT, Inc. v. Connecticut Siting Council, 313 Conn. 669 (2014). And, since it is appropriate for the Siting Council to consider such impacts, it is also appropriate for the Siting Council to deny or condition the Petition if the Siting Council finds the harmful impacts on agriculture to be too great. The Siting Council is not required to deny or condition the Petition on the basis of agricultural considerations, see FairwindCT, 313 Conn. at 701-04, but it certainly may, and in this case, it should.

As a renewable resource, solar energy, like local agriculture, is a key part of reaching the goal of sustainability. (Kolesinskas Pre-Filed Test., Q48) Locally-produced renewable energy and food can mitigate the effects of climate change and reduce this country's dependence on foreign sourcing. (Kolesinskas Pre-Filed Test., Q48; Kolesinskas Test., 11/2/17, p. 456) With proper siting of renewable energy facilities, it is possible to achieve both goals at once. Just as the Siting Council has historically balanced energy needs with other environmental considerations, so will the Siting Council be called on more and more to balance energy needs with agricultural concerns. The Siting Council is uniquely positioned to undertake this task. DoAg, which has taken the step of becoming a party to this proceeding owing to the critical agricultural resource at stake here, welcomes this opportunity to appear before the Siting Council to advocate and, it is to be hoped, persuade.

DoAg believes the Petition should be denied. To place a solar array on the site proposed

- hundreds of acres of prime and important farmland in the heart of the Connecticut River Valley

- would do irrevocable damage to the availability of that site for future agriculture. If the Siting Council concludes that it should grant the Petition, DoAg respectfully urges the Siting Council to impose conditions, summarized in section 9, below, which will ensure that the site is protected and preserved for agriculture.

2. The Project Will Be Located on Hundreds of Acres of Prime and Important Farmland.

Petitioner, DWW Solar II, LLC ("DWW"), is proposing a 26.4 MW solar array on five parcels comprising 289 acres in Simsbury, CT. (Pet., Intro., p.1)¹ Ninety acres of the site is "prime farmland." (Pet., § 6.12, p. 43) The United States Department of Agriculture ("USDA"), Natural Resources Conservation Service ("NRCS"), defines prime farmland as "land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses." (Kolesinskas Pre-Filed Test., Q13) An additional 123.6 acres of the project site is statewide important farmland. (DWW 8/28/17 Resp. SC Ints., Set 1, Q7) The USDA defines statewide important farmland as "land, in addition to prime and unique farmlands, that is of statewide importance for the production of food, feed, fiber, forage, and oil seed crops." 7 C.F.R. § 657.5(c). These 213 acres of prime and important farmland are part of a fertile "micro-climate" that is unique to the Connecticut River Valley and that has been recognized by the USDA as being important and particularly excellent for growing crops. (Kolesinskas Pre-Filed Test., Os 30 -32; Kolesinskas Test., 11/2/17, pp. 449 - 450) Farmland in this area is one of the most threatened – from a farmland resource point of view – in the United States, owing to its location between New York and Boston, its dominance of well-

¹ The Petition, and DWW's evidentiary presentation in general, is full of inaccuracies and obfuscations, some of which will be discussed in this Brief. Among these is that the parcel descriptions in the chart in Section 3.4 of the Petition are wrong: the parcel ID numbers, the acreage, and, for one parcel, the zoning designation, differ from the information on Simsbury's Assessor's cards, copies of which were submitted with Simsbury's Oct. 3, 2017 Responses to DWW's Interrogatories, Attachment A – Int. No. 6.

drained soils that are easy to develop, and its location in an area where sprawl development is the norm. (Kolesinskas Pre-Filed Test., Q32)

The project site is currently being farmed – it is being leased to a third party for agriculture. (Pet., § 3.1, p.5; DWW 8/28/17 Resp. SC Ints. Set I, Q6) According to the Petition, 131 acres of the project site will be on existing agricultural fields. (Pet., § 6.3, p. 28; Pet., § 7.3, p. 48) Crops recently grown here include tobacco, squash, corn, cucumbers, and melons. (Pet. § 6.3, p. 28; DWW 10/3/17 Resp. SC Ints. Set II, Q70; Moberg Test., 9/12/17, p. 85) The project site is in the P.A. 490 program, *i.e.*, it is being taxed as agricultural land at a lower rate. (DWW 10/26/17 Resp. Intervenors Ints., Set I, Q1)²

The solar arrays will stretch across all five parcels.³ (Pet., § 3.5, p. 8) Of the 131 acres of existing agricultural fields, 126 acres will be converted to solar arrays. (Pet. § 5.3, p. 21; Pet., § 7.3, p. 47) The solar panels and associated equipment will be placed on 108 acres of prime and important farmland: 55 acres of prime farmland and 52.7 acres of statewide important farmland. (DWW 8/28/17 Resp. SC Ints. Set I, Q7)

Concern was expressed at the hearing in this matter over the possible presence in the soils at the project site of herbicides and pesticides from past farming. DWW has not tested the soils for the presence of herbicides and pesticides (Grybowski and Kenney Test., 10/10/17, pp. 240-41); however, even if these are present, they will not affect the suitability of the land for farming. (Kolesinskas Test., 11/2/17, pp. 430 and 436-37) The farmlands at the site are not to be

² Before the intervenors in this matter pressed the issue, DWW told the Siting Council that the land was not in the P.A. 490 program. (DWW 8/28/17 Resp. SC Ints. Set 1, Q5)

³ It is unclear how many acres of the site the project will actually cover: at one point, the Petition says it will be 175 acres (Pet., Ex. D, 3rd page); at another, 156 acres (Pet., § 3.1, p. 5); and at another, 150 acres (Pet., Ex. D, 4th page).

considered brownfields by virtue of the past use of pesticides and herbicides. (Kolesinskas Test., 11/2/17, p. 429)

3. The 25-Year Loss of Farmland is Harmful.

A major problem with the project is that it removes 200+ acres of prime and important farmland from production for 25 years⁴ while the solar array is in place. (Kolesinskas Pre-Filed Test., Q48; Kolesinskas Test., 11/2/17, pp. 455-56) Connecticut has a public policy to promote agriculture. A major part of this policy involves the maintenance and preservation of agricultural land. Con. Gen. Stat. § 22-26aa states:

The General Assembly finds that the growing population and expanding economy of the state have had a profound impact on the ability of the public and private sectors of the state to maintain and preserve agricultural land for farming and food production purposes; that unless there is a sound state-wide program for its preservation, remaining agricultural land will be lost to succeeding generations and that the conservation of certain arable agricultural land and adjacent pastures, woods, natural drainage areas and open space areas is vital for the well-being of the people of Connecticut. (emphasis supplied)

(See also Siting Council Ad've Notice Item No. 93 – Governor's Council for Agricultural Development, Grow Connecticut Farms: Developing, Diversifying, and Promoting Agriculture, Dec. 2012) Millions of federal, state, municipal, and private dollars have been spent to permanently protect farmland in Connecticut through conservation easements and purchases. (See DoAg Ad've Notice Item No. 20 – Working Lands Alliance, Plowing Ahead: Farmland Preservation in 2010 and Beyond, March 2010, pp. 15 – 17; Farmland Trust and Connecticut Conference of Municipalities, Planning for Agriculture: A Guide for Connecticut Municipalities, 2016 ed., pp. 1, 35 – 36)

⁴ DWW has given different figures for how long the solar array will exist, ranging from 20 years to 35 years (Pet., § 7.12, p. 60 (20-25 years); Pet., Ex. D, 25th page (20-25 years); Pet., § 3.5, p. 8 (25 years); Pet., Ex. S, § 1, p. 3 (25-30 years or more); Questions of Hoffman, 11/2/17, p. 479 (35 years))

When access to agricultural land of the size and quality of the project site is lost, even temporarily, it makes it more difficult for local farming to succeed. (Kolesinskas Pre-Filed Test., Q48) As the agricultural land disappears, so does the infrastructure that supports local agriculture, making it even harder for the remaining farms to survive. (*Id.*) Locally-grown food is important because it is consumed locally, reducing transport distances and resulting in less food waste. (*Id.*) Indeed, the legislature has set a policy of increasing the amount spent on Connecticut-grown agricultural products, with a specific goal of 5% of residents' food budgets being spent on Connecticut products by 2020. (Conn. Gen. Stat. § 22-26e(b))

It is an accepted fact, by the Siting Council and others, that agriculture has a positive effect on Connecticut's economy. (Siting Council Ad've Notice Item No. 92 – UNIVERSITY OF CONNECTICUT, Economic Impacts of Connecticut's Agricultural Industry, Sept. 2010; Kolesinskas Pre-Filed Test., Q48) The 2010 edition of Economic Impacts, reporting numbers for 2007, says that agriculture contributed \$3.51 billion to Connecticut's economy and generated 20,000 jobs. (Id., p. 21) In the 2017 edition of the Economic Impacts report, it states that in 2015, Connecticut's agricultural industry contributed up to \$4.05 billion to the state economy. (DoAg 10/6/17 Resp. DWW Ints., Set 1, Q5) Of this, \$90 million was contributed by local food systems that are supplied with vegetable crops produced on agricultural fields like those in Simsbury and by agri-tourism, which also has multiple opportunities in Simsbury. (Id.) Farms and farmland in Simsbury are an important part of Connecticut's agricultural community and economy. (Id.)

Moreover, "agriculture has a high economic multiplier effect, meaning that every dollar in output generates economic activity in other sectors." (Siting Council Ad've Notice Item No. 53 – CONNECTICUT SITING COUNCIL, Written Testimony in Reference to Raised Bill No. 412...,

Feb. 7, 2017) "Because the agricultural industry purchases goods and services from other industries and hires local labor, its economic impact cascades throughout the state's economy. Agriculture support services include feed suppliers, veterinary services, equipment manufacturers and repair, and financial services. Farm businesses also support short-term contractual jobs such as in engineering, construction, plumbing, electrical work, and inspection." (Economic Impacts 2010, supra, p. 4; see also Kolesinskas Pre-Filed Test., Q48)

Finally, "the agricultural industry provides significant non-market social benefits and ecosystem services through its 405,616 acres of land in farms." (*Economic Impacts* 2010, *supra*, p. 20) Among these are aesthetic and environmental benefits, including the provision of habitat, the minimization of flooding, and the sequestration of carbon. (*Id.*; Kolesinskas Pre-Filed Test., Q48; DoAg 10/6/17 Resp. DWW Ints., Set 1, Q3)

If the project is built on the Simsbury agricultural land, all these benefits will be absent for as long as the solar array is there. And, while 200 or so acres of land being out of production for a few decades may not seem significant, it is. "It's death by a thousand cuts." (Kolesinskas Test., 11/2/17, p. 455) Each project, viewed in isolation, may not appear to have a large effect, but, as with wetlands, it is important to protect each acre because if one does not, eventually the resource disappears. Agricultural land, particularly prime and important farmland soils, is a finite resource. (Kolesinskas Test., 11/2/17, p. 447)⁵

⁵ At the Nov. 2, 2017 hearing, DWW referenced DoAg Ad've Notice Item No. 10, which is the USDA 2012 Census of Agriculture. DWW attempted to use the data in this census that shows an increase in the *number of farms* and *acres of land in farms* in Connecticut since 2002 to rebut Mr. Kolesinskas' testimony that Connecticut has lost an average of 4,000 acres of *agricultural land* per year. (Questions by Hoffman, 11/2/17, pp. 484 – 88) However, "land in farms" is not the same as "agricultural land." Mr. Kolesinskas testified to the permanent loss of agricultural land to development (Kolesinskas Test., 11/2/17, pp. 455 – 56), whereas the census speaks to the number of farms and acres actually in production. The two are different: it is possible for Connecticut to permanently lose agricultural land and simultaneously experience an increase in "land in farms."

DWW did not have to choose a site of over 200 acres of prime and important farmland for its project. The multi-state request for proposals that resulted in DWW's Petition allowed developers to bid with multiple, smaller parcels that were not connected to each other.

(Grybowski Test., 10/10/17, p. 224) DWW should have considered brownfields for its project; both the Department of Energy and Environmental Protection and the Environmental Protection Agency have lists of brownfields. (Kolesinskas Test., 11/2/17, pp. 446, 489) At the hearing, DWW implied that it needed a site greater than 100 acres (Questions of Hoffman, 11/2/17, p. 489), but DWW did consider a 25-acre site in Griswold (Pet., § 3.3, p. 8), and, as noted, the RFP allowed for multiple, smaller sites. It is always better to use a disturbed site than a greenfield; the greenfield should be the last resort. (Kolesinskas Test., 11/2/17, p. 447) For solar array projects, "we need to consider those other landscapes as well, and not just agricultural land because it's easiest and cheapest to build on." (Kolesinskas Test., 11/2/17, p. 477)

4. The Soil Will Be Damaged During Construction.

The project involves the placement of 109,888 solar panels. (DWW 8/28/17 Resp. SC Ints., Set 1, Q14) To support the racking for the panels, at least 9,600 posts⁶ will be driven into the ground each to a depth of 12 to 14 feet. (DWW 8/28/17 Resp. SC Ints., Set 1, Q21; DWW 9/5/17 Resp. DoAg Ints., Q6) The type of panels to be used has not been selected (DWW 8/28/17 Resp. SC Ints., Set 1, Q20; DWW 9/5/17 Resp. Simsbury Ints., Q88); nor has the racking (DWW 10/3/17 Resp. SC Ints., Set 2, Q78).

There will be 14 concrete equipment pads, each measuring 20 feet by 20 feet. (Pet., § 3.5, p.9) The footings for the concrete pads will extend 4 to 5 feet below grade. (*Id.*)

⁶ DWW also has said there will be 10,000 posts. (DWW 10/26/17 Resp. Intervenors Ints., Q3) DoAg's expert, Kip Kolesinskas, calculates the number of posts needed at over 40,000. (Kolesinskas Test., 11/2/17, pp. 440-41) Although DWW says DoAg "greatly exaggerates" the number of posts needed (DWW 10/3/17 Resp. SC Ints., Set 2, Q71(b)), DWW has not clarified the number of posts it will actually be using.

Underground cable buried 3 to 4 feet below grade will connect the panels, and buried cable will connect the solar array to the utility company's substation. (*Id.*) The buried cable will be trenched into place. (*Id.*, pp. 9-10) The concrete pads and the trenching for the buried cable will take up 4.8 acres of the site. (DWW 9/5/17 Resp. DoAg Ints., Q7)

In addition, the project site, which has steep slopes in many areas (Pet., § 6.5, p. 37), will have to undergo significant regrading, although the figures DWW gives for the number of acres that will be regraded vary widely: 9 acres of agricultural fields will be graded (Pet., § 5.3, p. 21); 14.2 acres of farmland soil will be altered by grading (Pet., § 7.12, p. 60); 15.7 acres of regrading on existing agricultural fields (DWW 10/3/17 Resp. SC Ints., Set 2, Q73); 31.3 acres will be regraded (DWW 9/5/17 Resp. DoAg Ints., Q7); 33 acres of farmland soil will be disturbed by grading (DWW 8/28/17 Resp. SC Ints., Set 1, Q8).

Obviously, construction will also involve heavy equipment driving throughout the site. The construction of roads, trenching, equipment pads, and fencing will require dump trucks, concrete trucks, and excavators. DWW describes the equipment it intends to use to drive the posts as "not particularly large" (DWW 10/3/17 Resp. SC Ints., Set 2, Q71(b)) and even "small" (Moberg Test., 9/12/17, p. 23). This equipment, which DWW invited the Siting Council to Google (Moberg Test., 9/12/17, p. 23), is a Vermeer PD10 (DWW 8/28/17 Resp. SC Ints., Set 1, Q59). The Vermeer website reveals that the equipment weighs at least 7 tons. In addition to the PD10, 18-wheelers and large pick-up trucks, like Ford F250s and F350s, will bring the frames and the panels onto the site. (Kenney Test., 9/12/17, pp. 27 – 29)

The soil that makes the farmland "prime and important" is in the upper two meters (6½ feet) of the soil. (Kolesinskas Test., 11/2/17, pp. 443-44) These construction activities – post-driving, pad construction, trenching, grading, and general construction activity – will disturb and

degrade the soil. (Kolesinskas Pre-Filed Test., Q33) DoAg's expert soil scientist, Kip Kolesinskas, calculates that the project will directly disturb at least 37 to 43 acres of soil on existing agricultural fields. (Kolesinskas Test., 11/2/17, pp.439 – 441; DoAg 10/3/17 Resp. SC Ints., Q19) If disturbance to all prime and important farmland soils is considered, the total would be higher. (DoAg 10/3/17 Resp. SC Ints. Q19)

The construction activities create a number of problems. (Kolesinskas Pre-Filed Test., Q33) A major problem is compaction of the soil, which changes the structure and consistence of the soil, making it harder and firmer. (*Id.*) This alters the way water, nutrients, and biota pass through the soil, leading to changes in the soil's chemistry, biology, and hydrology. (*Id.*) The existing soils on the site currently have high permeability rates. (Pet., § 6.5, p. 36) Compaction will reduce this. Compaction never leads to greater soil productivity – it always reduces it. (Kolesinskas Pre-Filed Test., Q33)

Another major problem is disturbance of the soil horizons by trenching, grading, and installation and removal of the infrastructure for the project, like the thousands of posts and the footings for the concrete pads. (Kolesinskas Pre-Filed Test., Q33) Any time there is digging in the soil, soil horizons will change, affecting the soil's structure, consistence, and texture. (*Id.*) This, too, will change the way water, nutrients, and biota move through the soil, thus affecting the soil's chemistry, biology, and hydrology. (*Id.*) Again, these changes in the soil horizons will be for the worse, not the better. (*Id.*; Kolesinskas Test., 11/2/17, pp. 443-44)

DWW admits that there will be a "significant amount" of soil disturbance. (Henry Test., 11/2/17, p. 661) DWW's consultants also acknowledged to Mr. Kolesinskas that when DWW was considering the effect of the project on the soils at the site, the focus was on mapping the location of wetlands, and not on analyzing what needs to happen in order to protect the soils

during construction and to restore the soil resources for agriculture. (Kolesinskas Pre-Filed Test. Os 36-40)⁷

5. DWW Will Not Protect the Soils During Construction.

Section 7.12 of the Petition purports to describe how DWW intends to minimize the effects of construction on the soils, but the analysis is inadequate (Kolesinskas Pre-Filed Test., Q35), a conclusion DWW agrees with (DWW 10/3/17 Resp. SC Ints., Sec. 2, Q71(b)). Details about baseline soil information, erosion and sediment control (for soil health, not for stormwater purposes), and efforts to reduce compaction are missing. (Kolesinskas Pre-Filed Test., Q35) There is no qualified person designated to decide whether soils are too wet to drive on. (*Id.*) There should be a qualified soil scientist present during construction to evaluate and monitor the soils (id.), but DWW will not commit to this – rather, the contractor will be in charge of topsoil preservation (DWW 9/5/17 Resp. DoAg Ints., Q14). To fully protect the soil, no soils should be removed from the site (Kolesinskas Test., 11/2/17, p. 442); however, although DWW says no soils "are contemplated to be removed from the site" (Henry Test., 10/10/17, p. 242), DWW also points out that the Petition does not really say whether the soils are going to leave the site or stay (Remarks of Hoffman, 10/10/17, p. 406-07). DWW says it intends to stockpile soil on site during construction, but there are no provisions or plans to maintain the separation of the soil's horizons as part of that stockpiling. (DWW 9/5/17 Resp. DoAg Ints., Q12)

Ultimately, it is not surprising that DWW has been unable to provide assurances that farmland soils will be protected during construction, because so many aspects of the construction have not been decided or, in some cases, even considered. As noted, the racking system and

⁷ DWW's president, Jeffrey Grybowski, who is a lawyer and not a soil scientist, opined that DWW's activities at the site would be "far less impactful" than the previous agricultural tillage that has occurred at the site. (Grybowski Test., 10/10/17, p. 248) However, tillage occurs at 9 to 12 *inches*, whereas the pilings will be driven 12 to 14 *feet* into the ground. (Henry and Peterson Test., 11/2/17, p. 734)

panels have not been selected. (Kenney Test., 10/10/17, p. 216; Grybowski Test., 11/2/17, p. 710) DWW does not know the type of wire it is going to use. (Kenney Test., 9/12/17, p. 27) It does not know whether the posts will be driven or whether screw piles will be used. (Moberg Test., 10/10/17, p. 238) DWW is not sure whether it is going to put conduit in the roads. (Kenney Test., 9/12/17, pp. 25-26) DWW does not know whether it will be using drilled concrete foundations because it has not done the geotechnical analysis yet. (Moberg Test., 9/12/17, p.p. 22-23) The staging area for bringing on construction equipment and supplies has not been chosen. (Kenney Test., 9/12/17, p. 28) DWW is still in discussions with Eversource about where to interconnect. (Grybowski Test., 10/10/17, p. 236) DWW is not sure what width the temporary construction roads will be; DWW still needs to consult with first responders. (Kenney Test., 9/12/17, pp. 29, 33) DWW does not know how it is going to install sedimentation traps, as it has not really developed plans for them; DWW expects to put "a lot more thought into this." (Vitaliano and Moberg Test., 9/12/17, pp. 40, 42-45) DWW has not "delved deeply" into invasive species control. (Moberg Test., 9/12/17, p. 16) It has not planned or accounted for windfall of tree limbs onto the solar panels (Moberg Test., 9/12/17, p. 20), nor did it model for a rainfall event of greater than one inch per hour (Vitaliano Test., 9/12/17, p. 57)

6. The Soil Will Not Improve During the Life of the Project.

One of DWW's main arguments in favor of the project is that because DWW will be managing the site as "grasslands" during the life of the project, this will improve the health of the soil. (Pet., § 4, p. 13, Ex. D, $28^{th} - 29^{th}$ pp., § 7.3, pp. 47 – 48, § 7.5, p. 51) However, DWW's conclusory statements on this point cannot withstand scrutiny and were soundly refuted by DoAg's evidence, particularly the testimony of DoAg's expert soil scientist, Mr. Kolesinskas.

The unexamined premise of DWW's promise to improve soil health is that the soil at the project site needs improving. DWW, however, has not analyzed the soil (Kolesinskas Pre-Filed Test., Q44 ("need baseline for what to reclaim the soil to")), nor does DWW intend to (DWW 9/5/2017 Resp. DoAg Ints., Qs 2 and 3) "[S]oil health is a function of assessing and managing the dynamic soil properties *for a particular use* " (Kolesinskas Pre-Filed Test., Q42) (emphasis supplied) Here, that "particular use" is future agricultural production, but DWW has not shown that there is anything wrong with these fields as they exist or as they are currently being managed. Indeed, according to the Petition, some of the seeding DWW proposes to improve the soil is already occurring at the site: in 2016, the field south of Hoskins Road was fall-seeded with annual rye grass. (Pet. § 6.3, p, 28)

Although the Petition says DWW intends to seed the fields with alfalfa and white clover (Pet., § 4, p. 13), DWW, when questioned by the Siting Council, would not specify the grasses it intends to use. DWW said it expects to plant the fields with "some sort of a lower-growing grass or herbaceous cover." (Moberg Test., 9/12/17, p. 16) When pressed as to what DWW intended to plant, DWW said that it did not know what type of grasses it would use (Peterson Test., 9/12/17, p. 47), and that it would "probably" plant annual rye (Moberg Test., 9/12/17, p. 48). DWW did not commit to planting alfalfa or white clover. (Questions from SC Member Hannon, 9/12/17, pp. 55 – 57)

In the Siting Council's second set of interrogatories to DWW, the Siting Council specifically asked DWW whether "the enhancement of existing farmland by use of long-term cover crops" was based on "actual scientific knowledge (i.e., scientific studies) or theory." (SC Ints., Set. 2, Q 71(a)) DWW's response (DWW 10/3/17 Resp. SC Ints., Set 2, Q71(a)) lists five publications, but they do not appear to be particularly relevant: (a) the Armstrong paper studied

the effect of a solar array on the micro-climate surrounding the array, but not on the soil health beneath the arrays – in addition, this publication notes that white clover did *not* grow under the PV arrays; (b) the BRE document concerns biodiversity at solar arrays – it is not an analysis of how grasses enhance soil health; (c) the Beatty study used several seed mixes, only one of which included a small amount of white Dutch clover – also, the test site was in Colorado at a 6,000 foot elevation; (d) the Franzleubbers study noted that there are many other ways to sequester carbon in the soil beside rotation of crops with pastures, including conservation tillage, animal manure application, and optimum fertilization; and (e) the Semchenko study, although it looked at the effect of shade on the growth of different species, did not study either alfalfa or white clover.

What DWW has proposed is not "grasslands." (Kolesinskas Test., 11/2/17, p. 435) It is "a large scale solar energy array production facility dominated by impervious surfaces that will use as a ground cover vegetation that may contain species of grasses." (DoAg 10/3/17 Resp. SC Ints., Q9) The surfaces are impervious because rain is not falling directly on the ground beneath the solar panels. (Kolesinskas Test. 11/2/17, p. 431) The placement of the solar panels will change the hydrologic flow on the ground underneath them. (*Id.*) The soils and the grass under the solar panels will be in the shade. (Moberg Test., 9/12/17, pp. 49 – 50) What type of vegetation will even grow there is in question. (Kolesinskas Test., 11/2/17, p. 435; *see* Armstrong, *et al.* (2016) (white clover did not grow under the PV arrays)) The project site currently has little existing impervious surface (Pet., § 6.5, p. 36); DWW proposes to replace this with acres of impervious surfaces, not "grasslands."

7. Reclamation Will Not Occur Under the Current Proposal.

DWW's presentation gives little assurance that the project site will be reclaimed for agriculture at the end of the life of the solar array. As noted, since DWW has not tested the soils, there is no baseline as to what the soils should be reclaimed *to*. (Kolesinskas Pre-Filed Test., Q44; DWW 9/5/2017 Resp. DoAg Ints., Qs 2 and 3) DWW has not yet developed a soil restoration plan. (Grybowski Test., 9/12/17, p. 95) Indeed, DWW does not even acknowledge that soil restoration will be needed. (DWW 9/5/17 Resp. DoAg Ints., Q16) Although DWW has included a Decommissioning Plan in the Petition (Pet., Ex. S), that plan lacks critical detail. (DoAg 8/30/17 Comments to Siting Council; Kolesinskas Test., 11/2/17, p. 453) DWW's consultants, including its soil scientist, testified that they are not aware of any solar installation that has reverted to agricultural use. (Kenney and Peterson Test., 9/12/17, pp. 89 – 90)

DWW has made contradictory statements as to what will be removed from the site at the end of the project. DWW's plans call for the 10,000 posts that support the racking to be driven to a depth of 12 to 14 feet, the footings for the concrete pads to extend four to five feet below grade, and the conduit to be buried in trenches three to four feet below grade. (*See* Section 4, *supra*.) In the "public information session information" section of the Petition, DWW says "all equipment will be removed, preserving the agricultural lands for future generations." (Pet. Ex. D, 3rd page) At the hearing, DWW represented that DWW would "get everything out of the ground." (Grybowski Test., 9/12/17, p. 95) However, the Decommissioning Plan says all "anchor bolts, rebar, conduits, cable, and concrete" will be removed to a depth of only two feet below grade. (Pet., Ex. S, § 4.3) The concrete slabs will also be removed to a depth of only two feet below grade. (*Id.*, § 4.6)

The biggest problem with decommissioning and reclamation for this project is not the lack of a plan, or even the lack of a commitment to remove all materials – it is the lack of money. DWW is intending to set aside *no money* for decommissioning, instead relying on the salvage value of the solar array equipment. (Pet., Ex. S, § 2) DWW does not know what this value will be; nor has it given any basis for the estimates of the cost of decommissioning. DWW simply assumes that the future salvage value of the material will equal or exceed the decommissioning costs. (DWW 9/5/17 Resp. Simsbury Ints., Q78)

Nor does it appear that DWW is prepared to set aside money up front to cover decommissioning and reclamation. At the hearing, DWW made it clear that its bid was based on certain financial assumptions. (Grybowski Test., 10/10/17, p. 182) And, although these statements were made in connection with the possibility of DWW reducing the size of the project and thus reducing its revenues (Grybowski Test., 11/2/17, pp. 704 – 08), it is clear that if DWW cannot reduce its revenues, then it also cannot increase its expenses by, for example, setting aside the funds for decommissioning and reclamation up front.

8. The Petitioner's "Offer" Is Not Viable.

One of DWW's themes is that if the project site is not developed for solar, it will be developed for some other residential or commercial use, which would make the site permanently unavailable for agriculture. (*See* Questions of Hoffman, 11/2/17, p. 501) Thus, DWW argues, the best chance for this site is to place a solar array on it and then, in 25 or 30 years, allow DWW to grant the development rights to DoAg or to some other entity who can preserve the site for agriculture. DWW has said it would be willing to sign over a conservation easement at the end of the solar facility's life. (Kenney Test., 9/12/17, pp. 87 – 88; Grybowski Test., 10/10/17, p. 194) For several reasons, DWW's assumptions are flawed and its offer is simply not viable.

First, it is far from clear that, if the solar array is not approved, the five parcels will be developed for residential or commercial use. The current property owner, River Bend Development Co., LLC, has owned four of the parcels since June 1997. (Simsbury 10/3/17 Resp. DWW Ints., Q6 - Attachment A) However, no development applications – other than the proposal for the solar array – have been submitted to Simsbury to develop this site. (Rabbitt Test., 11/2/17, pp. 524 – 25, 617) The evidence suggests that a possible reason for this is the water well issues that were encountered when adjacent property – which had also been farmed – was developed for residential use years ago. Even DWW acknowledged that if the site were to be developed for residential use, one would need a "better understanding" of what is in the soil and the potential long-term exposures. (Henry Test., 11/2/17, p. 663)

Second, DWW's offer to convey the development rights or grant an agricultural easement in the future is not sufficient to guarantee the preservation of the agricultural lands. DWW offered to grant DoAg the development rights pursuant to the Farmland Preservation Program ("the Program") (Questions of Hoffman, 11/2/17, pp. 478 – 83), the provisions of which are set forth in Chapter 422a of the General Statutes, Conn. Gen. Stat. §§ 22-26aa et seq. Under the Program, the easement would have to be granted at the end of the project's life because, if the easement were granted now, DWW would not be able to develop the solar array – that development right would have been transferred to the State. Also, the Program requires that property be "scored" using certain factors before it can be accepted into the Program. (See Conn. Gen. Stat. § 22-26cc(a)) There is no guarantee that the site will score high enough to warrant acceptance into the Program after the degradation of the soils that will occur during construction and after the solar array has been present at the site for 25 years or more.

In addition, to fully protect the site for future agricultural use, the property interest protecting that right must be conveyed now, not later. A lot can happen in 30 years: DWW could make some other disposition of the property inconsistent with agricultural use; DWW could lose the property to foreclosure; DWW could go bankrupt. In the latter case, the site would become property of the bankruptcy estate. See 11 U.S.C. § 541 (what constitutes property of the estate). Its fate would be determined by the Bankruptcy Court, not by a promise DWW made in 2017. Moreover, even if, as DWW has proposed, DWW enters some type of "development agreement" restricting DWW to use the site only for solar for the next 30 years and requiring DWW to convey the development rights at the end of that time, that contract, depending on what its terms are, is one that DWW might well be able to reject in bankruptcy. See 11 U.S.C. § 365(a) (rejection of executory contracts).

Third, for reasons discussed in Parts 4-7, above, under DWW's current proposal, the agricultural soils at the site are going to be severely damaged during construction, they are not going to improve during the life of the project, and, at the end of the project, there are no assurances that the damaged soils will be successfully reclaimed. There is not much point in placing an agricultural easement on lands that cannot successfully be farmed.

9. <u>If the Siting Council Grants the Petition, It Should Impose Conditions That</u> Will Protect Agriculture.

DWW has stated that it is willing to prepare, as part of a D&M Plan, an Agricultural Protection Plan, which would include details regarding avoiding impact to farmland soils during construction and operation of the facility, planting and vegetation maintenance procedures, and restoration procedures. (DWW 9/5/17 Resp. DoAg Ints., Q15) If the Siting Council grants this Petition, DoAg strongly and respectfully urges the Siting Council to impose a condition that requires DWW to obtain approval from DoAg of this Agricultural Protection Plan prior to

commencing construction, much the way DWW must obtain from the Department of Energy and Environmental Protection a stormwater permit and approved stormwater pollution control plan prior to commencing construction. The Agricultural Protection Plan would include detailed procedures and plans designed to protect the agricultural soils during construction and the life of the project. It would also include detailed plans and procedures for decommissioning the project and reclaiming the soils at the site to insure that the site could be returned to productive agricultural use at the end of the project. (*See* Kolesinskas Test., 11/2/17, pp. 454 – 455 (if DWW were to follow DoAg's guidance, the soils at the site could be returned to agriculture))

In addition, if the Siting Council approves this project, DoAg strongly and respectfully urges the Siting Council to require DWW to establish a trust, funded either with cash or a letter of credit, which trust would be available *only* for decommissioning and reclamation at the site.

DoAg suggests modeling this trust on the financial assurance instruments required for hazardous waste facilities. (*See* DoAg Ad've Notice Item No. 11 – wording of instruments for financial assurance for hazardous waste facilities, 40 CFR § 264.151)

Finally, if the Siting Council grants the Petition, DoAg asks that the Siting Council impose a condition that any property interest that will preserve the site for future agricultural use be conveyed *now*, as opposed to 25 years from now. Such a grant could take the form of deed restrictions in the deeds from the current property owner to DWW. The restrictions would have to restrict the use of the property to a solar array for a time or until an event certain and to agricultural use thereafter. The deeds would have to be clear that these restrictions are enforceable by DoAg, Simsbury, or whatever entity will be protecting the future use of the land. Since the enforceability of the deed restrictions is critical, DoAg asks that the Siting Council

impose a condition that DoAg and Simsbury approve the form of the deeds from the current owner to DWW.

10. Conclusion.

For the foregoing reasons, DoAg respectfully asks the Siting Council to deny the Petition.

If the Siting Council determines to grant the Petition, DoAg requests that it impose the conditions described above.

Respectfully submitted,

STEVEN K. REVICZKY, COMMISSIONER CONNECTICUT DEPARTMENT OF AGRICULTURE

By:

Jason E. Bowsza

Connecticut Department of Agriculture

450 Columbus Boulevard

Hartford, CT 06103

Tel.: (860) 713-2526 Fax: (860) 713-2514 Jason.Bowsza@ct.gov

Certification of Service

I, Jason E. Bowsza hereby certify that a copy of the foregoing Department of Agriculture's Post-Hearing Brief was sent on December 1, 2017, by e-mail and by first class mail, postage prepaid to the following parties on the Service List in this matter:

Petitioner, DWW Solar II, LLC

Lee D. Hoffman, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 Tel.: (860) 424-4315

Fax: (860) 424-4370 lhoffman@pullcom.com

Town of Simsbury

Jesse A. Langer, Esq.
Robert M. DeCrescenzo, Esq.
Updike, Kelly & Spellacy, P.C.
One Century Tower
265 Church Street
New Haven, CT 06510
Tel.: (203) 786-8310
ilanger@uks.com
bdecrescenzo@uks.com

Aileen Kenney
Deepwater Wind, LLC
VP, Permitting & Environmental Affairs
56 Exchange Terrace, Suite 300
Providence, RI 02903
Tel.: (401) 648-0607

Simsbury Residents Flammini, et al.

Alan Kosloff, Esq.
Alter & Pearson, LLC
701 Hebron Ave.
Glastonbury, CT 06033
Tel: (860) 652-4020
Fax: (860) 652-4022
Akosloff@alterpearson.com

Christine Kilbourn-Jones

akenney@dwwind.com

Alan Kosloff, Esq. Alter & Pearson, LLC 701 Hebron Ave. Glastonbury, CT 06033 Tel: (860) 652-4020 Fax: (860) 652-4022

Akosloff@alterpearson.com

Jason/E. Bowsza