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Subject: CT Solar PDF LLC
Filing # 95785
NDDDB – New Determination Number: 202301567

Expiration Date: 2/9/2025

Current data maintained by the Natural Diversity Database (NDDDB) and housed in the DEEP ezFile portal indicates that populations of the following State Endangered, Threatened, or Special Concern species (RCA Sec. 26-306) have been documented within the project area or in close proximity to the proposed Energy and Utility Production Facilities and Distribution Infrastructure/Solar Energy, CT Solar PDF LLC.

Eastern box turtle (*Terrapene carolina carolina*)

In accordance with the project information provided in your request submittal, implementation of the following Best Management Practices will avoid negative impacts to listed species:

Common Name	Eastern box turtle
Scientific Name	<i>Terrapene carolina carolina</i>
Taxa	reptile
Status ¹	SC
General Ecology	In Connecticut, these turtles are found in well-drained forest bottomlands and a matrix of open deciduous forests, early successional habitat, fields, gravel pits, and or powerlines. Turtles are dormant between November 1 and April 1 and hibernate in only a few inches from the surface in forested habitat. The greatest threat to this species is habitat loss, fragmentation, and degradation due to development. This species is very sensitive to adult mortality because of late maturity (10 years old) and long life span (50-100years). Vehicular traffic, heavy equipment used for farming, and ATV use in natural areas are implicated specifically in adult mortality through collisions. Illegal collection by the pet trade and unknowing public for home pets exacerbates mortality rates and removes important individuals from the population. Predation rates are also unnaturally high because of increased predator populations (e.g. skunks, foxes, raccoons, and crows) that surround developed areas.
Best Management Practice	Land disturbance activities need to consider local habitat features and apply fencing and/or time of year restrictions as appropriate. We recommend you consult with a herpetologist familiar with preferred habitats to assist you with proper techniques to ensure the best protection strategies are employed for your site and the scope of

your project.

To prevent turtle access and entry into your work zone between April 1- November 1:

- Exclusionary practices will be used to prevent any turtle access into disturbance areas. These measures will need to be installed at the limits of disturbance as shown on the plans, or specifically designated by a herpetologist who can assess the conditions at your site.
- Exclusionary fencing be at least 20 in tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animal pass through.
- All staging and storage areas, outside of previously paved locations, regardless of the duration of time they will be utilized, must be reviewed to remove individuals and exclude them from re-entry.
- All construction personnel working within the turtle habitat must be apprised of the species description and the possible presence of a listed species.
- The Contractor search the work area each morning prior to any work being done.
- Any turtles encountered within the immediate work area shall be carefully moved to an adjacent area outside of the excluded area and fencing should be inspected to identify and remove access point. This animal is protected by law and should not be relocated off-site.
- In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable and disturbance is finished to allow for reptile and amphibian passage to resume.

If land disturbance will occur in suitable overwintering forested habitat you will need to take precautions to avoid mortality of hibernating adults. If practicable, small projects, under the supervision of a qualified herpetologist, may be able to utilize a combination of exclusionary fencing installed before October 15, combined with and surveys to ensure that no turtles are within the enclosed fencing. Work can then be conducted within the fenced area at any time of year as long as the fencing is maintained. Projects that will impact large blocks of forest or significant overwintering habitat may need to restrict your land disturbance activities in forested habitat to the turtle active season. These projects would need to restrict land disturbance activities to occur only between April 1- October 31.

Early successional habitat is important for this species and maintenance by mowing is essential. Unfortunately, mowing is major source of human induced adult turtle mortality.

- Avoid mowing or vehicular traffic during peak use by this species (May 15-Sept 15)

Use these additional techniques to minimize impact, especially if you need to mow during peak use times:

- Mow on multiyear rotation, combine with chemical control of woody plants.
- For grasslands >10acres, limit total mowing to 50% each year. If mowing during active season, limit to 25% of area. If mowing during inactive season limit to 50% of area.
- Mowing style: Avoid flail mower heads with guide bars that ride along the ground. Sickle bar mowers will have the least impact if mowing every 1-5 years. In areas with more woody vegetation >1-2" diameter Brontosaurus-style mower will likely have the least impact on turtles.

	<ul style="list-style-type: none"> • Mowing height: If mowing during active season, retention of mowing stubble to 7-12 inches will reduce mortality, reduce blade wear, and will leave important cover for animals. • Directionality - If mowing during the active season is necessary, start mowing from the center of the field and use a back-and-forth approach, or large circular pattern, to avoid concentrating fleeing animals where they may be killed or stranded. In addition, leave an unmowed 30 ft strip around the perimeter of the field and mow this area last. Most turtles are found in these areas and this provides time for them to react to the mowing activity and move out of the area. o If field is near stream: start mowing the side furthest from stream and work towards stream. o If field is bordered by woodland: start mowing side furthest from woodland and work towards woodland. o If field is bordered by road, start mowing next to the road and work your way across field. • Mower Speed – Mowing in low gear or at slow speeds will allow turtles to react and move out of the field. • Unmowed Edge - Leaving an unmowed field edge in high turtle use areas until after September 15th. Eastern box turtles are usually along field edges adjacent to forest and wood turtle are often in field edges closest to nearby streams. <li style="text-align: center;">(source: MA Natural Heritage & Endangered Species Program) • Landscape Planning: Use partnerships and landscape scale planning to protect important conservation areas for this species • Nesting Area Management: identify and protect nesting areas for this species. Work with biologists to plan your site use and nesting site management.
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¹E = State Endangered, T = State Threatened, SC = State Special Concern, FE = Federally Endangered, FT = Federally Threatened, NA = Not applicable.

Your submission information indicates that your project requires a state permit, license, registration, or authorization, or utilizes state funding or involves state agency action. This NDDB – New determination may be utilized to fulfill the Endangered and Threatened Species requirements for state-issued permit applications, licenses, registration submissions, and authorizations.

Please be aware of the following limitations and conditions:

Natural Diversity Database information includes all information regarding listed species available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection’s Natural History Survey and cooperating units of DEEP, land owners, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as enhance existing data. Such new information is incorporated into the Database and accessed through the ezFile portal as it becomes available. New information may result in additional review, and new or modified restrictions or conditions may be necessary to remain in compliance with certain state permits.

- During your work listed species may be encountered on site. A report must be submitted by the observer to the Natural Diversity Database promptly and additional review and restrictions or conditions may be necessary to remain in compliance with certain state permits. Please fill out the [appropriate survey form](#) and follow the instructions for submittal.
- Your project involves the state permit application process or other state involvement, including state funding or state agency actions; please note that consultations with your permit analyst or the agency may result in modifications or additional requirements. In this situation, additional evaluation of the proposal by the DEEP Wildlife Division may be necessary and additional information, including but not limited to species-specific site surveys, may be required.
- If your project involves preparing an Environmental Impact Assessment, this NDDDB consultation and determination should not be substituted for any conducting biological field surveys assessing on-site habitat and species presence.
- This determination applies only to the project as described in the submission and summarized at the end of this letter. Please re-submit an updated Request for Review if the project's scope of work and/or timeframe changes, including if work has not begun by 2/9/2025.
- If biological surveys have been conducted in accordance with Best Management Practices provided, please forward a copy of the results to the address listed at the end of this letter. Include the Project Name and Determination Number on all correspondence.

The NDDDB – New determination for the CT Solar PDF LLC at , , as described in the submitted information and summarized at the end of this document is valid until 2/9/2025. This determination applies only to the project as described in the submission and summarized at the end of this letter. Please re-submit an updated Request for Review if the project's scope of work and/or timeframe changes, including if work has not begun by 2/9/2025.

This letter is computer generated and carries no signature. If however, any clarification is needed, or, if you have further questions, please contact the following:

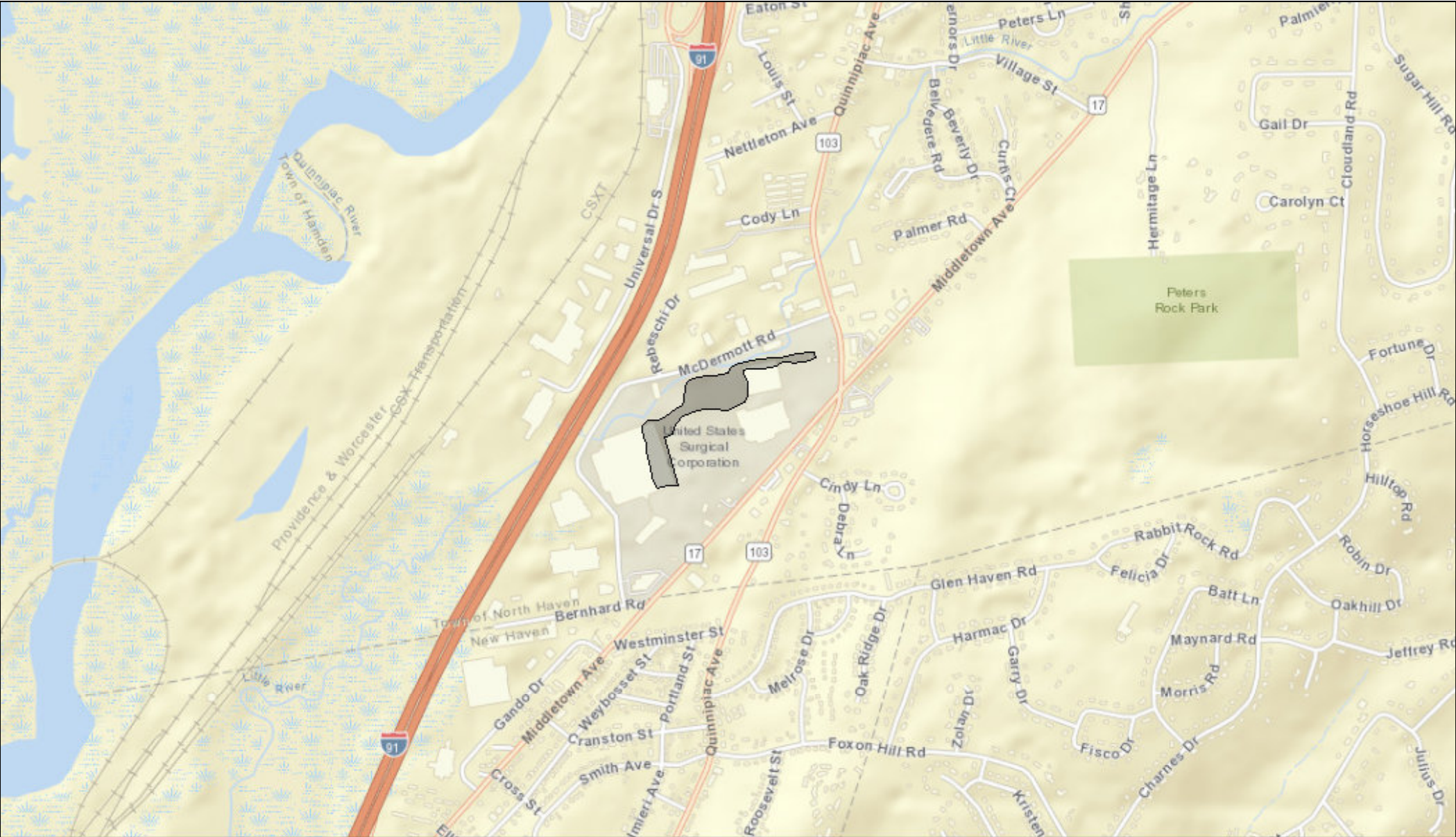
CT DEEP Bureau of Natural Resources
Wildlife Division
Natural Diversity Database, 6th floor
79 Elm Street,
Hartford, CT 06106-5127
(860) 424-3011
deep.nddbrequest@ct.gov

Please reference the Determination Number provided in this letter when you e-mail or write. Thank you for submitting your project through DEEP's ezFile portal for Natural Diversity Database reviews.

Application Details:

Project involves federal funds or federal permit:	No
Project involves state funds, state agency action, or relates to CEPA request:	No
Project requires state permit, license, registration, or authorization:	Yes
DEEP enforcement action related to project:	
Project Type:	Energy and Utility Production Facilities and Distribution Infrastructure
Project Sub-type:	Solar Energy
Project Name:	CT Solar PDF LLC
Project Description:	

CT Solar PDF LLC Map



February 9, 2023

