April 12, 2023

Katie Dykes, Commissioner
Department of Energy and Environmental Protection

Re: Clean Energy Procurement Process – Comments to inform drafting of RFPs

Dear Commissioner Dykes,

Thank you for opportunity to provide input on preliminary requirements for the request for proposals for the various forms of clean energy intended for this procurement. I served as Co-chair of the Rivers Sub-working group of the Working and Natural Lands Workgroup of the Governor's Council on Climate Change, I serve as Co-chair of the Water Planning Council Advisory Group (as a representative of the Fisheries Advisory Council), and was an active participant in the STEPs for Solar process.

Promoting and procuring carbon-free, renewable energy is essential to slowing down the impacts of climate change. However, if not sited and implemented thoughtfully, renewable energy can be harmful to resources necessary to adapt and be more resilient to the impacts of climate change that our region is already experiencing. We need to go beyond only looking at carbon offsets as the measure of balance between losing forest and reducing carbon. Loss of ecosystem services must be considered as well. When it comes to our inland water resources, large-scale solar and hydropower can be particularly damaging if not priced and sited properly.

I was pleased that representation from Environmental Quality and Environmental Conservation were represented at the Energy Procurement and Siting Workshop. Finding a balance between meeting Connecticut's clean energy, environmental conservation/protection and equity goals was a stated intent of this procurement process. The goals for carbon-free energy procurement and carbon reduction are very well defined. What are DEEP's specific goals for the environment and equity in this process?

DEEP and the governor's office have put an emphasis on planning so that we can meet the challenges of climate change. The Green Plan, the Governor's Council on Climate Change (GC3), the Connecticut State Water Plan, Integrated Water Resource Management Planning, and

Source Water Protection Planning – just to name a few - were all developed or are being updated with climate change in mind.

As we look to meeting our clean energy goals, we should be thinking about how this can be accomplished without undermining goals and recommendations that have been clearly defined to protect our natural resources and make our state and communities more resilient to climate change.

SOLAR

Balancing Clean Energy and Environmental Protection Goals

We can look to the Green Plan and GC3's Phase I Report to guide this procurement process.

The Green Plan (aka Comprehensive Open Space Acquisition Strategy) lays out a very specific goal for conservation of open space.

> Section 23-8b of the Connecticut General Statutes set a goal of conserving 21%, or 673,210 acres, of Connecticut's land base as open space by year 2023. Of this, the statute states that the State shall acquire 10% and its Partners shall acquire 11%.

The state is currently *not* on track to meet this goal. We should consider how we can procure solar without losing land that would be valuable for open space or natural resource protection that should be targets for open space to be acquired by DEEP or conservation partners.

The GC3 Phase I report deliberately focused on equity. Solar was used as an example of equitable policies and approaches:

> Solar Energy: An equitable approach to solar would include community solar projects that benefit all residents, including residents of low-income housing and public housing. An example of this could be promoting Virtual Net-Metering for renters and homeowners who are unable to install home solar electric systems.

If we look to meeting all of our clean energy goals primarily through large-scale developments, we undermine equitable approaches that would benefit vulnerable communities.

Furthermore, below are recommendations of the Governor's Council on Climate Change for Near-Term Action to begin to be implemented in 2021 and early 2022:

25. Evaluate approaches and best practices for siting of renewable and non-renewable energy infrastructure to avoid loss of forests, farmland and other sensitive lands. As Connecticut deploys large-scale solar projects, it is important that this development does not supersede other climate change mitigation strategies, including the carbon sequestration and storage potential of natural and working lands. The state should encourage developers to site their projects on brownfields, rooftops, parking lots, and other developed spaces. (cross-listed with Progress on Mitigation Strategies)

27. Increase adaptation and resilience of Connecticut's forests through keeping forests as forests and supported actions to maintain un-fragmented forests.

28. Increase mitigation of greenhouse gases in Connecticut's forests through sequestration and storage of carbon.

b. Consider actions to increase statewide forest cover from 59% to over 60% by 2040.

With these established goals and considerations in mind, how do we find the balance between meeting our energy clean energy goals while also meeting goals and recommendations put forth for protecting natural resources that will also help us to combat the impacts of climate change? **Rooftops, brownfields and canopies first!**

Thresholds and criteria from past procurements were provided at the Energy Procurement and Siting Workshop.

THRESHOLD

- No portion of project or interconnection are in core forest, as defined in statute
- Slopes: SCEF: greater than 15% slopes were not accepted, with the exception of landfills where no more than 10% of the project site could be on slopes greater than 15% Slopes
- 2018 Procurement: No more than 10% of project site and interconnection can be on slopes greater than 15%
- Must include a decommissioning plan
- Avoid ridgelines and ridgeline setbacks (CGS Section 8 1aa)

PREFERRED CRITERIA

- Preferred redevelopment of land including brownfields, landfills, sand and gravel operations

- Preliminary environmental assessment of the project site for wetlands and watercourse impacts (including public and private drinking water supply), DEEP's Forestland Habitat Impact Map, land use impacts, NDDB species impacts, and impacts to prime farmland and agricultural soils
- Required explanation of potential impacts, proposed mitigation or avoidance measures

By looking at these thresholds and criteria, it would appear that many of the issues surrounding environmental protection have been addressed in past procurements. Yet we are still seeing large-scale projects sited on land that undermines forest and agricultural land preservation.

How can that be?

The decision making process is weighted heavily toward price. <u>There must be incentives to utilize previously developed land</u>.

Feedback on Specifics Provided at Workshop

Provided at the workshop was a summary of beneficial siting as identified though the STEPS process. ✓ = in agreement and ⚠ = caution and is followed by comments.

- Use of brownfields promotes cleanup and redevelopment of polluted properties. Makes use of infrastructure and interconnections. ✓✓✓✓✓
- Avoid prime farmland. If farmland must be used, co-locating intensive agricultural use (e.g., shade crops, grazin animals, etc.) with solar energy production is preferred. ✓
- Provide for wetland and watercourse buffers of 100 ft. ⚠

  100 ft is a good start. If imposing site specific buffer zones is too complicated, we recommend increasing the buffer zone for areas in need of a higher level of protection as determined by DEEP's EQ and EC Divisions. In addition, this should be inclusive of vernal pools and intermittent streams as these are included in the statutory definition of watercourses.
- Avoid core forest and chose sites that involve limited disturbance. ✓
- Promote onsite mitigation opportunities for vegetation impacts. ✓
- Follow Appendix I in the Construction General Permit by reducing grading, addressing runoff, maintaining vegetation, and avoiding steep slopes. ⚠

  Improvements to the Construction Stormwater General Permit are very much appreciated and an improvement, however, this action alone does not offset loss of forests, wetlands and riparian areas.
- Have a decommissioning plan. ✓

Below are the criteria on which DEEP is seeking feedback:

- Clear process for community engagement and tangible benefits for EJ Communities ✓
- Siting on landfills and brownfields ✓ ✓✓✓
- Dual use energy generation (agrivoltaics) on unused farmland/farm structures with percentage of farmland maintained for agricultural production ✓
- Colocation of renewable technology with energy storage Information ⚠
  Storage should also be paired with the technology.
- Requirements for Decommissioning Plan ✓

Additional criteria that should also be included:

- Preliminary environmental assessment of the project site for wetlands and watercourse impacts should include drinking water watershed areas in addition to aquifer protection areas.
- Incentivize use of previously development land
- Give meaningful weight to nonprice factors, including impacts to agricultural land, forest, grasslands and other natural resources

HYDROPOWER

Hydropower provides clean, carbon-free, energy, but it also can have substantial impacts on river health by blocking fish passage, dewatering areas where fish and other critters raise their young, and degrading habitat along riverbanks by allowing water to fluctuate up and down. The environmental impacts of hydropower should be given equal consideration to other factors in any investigation into how hydropower can be better utilized in Connecticut.

Criteria from the 2018 Zero Carbon procurement were provided at the Energy Procurement and Siting Workshop.

Impacts to Water Resources:

- Utilize existing dam ✓✓✓✓✓
- Proposed interconnection route and site improvements have no long-term impacts on water quality and wetland resources ✓
- Consistency with Planning, Conservation and Development plans for the area (Connecticut only) ✓

Impacts to Natural and Ecological Resources:

- Consultation with DEEP Fisheries on need for fish passage (Connecticut projects) . ⚠

Where appropriate, the most biologically effective fish passage along with sufficient flows for spawning, rearing and migration should be required.

- Mitigation proposed if needed. ⚠

  Mitigation ~~proposed~~ required if needed.

Land Use Impacts:

- Design allows for minimum flow in river to support aquatic life. ✓
- Existing dam and impoundment, no zone changes are required. ✓
- No potential impacts to properties upstream or downstream of dam. ✓
- No impacts to core forest or prime farmland. ✓

Connecticut's energy policies should reward existing hydropower projects that can demonstrate superior environmental performance and encourage investments in measures that will improve environmental performance. The following criteria must be considered if Connecticut intends to expand use of hydropower:

- Decommissioning: require establishment of a general fund to cover decommissioning of retired hydroelectric projects, or, as a requirement of issuing individual licenses, ensure that all licensees have financial resources to pay the cost of individual project decommissioning.
- Require an economic and efficiency analyses of proposed projects. The results must be subject to independent peer review and properly applied to the project.
- Require project owner to manage lands it owns to mitigate project impacts.
- Establish environmental mitigation funds by setting aside a percentage of their gross power revenues for river conservation, restoration, and recreation projects.

Thank you again for the opportunity to provide comment. As always, Rivers Alliance is available, happy, and willing to work with the department and all stakeholders in meeting our clean energy and carbon reduction goals while protecting our vital natural resources.

Sincerely,

Alicea Charamut, Executive Director