

Connecticut Green Bank

REQUEST FOR PROPOSALS FOR SOLAR PROJECTS AT STATE OF CONNECTICUT FACILITIES

RFP Answers Round 1

Dated July 29, 2021

Q1: Will you distribute the Attendance Sheets from the Site Visits including contact information?

Yes, the sign in sheets will be made available in Amendment 2.

Q2: Will CT Green Bank consider proposals for individual or a selected number of specific project sites instead of the full scope for all 14 sites?

Proposers can submit for individual projects or as a portfolio bid.

Q3: Can we have a list of any roofs with tectum or gypsum decking as well as any drop ceilings?

Answer forthcoming in future release.

Q4: Are there structural drawings available for our engineers to view?

Answer forthcoming in future release.

Q5: At H.H. Ellis Tech School we are exploring possibilities to utilize roof space despite the slope of the crickets, but will need a different type of racking solution. If there are any specifications or drawings that can give measurements of these areas and the slope we will have to deal with it will help us narrow down the best alternative.

Answer forthcoming in future release.

Q6: What authority issues permitting and zoning approvals for the CTEC schools?

These schools are State of Connecticut owned and operated facilities. Thus, permitting and inspections would be by the Department of Administrative Service (DAS) Office of the State Building Inspector (OSBI) and the Office of the State Fire Marshal (OSFM).

Q7: Will the airport adjacent to H.H. Ellis High School require additional approvals?

Yes, the awarded Proposer will be required to obtain FAA approvals for the installation of solar at H.H. Ellis High School. FAA Form 7460-1 (https://www.faa.gov/documentLibrary/media/Form/FAA_Form_7460-1_042023.pdf) is required. It is the responsibility of the awarded Proposer to determine if any additional forms or approvals are needed.

Q8: Are there any specific conduit requirements?

All conduits shall be compliant with relevant code requirements. Refer to FM Global requirements where applicable. In addition, PVC is acceptable for underground installation only. EMT can be used in exterior locations with weather rated fittings and hardware. RMS and IMS are not required unless stated by code. LFMC can be used for short jumpers, less than 3' preferred, when making final connection to equipment.

Q9: Is it a requirement that bidders bid all 14 sites? It is possible that some sites may not provide economic benefit for the site host given the scale and cost of the system.

Proposers can submit for individual projects or as a portfolio bid.

Q10: Is the lighting plan required for carport proposal designs, or only for the final design before construction begins? (Item 17 in the RFP)

Site lighting plans do not need to be submitted as part of the proposal design.

Q11: Can you confirm that there are no water management requirements for the solar canopies, apart from the snow rail requirements?

Snow rails are the only water management requirement.

Q12: With dual tilt canopies, snow will accumulate in the concave "valley" of the canopy, as both of the canopy planes tilt inwards. If we develop dual tilt canopies, is there still a requirement to include snow rails?

A snow rail will not be required for a dual tilt canopy that has a "valley" for snow accumulation.

Q13: With respect to the Monitoring System requirements, it would be helpful to have the site host provide power and internet feeds. Without knowing the exact location of the systems, the contractor cannot estimate the cost of running electricity feeds to that location. Additionally, it is not typical for a long-term solar project owner to be responsible for electricity costs or an ongoing internet connection through a 3rd party that will need to integrate with campus/agency IT security. Would

CTGB be open to bids that include scope for a smart TV monitor with mounting bracket and a URL link to the monitoring page, but for the site owner to be responsible for ensuring proper connection of the system?

The project owner is not responsible for the cost of electricity and internet service to the monitoring system. However, the proposer is responsible for providing the necessary wiring, conduit, receptables, labor, etc. in order to provide power and internet from the nearest source within the facility to the monitoring system and production display. For projects where the facility's internet service cannot be utilized a modem with cell data capabilities shall be incorporated into the monitoring platform. The proposer is responsible for all associated hardware and installation, but they are not responsible for on-going data services.

Q14: Who will sign the interconnection agreements?

The Connecticut Green Bank and the host agency will sign the interconnection agreements.

Q15: Have all three of the state agencies who own the sites in the RFP done solar PPAs before?

DEEP and DAS have done solar PPAs with the Connecticut Green Bank. All projects will use a PPA template that has been approved by the State and the Attorney General.

Q16: Some sites have a higher MAQ (based on the ZREC application) compared to the site load. Should we be designing our system production to the MAQ or the site load in these cases? (Portland Depot and Eli Whitney Technical HS)

Portland (S-101): The proposed system design can have a production equal to the MAQ. This facility has a planned electrical service upgrade, and additional electric loads will be added.

Eli Whitney Technical HS (S-105B): The proposed system design should meet 85% of the site's annual usage as listed on the Site Report. The ZREC size of 100 kW was used in order to allow greater flexibility to the proposers when selecting inverters.

Q17: Site 1: Quinebaug Fish Hatchery:

a. There is a utility line running right through the southeastern array. Is this line going to be removed in order to place PV in that area? Was this line taken into consideration for the indicative designs?

A. No, the utility lines will not be removed. Yes, this was taken into consideration for the indicative designs. Adequate working clearances shall be maintained from the existing utility lines and the PV array.

b. The topography of the northwestern array looks extremely challenging, particularly in the south of the proposed indicative array. Was this taken into consideration for the indicative designs?

B. Yes, the topography of the northwestern array was taken into consideration for the indicative designs. The proposer can utilize either area or a combination of the two as they see fit in order to provide the best and most cost effective design.

Q18: 11. Site 3: Marine Headquarters:

a. Can the skylights/lexium panels be covered with solar PV? Its possible that some racking or modules will cover these panels and block the sunlight access (without compromising any rooftop structural integrity).

A. No, the skylights cannot be covered with solar PV. The skylights are the primary source of light for the building.

It is the responsibility of the proposer to perform a structural analysis and ensure their design does not impact the structural integrity of the facility

Q19: 12. Site 5: H.H. Ellis Technical High School:

a. Can we explore alternate designs that reconfigure the mix of rooftop and carport solar? Given that rooftop solar is much cheaper than solar canopies, it might make sense to develop more solar on the available rooftop areas, despite the presence of crickets.

A. Yes, the entire roof is available for solar PV.

b. There is a large statue/piece of artwork located very close to the northern canopies. It is likely that solar canopies may block the view of this art. Is this acceptable?

Answer forthcoming in future release.

c. Will the school consider longspan canopies that span the drive isle between back-to-back parking rows?

Answer forthcoming in future release.

d. The indicative layout shows canopies located very close to the edge of the southern fence, bordering the neighboring airport. Is it acceptable for canopies to be located so proximate to this perimeter fence?

D. What has been provided is a conceptual design and intended to be used as a guide. Approvals are performed at the state level, and therefore not burdened by the limitations of local zoning. Additionally, FAA requirements should be considered.

Q20: 13. Site 7: Eli Whitney Technical High School:

a. Is it possible to develop a solar canopy in the proposed location that overhangs the drive aisle or the grass south of the proposed canopy? This will allow us to build a canopy with more capacity per column, which will allow for a much cheaper build.

A. These areas may be traveled by busses, delivery vehicles and fire trucks each with variable clearance requirements. Therefore, the drive aisle shall not be covered. The grass areas to the south of the proposed canopy can be covered, but should not interfere with the athletic fields.

b. Alternatively, if the answer to (a) is no, is it possible to develop a solar canopy over the E-W parking lot to the west of the proposed canopy location? Again, this will allow us to build a canopy with more capacity per column, which will allow for a much cheaper build and better economics for the school.

B. Proposers can submit a carport on the E-W parking lot if this will provide the best and most cost effective design.

Q21: 14. Site 8: Henry Abbot Technical High School:

a. Will the school consider solar on the rooftop in addition to solar canopies? Rooftop solar may provide better financial returns given the cost structure.

A. Proposers should only plan to use parking lot areas as demonstrated in the Exhibit A site report.

Q22: 15. Site 9: Howell Cheney Technical High School:

a. Will the school consider longspan canopies that span the drive aisle between back-to-back parking rows?

A. These areas may be traveled by busses, delivery vehicles and fire trucks each with variable clearance requirements. Therefore, the drive aisle shall not be covered.

Q23: 16. Site 10: W.F. Kaynor Technical High School:

a. The RFP appendix did not contain rooftop structural drawings or details on the roof type. If available, will the school provide these for review?

Answer forthcoming in future release.

Q24: 17. Site 12: DOT HQ

a. Is there any reason that we would need to develop the small GFT array, or the array SW of the building in the lot parallel to the road? Any reason why we couldn't move some generation to the northern half of the lot?

A. The DOT requested a small ground mount system at the front of the parking lot for those driving by or entering the facility to see. The carport in the lot parallel to the road was added to provide coverage to the DOT's maintenance vehicles. Proposers should develop a design that they determined to be the most cost effective and advantageous.

b. Will the school consider longspan canopies that cover multiple drive aisles/parking rows?

B. The carport layout depicted in the site report has been approved by the DOT, but they may consider longspan canopies that cover multiple drive aisles/parking rows. Proposers should develop a design that they determined to be the most cost effective and advantageous.

Q25: 18. Site 13&14: CT Transit Hamden

a. The RFP states that the actual secured ZREC size for CT Transit System 1 is 940kW and System 2 is 510kW, but that we should not submit designs greater than 500kWac. What is the reason for the limitation?

A. The available structural capacity of the roofs is the limiting factor. This can be seen in the exhibit "CT Transit Excess Load Capacity Plan." The intent is to utilize all of the areas with sufficient structural capacity and maintain two equal sized solar arrays at 500 kWac - each dedicated to an individual electrical service.

b. Would CTGB be interested in entertaining a proposal that maxes out the ZREC MAQ, specifically by designing lower cost solar on the rooftop in order to minimize the PPA rate and the project savings, particularly given that these sites have adequate load for more solar?

B. No

Q26: During the site visit at Quinebaug Hatchery it was mentioned that the State would pay for and perform tree clearing in the East field, is this true?

No, the State will not be cutting or trimming trees for the solar project. Any trees the proposers deem necessary for removal shall be included in the proposed cost and will be the responsibility of the proposer.

Q27: Can you please provide any available site drawings for all locations included in the RFP?

All of the drawings and supplemental information that were made available to the CT Green Bank as part of this RFP are located in EXHIBIT A – SITE REPORTS AND AVAILABLE DETAILS link. Any additional drawings and/or supplemental information will be uploaded there and a notification will be provided via an RFP Amendment.

Q28: Can you also clarify what ZREC is assigned to which meter at each location?

The location of the meter(s) are indicated on the applicable Site Report Exhibits. Proposers have the opportunity to view the meter(s) and record any relevant information during the second session of site visits (dates and locations referenced in Amendment 2).