

Buncombe County Solar Solicitation

Questions and Answers submitted by pre-bid attendees

1. We did not see any structural letters pertaining to the parking garages listed in the Roofing Data spreadsheet. Will that information be made available in the near future?
There are no structural engineering letters for the parking decks. Through design-development, Pisgah Energy and the structural engineering team with Quest Renewables have reviewed the parking deck structures and have adapted the canopy designs to be compatible with them. The dead and live loads from the canopies as designed in the bid drawings present no concerns to the parking deck structures. It will be the responsibility of the bidders to include final structural engineering for the canopies. Quest Renewables staff is ready to accommodate the bidders with guidance and costs for final structural engineering on the canopies.
2. Is the county interested in Net Metering or a PPA as part of financing or lease terms? ***All of the projects are designed as net-metered systems with the exception of the sell-all system for Wall. St Parking Garage.*** If so, has the county been in communication with DEP about this? ***DEP doesn't engage on solar interconnection discussions until the Interconnection Request has been submitted. The contractor is responsible for submitting the Interconnection Request.***
3. All of the drawings are for bid-only. Quest Renewables and RBI Solar are providing stamped engineering drawings in their proposals for the parking deck systems and the ground-mount systems respectively. Do we also need stamped engineering drawings for every other roof racking system, electrical system, and civil site plan (fencing, gravel road, etc.)? ***Yes***
4. Will the winning bidder be working with Pisgah Energy to create a Plan Set for Construction? ***Pisgah Energy/ Optima Engineering are part of the plan review team and will be reviewing the final construction sets for permitting to ensure consistency with the bid drawings and specifications.*** If so, can a numbered list be provided of what is needed in order to create construction drawings (Example: 1. Stamped Engineering Drawings from Quest 2. Stamped Single Line Diagrams from Electrical Engineer 3. Land Survey for Ground Mount 4. Existing utility locations). ***Projects within Asheville City limits will be permitted through The City of Asheville. Projects outside of Asheville City limits will be permitted through Buncombe County. Each jurisdiction dictates the requirements for the permitting plan set for construction. Here is a link to the City of Asheville Map that defines city limits –***
<https://avlmap.ashevillenc.gov/>
If bidders aren't familiar with the requirements for a construction plan set for each jurisdiction, they can reach out to the permitting agencies for Buncombe County and The City of Asheville.
<https://www.ashevillenc.gov/department/development-services/>
<https://www.buncombecounty.org/Governing/Depts/permits/Default.aspx>
5. Are there any requirements and/or constraints for temporary site facilities and utilities? (Example: dumpster, site office, laydown area, security, water, toilet, electricity, site sign)? ***The contractor is responsible for providing all temporary site facilities to properly execute construction.***

- *Dumpsters and Temporary Toilets - The agency owners will work with the contractor to determine the location for temporary dumpsters and toilets during construction. Customer dumpsters and restrooms will not be available for contractor use.*
 - *Site offices are not required but could be provided. Many of the job sites don't have the required space for a site office. If the contractor is providing a site office, the agencies will work with the contractor to determine the placement location for a mobile office.*
 - *The crane and staging areas for the canopy projects are defined in the bid drawings and within the site visit videos. The final hoisting and laydown areas for all other sites have not been determined. The agencies will work with the contractors on accommodating hoisting and laydown areas.*
 - *Site security staffing is not required for these projects. The contractor is responsible for securing all stored equipment during construction.*
 - *Water is available at most sites, which contractors may use.*
 - *Electricity is available at most sites for contractor use, however a generator may be preferred based on the distance to the nearest source of electricity at many of the sites.*
 - *Locations for signs have not been discussed, however the agencies will work with the contractor to determine a location if there is room at a jobsite.*
6. The RBI Solar Proposal requires Pull-Out Tests and Corrosivity soil tests for each of the ground-mount sites. Does the County require any more soil testing than this? ***The racking manufacturers dictate the field verification requirements to get a structural engineering stamp on the racking system. A stamp on the racking system for construction typically satisfies the requirements of the permitting authority for plan/review and issuing permits. Bidders can consult with the permitting authority for specific requirements.***
7. Will erosion & sediment control measures be required for any of the projects? ***Where applicable, yes.***
8. RBI requires a certain level of construction site surveying for the ground-mount systems. Will benchmarks, coordinates, etc. be provided to the bidder for this? ***The contractor is responsible for establishing coordinates on the surveys. Some existing site surveys may be utilized for reference, however many of the sites don't have current surveys. Underground utilities have not been located during bidding stage. The contractor is responsible for locating all underground utilities.*** Will the County require construction surveying for other projects (fence, road, etc.)? ***The civil plans required for fencing and roadwork will require surveying.***
9. Are there any other administrative requirements besides building permit fees, utility fees, etc. associated with a fee that the bidder needs to take into consideration (Example: stormwater permit, etc.)? ***Bidders should consult with the permitting authorities as needed to determine all permits required for plan/review/permitting and construction. The AHJ, Utility, and N.C. Utilities Commission are the only entities requiring approval for these projects.***
10. The specifications for the site fence is deemed by our subcontractor to be unusual even for DOT standards. Is this specification set-in-stone? ***Please recommend alternate specifications to consider.***

11. What are the requirements for testing, commissioning, and maintaining the system? ***The contractor is required to test and commission the project to achieve a fully operational system. Bidders should include their scope of services for system maintenance. The specific requirements for system maintenance have not been defined.*** Will the contractor be liable if they install the system as bid, but the system doesn't perform according to the production data calculated by Pizgah? ***The contractor is responsible for ensuring the system is fully operational, however there are no production guarantee requirements for these projects.***
12. Our ground mount estimates are conditioned on pull tests being conducted. I don't think this can occur before the bid. Have these been done?? ***No, the contractor will need to provide pull tests/geotechnical engineering.***
13. What if we find trouble with the pull test? ***We understand bidders have to provide their estimates based on assumed good soil conditions. If you determine there is rock in place or a soil type that changes the scope of work, that would merit a change order.*** How do we condition that in the bid?? ***Qualify that in your proposal.***
14. In trying to come up with a leasing agreement we need to know the rate structure. I can imagine there are many different ones considering the complexity of the job. Can you give us some guidance on how this might work or be simplified? ***Bidders are not being requested to provide annual savings information relating to estimated solar production and the customer rate schedule. The lease rate from lessor is a function of the return on investment goal required by the lessor. For instance, if the lessor's investment return goal is X% IRR at Year 20, the lease rate will be based on meeting the investment return goal. Since savings is not a function of calculating the lease rate, there are no plans to share the rate schedules.***
15. For the base bid direct purchase scenario, will the projects be funded in periodic (i.e. monthly) construction draws from the city or county based on percentage of work complete? ***Typically in construction the County allows progress payments for work put in place during that time period. We usually do monthly billings and require a retainage to cover any issues if they arise. Retainage is normally paid out as the last pay app.***
16. There is a rumor that the City of Asheville pulled funding for the RFP. Can you speak to this? ***There has been confusion around this issue. The City did NOT pull funding for this solicitation. A City Council member had proposed a new tax that would fund renewables, among other things, in future fiscal years. That proposal is no longer being considered.***
17. Except for the garage canopies are the racking designs complete and stamped by the racking company? ***None of the racking systems have been stamped by a structural engineer for final construction. Knowing the bidders have options for multiple solar panel and racking combinations, we considered it a bad use of funds to do final engineering on a racking plan set when the final solution used for construction may differ from what is shown in the bid drawings.***

18. Also, I know the major equipment such as modules and inverters can't be changed. But do we have leeway on the racking we use? We normally have a preference of the ballasted racking in particular.

All products specified in this bid went through a vetting process to ensure compatibility in the designs and at this stage of bidding, we cannot consider any new products for design compatibility other than the ones listed in the specifications. Bidders have the option to select from three ballasted racking companies and four flush-mounted racking companies that are listed in the specifications. If the selected bidder identifies a racking solution that was not listed in the specifications that would provide additional benefits, the owner may consider an alternate racking solution.

19. It is understood that no alternate manufacturers/vendors will be considered. However, can approved vendors be interchanged on a project by project basis? For example, if RBI offers a rooftop racking solution that is comparable with the specified IronRidge or PanelClaw system, can RBI be used?

Bidders have the option to select from three ballasted racking companies and four flush-mounted racking companies that are listed in the specifications. No additional alternate racking systems are acceptable. RBI is not one of the roof mounted solutions approved for the project. If the selected bidder identifies a racking solution that was not listed in the specifications that would provide additional benefits, the owner may consider an alternate racking solution.

20. I just checked with our NABCEP person in the office. He only has the NABCEP entry level certification same as me. Most larger solar projects are designed before we bid on them as is true in this case and this is the first time we have ran into the installer certification. Question is will this be sufficient for the certification or will we need a NABCEP installer on staff. If so, at what point will this need to occur. Before the bid is submitted or after the project is awarded but before the project begins?

The NABCEP PV Installer Certification documentation is required to be submitted with your bid.

21. The Equipment Data sheets included show multiple items that are not included in the designs of the RFP. This includes the following:

- a. Hanwha Qcells Qpeak Duo module. I could not find this anywhere in the design packages. ***From Specifications Sheet G002-Section 2.4.A,***

A. Basis of Design for PV Modules is based on REC-385TP2SM72. Approved alternates are Trina TSM-D315H.385 and Q-Cell Q. PeakDUOL-GS.2.385."

- b. Trina Solar 385W. They have included spec sheets for both the 385W standard module and the Bi-facial version. In the RFP design packages I was only able to find the bi-facial version listed. May have missed something? ***From Specifications Sheet G002-Section 2.4.A&B,***

A. Basis of Design for PV Modules is based on REC-385TP2SM72. Approved alternates are Trina TSM-D315H.385 and Q-Cell Q. PeakDUOL-GS.2.385.

B. For Quest Canopy Systems, Solar Modules Shall Be Trina 385 BiFacial Translucent Module TSM-D3G15HC.20.385. No Alternates will be allowed for these systems.

- c. SolarEdge SE43.2KUS. This is not listed in the design packages. However, there are two systems that are utilizing 6x14.4KUS and one that is utilizing 8x14.4KUS inverters. The 43.2KUS inverter is a pre-stacked version of 3 x 14.4KUS inverters. Are we supposed to assume that we can make this change? Will need to further research to make sure the layout would accept this type of inverter “change” (may have missed a note or something).

There is a clarification coming in the upcoming addendum regarding the SolarEdge 43.2kW inverters. Understanding that there is some substantial cost-savings to using the 43.2kW inverters when you have at least three 14.4kW, bidders will be allowed to quote the 43.2kW inverters in lieu of the 14.4kW inverters if they choose to. This will not change the system capacity of the designs but will likely provide some cost savings to the project.

Additionally, The SolarEdge 66.6kW and 100kW inverters are configurations of (2) and (3) SolarEdge 33.3kW inverters, so for the 480V sites where SolarEdge 33.3kW inverters have been specified, bidders will be allowed to quote the 66.6kW and 100kW inverters where applicable. Using the 66.6kW and 100kW SolarEdge inverters will not change the system capacity of the designs but will likely provide some cost reductions. The upcoming addendum to be released at the end of the month will clarify this.

22. On just about every building, there appear to be duct work, vents, drain cleanouts, air handlers, fans, etc. directly where the panels are located. The layout drawings specify “keep out” areas, but some locations appear to be ignored. Also, removing debris from roof drain cleanouts is a necessary part of any building maintenance schedule, yet there are no aisles, paths, or gaps between rows for building maintenance workers to have access without weaving in and out of our equipment. Question(s): are we allowed to remove panels from the array, or are we bidding on a project that will need to be immediately change-ordered with updated drawings, system sizes, and pricing?

The solar panel and racking layouts included in the bid drawings have been reviewed, modified and optimized multiple times with Pisgah Energy, the owners, and the racking manufacturer to ensure the layouts are code compliant and allow access/meet clearance requirements for serviceable rooftop equipment. Please submit any specific questions you have referencing the specific areas of concern on the rooftop. Reference the project name, the area of concern and the sheet number. From specifications Sheet GOO2, section 1.2.V & W – V. If During the course of work, the contractor discovers a problem with the performance of the installation relative to the plans and specifications, the NEC, or other code requirements, the contractor shall immediately bring the problem to the attention of the solar designer and/or electrical engineer for resolution prior to the execution of the work. W. Where there are conflicts between the plans and specifications, the contractor shall bring the issue to the attention of the engineer for resolution prior to the execution of the work or ordering any materials. No additional costs shall be warranted without a change to the project scope.

23. Panel Claw has stated an estimate of the number of ballast blocks at each array; however, the drawings say “not for construction.” Are we safe to assume that these numbers are engineered

and accurate? Should each company bid on the proposed number of blocks and if different, the winner change order?

Bidders are to provide final structural engineering on the racking solution used and are to account for the correct quantity of equipment when estimating materials. PanelClaw has estimated that this is the number of ballast black required, however the selected contractor will need assume all materials costs for a turn-key solution. With bidders having options for multiple racking solutions and each of those solutions having different requirements for ballast blocks, we will not advise bidders on the number of ballast blocks required for bidding.

24. We've heard that the re-roofing is not in the scope of this RFP. Are each of these roofs with panels being replaced and warranted for 20+ years outside of the scope of this RFP? **No.** If not, is it possible to exempt our maintenance costs for the price of reroofing or list it outside of our price to Buncombe County? **Your maintenance costs should reflect the costs for annual operation and maintenance and should not include any costs associated with re-roofing.**
25. Has anyone from Pisgah Energy actually been on each of the rooftops that they've provided design documents for us to bid on? If not, the city needs to assume changes to system sizes, equipment, and price if and when the contract is awarded-- regardless of who wins.
Pisgah Energy and Optima Engineering have been to the facilities multiple times to verify that the designs proposed are compatible with the existing site infrastructure.
26. Are we expected to verify each of the designs for correct wire sizing and equipment according to NEC, or just bid as-is and change order any design issues after the contract is awarded?
Bidders are expected to bid the systems as they are designed. If bidders have any concerns regarding the designs, they should submit a specific question referencing the project name, area of concern and sheet number. Pisgah Energy and all design partner affiliates have designed the systems within the best of their ability to be compatible with each of the sites. The specifications state that the intent of the bid drawings is not to provide every minor detail of construction. Knowing the bidders have multiple options for the final equipment selected for construction, it's a bad use of funds to provide 100% engineered drawings at this stage. The bid drawings are at a ~50% completion level that provides key details for understanding the basics of the site, array(s), equipment locations, interconnection strategy, as well as conceptual solar/electrical design that gives bidders the ideas but also specifies capacities and components that all bidders will be held to. Details such as circuit lengths, conductor/conduit sizing, voltage drops, string maps (DC source circuits) are the responsibility of the bidders to provide in the final engineering plan sets for permitting. From specifications sheet G002, section 1.2.Q and S--
Q. Contractor shall be responsible for final field verification and for producing 100% construction drawing set for plan review and permitting.
S. It shall not be intent of the of issued plans and/or specifications to show every minor detail of construction. The contractor is expected to furnish and install all necessary items for a complete and operating system.
27. COVID-19 is making site visits difficult. Are we to assume the equipment and infrastructure listed at each site is correct and accurate, and the winner change order any discrepancies?
The equipment and infrastructure at each site has been verified and bidders are to assume this is correct. From specifications Sheet G002, section 1.2.V

V. If During the course of work, the contractor discovers a problem with the performance of the installation relative to the plans and specifications, the NEC, or other code requirements, the contractor shall immediately bring the problem to the attention of the solar designer and/or electrical engineer for resolution prior to the execution of the work.

28. Is it possible to have Pisgah Energy revisit and verify each of their designs, provide functional systems, appropriate equipment and solutions throughout, and accurate engineering for each so that each solar contractor is bidding on the same, viable systems, pushing the bid date if necessary?

Pisgah Energy and Optima Engineering have been to the facilities multiple times to verify that the designs proposed are compatible with the existing site infrastructure. If bidders have any concerns regarding the designs, they should submit a specific question referencing the project name, area of concern and sheet number. There are no plans to push back the bid date.

29. Are interconnections going to be able to be made down, or are we assuming they would have to be made live?

Many of the proposed methods for interconnection will require a scheduled power outage. The selected bidder will need to coordinate the scheduled power outage with the owner.

Are there lugs available?

For the sites where interconnecting at a line side tap of the main breaker, almost all sites have been confirmed that there is an open tap/terminal to interconnect this way. A couple of the sites for Buncombe County Schools have not confirmed if there is an open tap/terminal and the interconnection on these sites will change to a circuit breaker. This will be clarified in the upcoming addendum.

30. Question for Quadpod: can we run conduit between rows as shown on the Pisgah Energy drawings for HHS parking deck?

The conduit pathways on the plans are indicative for connecting the circuits but do not reflect the final exact location for conduit. Understanding that aesthetics are imperative for the canopy systems, conduit should be installed in a manner where it is concealed or running along side framing members as much as possible. Conduit can be run between rows but it needs to be concealed as much as possible. Bidders can discuss constructability methods for running conduit between the canopy rows with Quest Renewables directly when receiving quotations from them.

31. Verification firms are noted in the RFP. " established relationships with installers, operators, maintenance, and verification firms." Is there a requirement for outside verification?

Bidders will be required to obtain verification as required by the Authority Having Jurisdiction.

32. Under 'Basic qualifications', it states "Provide current letter from surety firm showing evidence of minimum \$10M aggregate bonding limit/ \$2M single project bonding limit." If there are funds from the bidder in lieu of the bid bond amount, how do we show this?

The bid bond required for bidding and the performance and payment bond required for construction are two different requirements. The letter from the surety firm showing evidence that the firm can provide a performance and payment bond during construction for the stated aggregate and single project bonding limits is a requirement that should not be overlooked. If

you are providing a cash deposit, cashiers check or certified check in lieu of a bid bond, the bidder still needs to submit the letter from the surety stating the aggregate and single project bonding limits for the bidding firm.

33. When will virtual tours of the facilities or pre-recorded videos made available in lieu of site visits? Will the deadline of May 15th be extended as well as the request for information deadlines and so on?

The videos of the site videos will be live by no later than May 15th.

34. Question: I do not see anything about rapid shutdown for the Fronius or the SMA inverters. Can you give me some clarification about that. It is my understanding that Fronius is ignoring rapid shutdown and not supporting rapid shutdown as required in the NEC 2017 code.

Rapid shutdown at the module level is not required for the canopy and ground-mounted systems. Fronius inverters are specified for the canopy system at the Wall St Parking Deck only due to this being a 208V account. 480V SMA Inverters are specified for the canopy systems at 164 College St Parking Deck and 40 Coxe Ave HHS Parking Deck and all ground-mounted systems, with the exception of Enka Intermediate at Buncombe County Schools, which utilizes SolarEdge for the roof and ground-mounted arrays.

35. Question: Several vendors are expressing concern about availability of the modules at the specified wattages in a year or so. As you know the wattage size of modules goes up seemingly every day. So, what is available today may not be what's available when we actually need them.

We fully understand that based on the project timelines, the actual wattage classes may deviate from a 385 watt module. We have spoken with Q-Cell, Trina and REC and they are all prepared to quote 385 watt modules for this portfolio to ensure all bidders are quoting 385 watt modules.

36. Question: Why was there not a pre-qualification for these projects?

On the advice of the County's Purchasing Dept. we did not seek a prequalification process for these projects. The general thought was that the state required process for conducting a prequalification would be very time consuming and labor intensive and might delay the process of issuing the solicitation even further. It was determined that the County and its partners would instead require a high level of standards for any potential bidder. For example, the requirement for an NC unlimited GC license, surety letter show a \$10M Aggregated bonding limit, cash deposit or bid bond for the full amount of the bid, performance and payment bonds, etc. The County believes that setting high standards in this regard helps to ensure that only qualified bidders will be able to submit responses to this solicitation. In addition, our team will be reviewing the responses for applicable and relevant experience. If a bidder is unable to show in their response that they have relevant experience and capacity to handle the size and scope of these projects, they could potentially not be considered a responsible bidder and may not be awarded.

37. Question: You mentioned an apples to apples comparison during the pre-bid meeting. How do you get an apples to apples comparison with direct purchase vs a financed option? Can you give an example?

In the pre-bid, a reference was made to being able to compare bids "apples to apples". This was in reference to the fact that the County has created uniform specifications to be followed by all bidders for all projects with regard to system size, panels, inverters, racking, and other

system requirements. This is to ensure that all bidders are providing their quotes on the same level of products for each system.

The “apples to apples” statement was also used in reference to providing solar leasing bids. The County requested the estimated cost to purchase the systems at the end of the leasing period in order to help make a better comparison to the direct purchase option.

This expression was not intended to reflect a comparison between a direct purchase option and a financed option. The County understands that financing a project clearly adds additional costs over time and is not comparable to a direct purchase option. However, we do understand that some EPCs may have relationships with third party financiers and may be able to provide favorable terms which still allow for the projects to be financially feasible. The County and its partners are interested in reviewing what those option could potentially look like if available, in addition to direct purchase and leasing models.

38. Does the firm responding to the RFP need to have financing capacity in order to offer a financing option through the bid, or can that be provided through a third party such as a bank?

Bidders can use a third party to finance the project.

39. Additionally, does the firm responding to the RFP need to be licensed to lease solar in North Carolina, or can that be provided through a third party such as a leasing firm?

Our original understanding was that to offer a solar lease in NC, the lessor must be registered as an electric generator lessor. However, we have recently been made aware of third party leasing companies/financial institutions that claim to be able to provide among other things, a “tax-exempt installment purchase agreement with non-appropriation language”. If bidders can offer and provide a viable legal structure with a third party leasing company we will accept it. That structure is currently under review by our legal/financial team to determine compliance with NC General Statute and applicable accounting practices. It would be very beneficial and expedite the review process if a firm could provide relevant examples of such agreements in NC with a non-profit or tax exempt entity.

40. Does the production modeling you receive include the removal of any potential shade obstructions such as trees?

Yes

41. We understand from the County’s response to question #4 presumes that financing over time adds additional costs that are not comparable to a direct purchase option, as noted below:

Question: You mentioned an apples to apples comparison during the pre-bid meeting. How do you get an apples to apples comparison with direct purchase vs a financed option? Can you give an example?

Answer:The County understands that financing a project clearly adds additional costs over time and is not comparable to a direct purchase option....

We respectfully suggest this would be true if you are not attributing any time value of money or the opportunity costs of debt financed CAPEX expenditures that could otherwise be directed towards other critical purposes, such as building smaller classrooms or emerging new priorities in light of COVID-19 challenges. It also assumes that 3rd party financing cannot achieve any additional savings passed along to the schools through monetization of tax benefits to system owners that accrue to solar projects. There are several ways to objectively evaluate direct purchase vs financed capital projects, including Net Present Value (NPV), Internal Rate of Return, and Cost-Benefit Analysis. The most widely used approach for this purpose is NPV, that builds on a discount rate for the cost of capital, and the stream of future

values. In order to equitably evaluate different proposals, we would respectfully suggest that you confirm the discount rate for NPV that you would use.

If the County wishes to signal its openness to considering a financed option, and wishes to establish a level playing field in considering options, it would be most advantageous for the County to stipulate the discount rate for a Net Present Value calculation to compare direct purchase vs. financed costs. Along those lines, would you consider applying the County's SEIR discount rate of 3.53% per the most recent financial rate for the purposes of calculating Net Present Value of direct purchase vs financed costs?

NPV will be used in evaluating procurement options from bidders. We will use the same discount rate when evaluating bids.

42. Can a partnership qualify as an eligible bidder where one company that attended the Pre-bid meeting makes a formal partnership agreement with a business who has the required bonding ability? What types of business collaborative structures are acceptable as a qualified bidder?

Formalized Joint-Ventures between companies that both attended the pre-bid meeting will be allowed.

43. Will the winning bid be based off the system cost, or the system cost minus incentives?

Direct Purchase and Debt Financed Options will be evaluated on system cost and qualifications. The Solar Leasing Option will be assessed on the leasing rates and qualifications from bidding/leasing company which may include a third-party monetizing incentives. Leasing rates should not include monetization of Duke Rebate by a third-party.

44. Should we include incentives such as a possible non-profit Duke rebate as part of our direct purchase and other bid structures or will that be an incentive that the county and city will deal with?

The Duke Rebate will not be monetized by a bidding/leasing company. The agencies plan on applying for the Duke Rebates – though as stated in the solicitation, the awarded contractor would potentially be asked to assist in the rebate application process. Leasing rates that include monetization of other incentives by a third party may be provided.

45. How are we calculating and showing incentives in our bids?

Direct Purchase and Debt Financed Options should not include incentives. For leasing, ultimately the lease rate will reflect the monetization of incentives by a third party, however bidders should qualify the incentives they intend to monetize for a solar leasing option in their response.

46. Will a business structure that enables the non profits such as Buncombe County, AB-tech, and the City of Asheville, to take advantage of the ITC be an incentive that can be deducted from the direct purchase bid or should that incentive only be included in an alternative bid?

The ITC would only potentially apply to the leasing option, however we understand that is illegal for a lessor to monetize the ITC when leasing a net-metered solar system to a non-profit entity in the state of North Carolina. If a 3rd party is monetizing the ITC, this would be reflected in the lease rates and the legal structure for this transaction should be qualified in the bidders response.

47. How will the bid bonding work for a solar lease? There may be no project costs involved do does that mean there will be no bond requirement? Please explain those bonding requirements for leasing with as much detail as possible.

The bidding company will still need to provide a performance and payment bond for a solar lease. No, a bond is still required since there will be project costs paid for by the bidding company/Lessor. Performance and Payment bond costs are based on the project costs and bidding company bond rates, so the amount of the bond will likely differ on the direct purchase, debt financed and solar leasing options and the bidding companies will need to include the appropriate bonds costs depending on the procurement method. Surety firms can likely advise on this transaction as well.

48. Will a leasing bid structure be accepted from a company that has not been approved from the NCUC to be a qualified solar lessor or does a bidder with a lease structure need that qualification?

Our original understanding was that to offer a solar lease in NC, the lessor must be registered as an electric generator lessor. However, we have recently been made aware of third party leasing companies/financial institutions that claim to be able to provide among other things, a “tax-exempt installment purchase agreement with non-appropriation language”. If bidders can offer and provide a viable legal structure with a third party leasing company we will accept it. That structure is currently under review by our legal/financial team to determine compliance with NC General Statute and applicable accounting practices.

It would be very beneficial and expedite the review process if a firm could provide relevant examples of such agreements in NC with a non-profit or tax exempt entity.

49. What is the available fault current (AIC) of each of the existing MCB's? This rating affects the pricing of our breakers?

Buncombe County

West Asheville Library – 65Kaic - N/A – Interconnecting at J Box
South Buncombe Library – 22Kaic - N/A – Interconnecting at J Box
Tax Office – Ratings not Visible on MCB - N/A – Interconnecting at Weatherhead
HHS Building & Parking Deck - 65Kaic - N/A – Interconnecting at Transformer
College St. Parking Deck - House Loads – 35Kaic
College St. Parking Deck - 35 Woodfin Loads- Family Justice Center - 65Kaic - N/A – Interconnecting at Line-side Tap of MCB
Fairview Library – 22Kaic - N/A – Interconnecting at J Box
Leicester Library - 65Kaic - N/A – Interconnecting at J Box
North Asheville Library - 22Kaic - N/A – Interconnecting at J Box
Transfer Station - 18Kaic
Animal Shelter – 50Kaic
Old Fireman's Training Facility - 10Kaic - N/A – Interconnecting at J Box

Buncombe PSTC - Training Center - 22Kaic
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Buncombe PSTC - Apparatus Center – 35Kaic

City of Asheville

Burton Street Community Center - 65Kaic

Linwood Crump Shiloh Center - 65Kaic - N/A – Interconnecting at J Box
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Wall Street Parking Deck - House Loads - Ratings not Visible on MCB - N/A – Interconnecting at Gutter
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Wall Street Parking Deck - Parking Services - Ratings not Visible on MCB - N/A – Interconnecting at Gutter

Wall St. Parking Deck - Sell All - N/A – Interconnecting at Gutter

Fire Station #10 – 30Kaic

Fire Station #11 - 30Kaic

AB Tech

Allied Health – 100Kaic

Bailey – Ratings Not Visible on MCB

Birch – 42Kaic

Conference Center – 50Kaic -

Coman / Lock Library – Coman (42Kaic), Locke (42Kaic) - N/A – Interconnecting at Transformer

Ferguson – 65Kaic

Hemlock – 35Kaic - N/A – Interconnecting at J-Box

Asheville City Schools

Hall Fletcher Elementary School - Ratings Not Visible on MCB - N/A – Interconnecting at Line-side Tap of MCB
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Ira B Jones Elementary School - Large Account - Ratings Not Visible on MCB

Ira B Jones Elementary School - Small Account - Ratings Not Visible on MCB

Montford Northstar Academy - Ratings Not Visible on MCB - N/A – Interconnecting at J-Box

Asheville High School – Vocational - Ratings Not Visible on MCB - N/A – Interconnecting at Line-side Tap of MCB

Asheville High School – Cafeteria – 30Kaic
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Asheville High School - Cultural Arts Building – 65Kaic
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Vance Elementary School – 30Kaic

Asheville Middle School – 65Kaic - N/A –
Interconnecting at Line-side Tap of MCB

Buncombe County Schools

Hominy Valley Elementary School – 65Kaic
Enka Intermediate – 65Kaic
Glen Arden Elementary - Ratings Not Visible on MCB – 65Kaic listed on existing spare breaker.
Community High School – 35Kaic
Cane Creek Middle – 65Kaic
North Windy Ridge Intermediate School – 100Kaic – N/A - Interconnecting at Line-side Tap of MCB
Buncombe Aquatic Center – 50Kaic – N/A - N/A – Interconnecting at J-Box
Erwin High - Kitchen Account - Ratings Not Visible on MCB - N/A – Interconnecting at Line-side Tap of MCB
Erwin High - Main Account - Ratings Not Visible on MCB - N/A – Interconnecting at Line-side Tap of MCB
Owen Middle School – 65Kaic

50. Are any sacrificial roof sheets required for ballasted systems?

Contractors should use methods that will protect the roof membrane and keep all existing warranties intact. With the multitude of roofing manufacturers in the portfolio, bidders should discuss overburden protection requirements with the roof manufacturers to determine what methods are needed to keep the warranties intact. Some roofing manufacturers will approve racking systems without slip-sheets if they have rubber protective padding but this requirement should be determined based on the roofing manufacturer for that facility. The agency owners do not require any additional overburden protection requirements beyond what is required by the roofing manufacturer.

51. Have remote PV system disconnection locations been discussed with the utility (i.e. sites where the disconnect is not visible from a meter out at a pole-mounted transformer)?

No, this has not been discussed as Duke Energy won't engage on this until an Interconnection Request has been submitted. Duke Energy has made exceptions in the past to disconnect locations not being visible from the meter location by placing a placard near the meter noting the disconnect location. Bidders should bid based on disconnect locations shown on plans.

52. Transfer Station - Has a consideration for the backup generator been incorporated in the line diagram? Is an existing riser diagram available?

The solar interconnection point is downstream from the generator ATS (Automatic Transfer Switch) at this site and this will be addressed in the upcoming addendum with notes in the project specifications. This won't merit a change to the line diagram for Duke interconnection since the ATS would make the PV system off-grid during an outage. A riser diagram is attached.

53. Animal Shelter - Has a load calc been performed for the main breaker de-rate?

YES

54. Are the existing plans/layouts feasibility in nature and does the contractor have the ability to modify the site plan or layout for efficiency and cost?

These designs have been optimized multiple times over the past six months to create efficiencies in materials, engineering and labor. A bidder cannot modify the designs during bidding. If the selected bidders feel there are alternate designs that increase efficiency and cost while still using quality components, the agency owners will consider this after contractor selection.

55. In regards to the pre-bid meeting attendance requirement, is the attendance requirement specific to the company submitting the bid, or to the individuals who attended being participants in the project? For example, if an individual who attended the bid meeting were to move to another firm, would that individual qualify their new employer to bid? Would their absence from the old firm disqualify that company? Or, alternatively, would a listed bid attendee (company) who is a Design/Construction Management/consulting firm be able to qualify an unlisted GC company's bid on the project, by virtue of the consulting firm's participation in the project as key personnel, design services provider, named subcontractor and/or CM/QA provider?

The requirement is for the bidding company, not specific individuals. If an organization did not have a representative attend the pre-bid meeting their bid will be considered non-responsive. If an organization had a representative attend and that person no longer works for the company, the company is still eligible.