

Case No. 2020-00208
Northern Bobwhite Solar LLC
Responses to Siting Board Staff's Post-Hearing Requests for Information

- 1. Refer to the Application, Exhibit N – Economic Analysis, Appendix A – Memorandum of Industrial Revenue Bond Agreement. On page 2, reference is made to an Exhibit B which is characterized as a Memorandum of Agreement. Provide a copy of Exhibit B.**

Response:

See attached Exhibit PHDR-A.

Witness: Scott Wentzell

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2. Provide a schedule of the annual payments associated with the Industrial Revenue Bond.

Response:

Repayment terms for the industrial revenue bond, including the interest rate and amortization, will not be established until the bonds are issued, and, accordingly, a payment schedule does not exist at this point. Bobwhite anticipates that the bonds will be issued after construction of the Project is complete. As part of industrial revenue bond issuing process, Bobwhite will transfer Project assets to Marion County who will then lease those assets back to Bobwhite. Under the lease, Bobwhite will pay amounts sufficient to provide for the payment of principal of and interest for the bonds along with fees. Consistent with standard practice for industrial revenue bonds, it is anticipated that a servicing agent will be identified to handle payments from Bobwhite to the bond purchaser and no funds relating to bond repayment will flow through the County.

Bobwhite has agreed to make an annual fixed payment of \$10,000 per year to the County during each year of the up to 40-year bond issue and to pay the County's occupational license tax on the LLC's net profits apportioned to the County (if any) or pay an equivalent amount.¹

Witness: Scott Wentzell

¹ Marion County exempts from its local occupational license taxes "public service corporations that pay an ad valorem tax on property valued and assessed by the Kentucky Department of Revenue pursuant to the provisions of KRS 136.120." See Marion County Fiscal Court Ord. No. 05-220.10, Section 3(2)(d).

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3. **State whether any engineering and procurement contractors that either Geenex or EDF Renewables has worked with are aware of any construction method or equipment that would mitigate or reduce construction noise, particularly construction noise related to the pile driving process and provide the approximate cost of each such product or method of construction.**

Response:

EDF Renewables contacted three engineering and procurement contractors (“EPCs”) and inquired about methods or equipment for reducing construction noise, particularly from pile driving. We received a response from only one EPC; that contractor’s responses is provided verbatim below. The other two contractors did not respond to our request.

The EPC that responded indicated that ground screws could be an alternative foundation technology to driven piles but come with both cost and schedule impacts. Typically, more ground screws are required than piles, adding costs and increasing the installation time. Like pile driving, the ground screws would also require pre-drilling through shallow bedrock, which would also generate noise similar to a pile driver. We are unable to estimate those noise levels at this time. No other products or methods of construction were proposed that would reduce pile driving noise.

EDF also asked this EPC if vibratory pile drivers would be less noisy than the more commonly used impact pile drivers. The EPC did not anticipate a noticeable difference in noise between the two types of pile drivers. The PD-10 referenced below by the EPC is a model of impact pile driver manufactured by Vermeer and is a commonly used pile driver on solar sites. EDF Renewables contacted Vermeer but was unable to obtain operational noise information from the manufacturer.

Response from EPC

There is not much you are going to do to quiet a pile driver. Kind of is what it is.

I have never installed ground screws on a solar project. My knowledge of the pricing of them would say they are \$350-400 each installed vs. \$175-200 each for a driven pile.

Vibratory pile drivers are essentially the same as what we do with a PD-10. We don’t grab the pile with jaws, but the action of the hammer is very much the same, and creates nearly the same noise levels.

If the bedrock is less than 6 feet deep, it will need to be predrilled. Predrilling will typically speed the installation of the pile reducing the amount of drive time noise? Cost \$50-60 per hole for drilling.

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I have no means or ideas on how to reduce noise, nor anything to price to do so.

EDF Renewables has never constructed a solar project with ground screws, but quotes for their use have been obtained for other projects in the past. Based on those quotes, EDF's engineering team concludes that ground screws would be more expensive and take longer to install than driven piles for the Northern Bobwhite Solar project. The cost increase would depend on the amount of pre-drilling required (shallow bedrock), steel costs, as well as labor rates. The current estimate would be a cost premium of 15% or more. The exact schedule impacts are unknown but additional time would be anticipated to install the ground screws compared to driving piles.

Bobwhite appreciates that construction noise associated with pile driving is a concern for the Siting Board and may be a concern for local residents, although no concerns have been voiced to date. Bobwhite has previously committed to ceasing pile driving activities by 6pm daily. Bobwhite will further commit to limiting pile driving activities to 9am-5pm when operating within 1,000 of an occupied non-participating home. We believe this will appropriately mitigate community impacts related to pile driving noise.

Geenex Solar is a front-end developer of utility-scale solar facilities responsible primarily for land acquisition, interconnection queue filings and at times community engagement. As such, Geenex Solar does not have experience working with engineering and procurement contractors for the development of the solar facilities.

Witness: Scott Wentzell

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- 4. State how long it will take Northern Bobwhite to develop a formal decommissioning plan and provide a copy of that plan when completed.**

Response:

Bobwhite anticipates that a formal decommissioning plan can be drafted within 6-8 weeks after final engineering and design for the facility is complete. A formal decommissioning plan will be submitted to the Siting Board no later than one month prior to the start of construction.

Witness: Scott Wentzell

EXHIBIT PHDR-A

**EXHIBIT B
TO INDUCEMENT RESOLUTION**

Form of Memorandum of Agreement

MEMORANDUM OF AGREEMENT

This **MEMORANDUM OF AGREEMENT** (this "*Agreement*") is made as of September 3, 2020, by and between the **COUNTY OF MARION, KENTUCKY**, a county and political subdivision of the Commonwealth of Kentucky (the "*Issuer*") and **NORTHERN BOBWHITE SOLAR LLC**, a Kentucky limited liability company, its affiliates and assigns (collectively, the "*Company*").

RECITALS

A. The Issuer is authorized under Sections 103.200 to 103.285, inclusive, of the Kentucky Revised Statutes (the "*Act*") to issue industrial revenue bonds to finance the costs of acquiring, constructing, installing, and equipping certain industrial projects and facilities within the meaning of the Act, in order to accomplish the public purposes of promoting economic development within the Issuer's environs; and

B. The Company has advised the Issuer that the Company desires to finance the acquisition, construction, installation, and equipping of an industrial project consisting of the facilities and properties, including the franchise as that term is used in KRS 136.115 to 136.180 (the "*Franchise*"), described in ATTACHMENT A attached hereto (the "*Project*"); and

C. The Company has asked the Issuer to issue industrial revenue bonds pursuant to the Act in an aggregate principal amount not to exceed \$120,000,000 for the purpose of financing the Project (the "*Bonds*"); and

D. The parties hereto have found and determined that the financing of the Project will tend to accomplish the public purposes of the Act by causing economic development within the Issuer's environs; and

E. The Issuer proposes to issue the Bonds to finance the Project and desires to authorize the Company to proceed with the financing of the Project and be reimbursed from the proceeds of the Bonds for costs incurred related thereto before the issuance of the Bonds; and

F. The Issuer proposes to enter into, at the appropriate time and in accordance with the Act, a lease agreement with the Company (the "*Lease Agreement*"), pertaining to the Project, the Lease Agreement to be upon terms and conditions as the Act may require and the Issuer may deem acceptable; and

G. In order to obtain for the Issuer's residents the benefits listed above, which the Project would create and preserve, the Issuer desires to encourage and induce the Company to proceed with the financing of the Project;

NOW, THEREFORE, in consideration of the premises and of the covenants and undertakings herein expressed, the Issuer and the Company hereby agree as follows:

Section 1. The Company may commence the acquisition, construction, installation, and equipping of the Project and may provide or cause to be provided, at its own expense, any necessary interim financing to permit such acquisition, construction, installation, and equipping to commence and continue.

Section 2. The Issuer will issue and sell the Bonds pursuant to the terms of the Act in an aggregate principal amount not to exceed \$120,000,000. The Bonds shall be signed by the manual or facsimile signature of the Issuer's County Judge/Executive and attested to by the Issuer's Fiscal Court Clerk, and shall bear such title or designation, shall bear interest at such rate or rates, shall be in such denomination or denominations, shall be subject to such terms of redemption, shall be in registered form, shall be payable as to principal, redemption price, and interest at such place or places, and shall contain such other terms and conditions as may be fixed by or pursuant to the Issuer's ordinance authorizing the sale and delivery thereof. The proceeds from the sale of the Bonds shall be used to finance the Project pursuant to the Act.

Section 3. The Issuer will cooperate with the Company for the purpose of issuing and selling the Bonds on the best terms reasonably obtainable; and if arrangements therefor satisfactory to the Issuer and the Company can be made, the Issuer will authorize the execution and delivery of such instruments and the taking of such further actions as may be necessary or advisable for the authorization, issuance, and sale of the Bonds on a negotiated basis and the use of the proceeds thereof to finance the Project, all as shall be authorized by law and mutually satisfactory to the Issuer and the Company. The Issuer shall sell the Bonds only to the Company or any affiliated entity or assignee thereof.

Section 4. Upon the issuance of the Bonds, the Issuer shall take title to the Company's Project and the Issuer and the Company shall enter into the Lease Agreement pursuant to which the Company will covenant and agree to pay amounts sufficient to provide for the payment of principal of and interest for the Bonds, together with all trustee, paying agent, and serving agent's fees in connection with the Bonds, and any other related charges as the same come due and payable.

Section 5. The Company acknowledges and agrees that so long as the Issuer has title to the Company's franchise as that term is used in KRS 136.115 to 136.180 (the "*Franchise*") and the Company's leasehold interest in such Franchise is excluded from local ad valorem taxation pursuant to KRS 132.200(7), the Company shall either pay the Issuer's occupational license tax on the Company's net profits apportioned to the Issuer or make a payment equal thereto if the Company is exempt from said occupational license tax.

Section 6. The Issuer will take or cause to be taken such other acts and adopt or cause to be adopted such further proceedings as may be required to implement the aforesaid undertakings or as it may deem appropriate pursuant thereto.

Section 7. Contemporaneously with the sale of the Bonds, the Company (a) will enter into the Lease Agreement with the Issuer, the terms of which shall obligate the Company to pay the Issuer the amounts described in Section 4 hereof, as and when the same shall become due and payable, all provisions required by law and such other provisions as shall be mutually acceptable to the Issuer and the Company, and (b) will take such further acts and adopt such further proceedings as may be required to implement its aforesaid undertakings or as it may deem appropriate in pursuance thereof.

Section 8. As an inducement to the Issuer to enter into this Memorandum of Agreement, the Company agrees that it will reimburse the Issuer for, or pay reasonable expenses, including fees and expenses of its counsel, which the Issuer may incur at the Company's request, or as may be necessary, arising from the execution of the Memorandum of Agreement and the performance by the Issuer of its obligations hereunder, but such expenses shall not exceed \$1,500 for the Bonds, which the Issuer and the Company agree is reasonably sufficient to pay such costs and expenses.

Section 9. It is understood and agreed by and between the Issuer and the Company that the provisions hereof are not intended to, and shall not be construed or interpreted to, either (a) obligate or authorize the expenditure of any funds of the Issuer derived from any source whatsoever other than the proceeds from the issuance and sale of the Bonds as provided for herein; or (b) create any personal liability of the Issuer's present or future officers and officials serving from time to time.

Section 10. No recourse shall be had for the payment of the principal of or premium or interest on any of the Bonds or for any claim based thereon or upon any obligation, covenant, or agreement therein contained against any past, present, or future officer, member, employee, or agent of the Issuer or the Commonwealth of Kentucky or any agency or political subdivision thereof, as such, either directly or through the Issuer or the Commonwealth of Kentucky or any agency or political subdivision thereof, under any rule of law or equity, statute, or constitution, or by the enforcement of any assessment or penalty or otherwise, and all such liability of any such officer, member, employee, or agent as such shall be expressly waived and released as a condition of and consideration for the execution and delivery of this Agreement and the issuance of the Bonds.

Section 11. The Company may assign its rights under this Agreement and shall provide notice of such assignment to the County Judge/Executive of the Issuer.

Section 12. This Agreement may be signed by each party upon a separate copy or separate signature page, and any combination of separate copies signed by all parties or including signature pages so signed will constitute a single counterpart of this Agreement. This Agreement may be signed in any number of counterparts, each of which will be deemed to be an original,

but all of which together will constitute one and the same agreement. It will not be necessary, in proving this Agreement in any proceeding, to produce or account for more than one counterpart of this Agreement. This Agreement will become effective when one or more counterparts have been signed by each party, and delivered to the other parties, respectively. Any party may deliver an executed copy of this Agreement (and an executed copy of any documents contemplated by this Agreement) by facsimile transmission to another party or e-mailed .pdf files of scanned copies bearing their respective signatures, and such delivery will have the same force and effect as any other delivery of a manually signed copy of this Agreement (or such other document).

[Signature Page To Follow]

[SIGNATURE PAGE TO MEMORANDUM OF AGREEMENT]

MARION COUNTY, KENTUCKY

By: David R. Daugherty
David R. Daugherty
County Judge/Executive

Attest:

By: Chad Mattingly
Chad Mattingly
County Clerk

NORTHERN BOBWHITE SOLAR LLC

By: _____

Name: _____

Its: _____

**ATTACHMENT A
TO MEMORANDUM OF AGREEMENT**

Project Description

The Project includes all industrial building facilities to be financed by the Bonds and to be acquired, constructed, installed, and equipped by the Company in Marion County, Kentucky for the purpose of manufacturing approximately 96 megawatts (MW) of electricity, including any land, Franchise and all related distribution facilities and operating equipment and machinery deemed necessary in connection therewith, but excluding any underlying land which is to be leased for the Project.

**COMMONWEALTH OF KENTUCKY
BEFORE THE KENTUCKY STATE BOARD ON
ELECTRIC GENERATION AND TRANSMISSION SITING**


In the Matter of:

ELECTRONIC APPLICATION OF NORTHERN)
BOBWHITE SOLAR LLC FOR A CERTIFICATE)
OF CONSTRUCTION FOR AN APPROXIMATELY)
96 MEGAWATT MERCHANT SOLAR ELECTRIC) Case No. 2020-00208
GENERATING FACILITY AND NON-REGULATED)
TRANSMISSION LINE IN MARION COUNTY)
KENTUCKY)

CERTIFICATION

This is to certify that I have prepared or supervised the preparation of the responses to the Siting Board Staff's Post-Hearing Requests for Information for which I am identified as the witness on behalf of Northern Bobwhite Solar, LLC and that the responses are true and accurate to the best of my knowledge, information and believe after reasonable inquiry.

DATE: May 17, 2021



Scott Wentzell