I. Construction phase activities—Generally, much more information was provided about the operational phase compared with the construction phase. Since impacts will occur during the construction phase, HE is requesting more information about construction, summarized below and detailed in subsequent inquiry categories.

A. Please provide a detailed description of construction activities, including a schedule and description of activities, peak activity periods, number of commuting workers (average by quarter and peak period), personal and construction vehicle traffic volumes (see detailed question below), construction access points to the site and staging area, local roads, State Routes and highways that will carry construction traffic.

Response:

A detailed description of construction activities cannot be provided at this time. The construction activities and impacts described in Bobwhite's application were based on a typical project of this size and the Applicant's best estimate based on experience. The specific construction plan for this Project will not be known until detailed engineering and design are complete. This level of design cannot proceed until a Certificate of Construction is received.

The engineering, procurement and construction (EPC) contractor will develop the construction plan and sequence construction activities to maximize costs and efficiency. Multiple parcels and sections of the project will be under construction at a time, and in different phases of construction. Until the construction plan is developed the information requested is not available.

Witness: Scott Wentzell

B. The Project appears to consist of parcels dispersed among several different geographics areas. Will all parcels within the Project boundaries be developed simultaneously, or will parcels be developed subsequent to one another in some sequence? If yes, please provide a description of that sequence over the construction period.

Response:

The EPC will develop the sequencing of construction to maximize costs and efficiency. Multiple parcels will be under construction at a time, and in different phases of construction. Until the construction plan is developed the information requested is not available.

Witness: Scott Wentzell

II. Site development plan—We need to better understand certain elements of the site development plan.

A. On the Exhibit A 1.0 Permitting Context Map, it appears that there are a small number of residential structures located within the Project boundary (these are also shown on the various Site Plan maps in Appendix C of Exhibit O). Please explain the relationship between those residences and the Project.

1. Are those structures currently occupied?

Response:

The Project boundary shows the parcel boundaries for each parcel covered by a lease or access agreement. The residential structures that appear to be within the Project Boundary will be located outside the fenced area which contains the solar plant. These residential structures are owned by landowners who have entered into leases with Bobwhite to include their parcels in the Project. The dwellings are occupied; however, a few of the buildings are barns, workshops, and other accessory buildings that are not occupied.

Witness: Scott Wentzell

2. If so, will Northern Bobwhite have them vacated prior to the start of construction?

Response:

No.

Witness: Scott Wentzell

3. If they are to remain occupied during construction and operations, how far are those structures from the solar panels or other equipment?

Response:

These residences are owned by landowners who have entered into leases with Bobwhite to include their parcels in the Project. These agreements generally define "Do Not Disturb" areas around structures, which were negotiated with the landowners and establish portions of the property around the residential structures which is expressly excluded from solar panel development. By defining a "Do Not Disturb" area, these landowners have waived their respective setback rights to the extent permissible by law. However, Bobwhite applied the same setback distances for

these residential structures as all others residential structures on non-participating parcels unless the "Do Not Disturb" area(s) precluded the need for additional setbacks. The table below presents the distance from residential structures on leased parcels to the nearest solar panel.

Residence APN	***Distance to Panel (ft)***
063-007	*360*
063-017	*240*
063-015	*1800*
064-001A	*308*
064-002-03-04	*530*
070-035	*395*

Witness: Scott Wentzell

B. Section 1 of the SAR (Exhibit O) lists items that will not materially change during the final design without approval from the Board (specific setbacks). The text in that section also indicates that the Site Plan provided in Appendix C is preliminary and that the location of items such as the interior access roads, construction entrances and solar equipment is not final.

1. For the purposes of evaluating impacts to traffic, noise, visual aesthetics and property values, we must rely on specific numbers and locations for those items. For that effort, should we assume the preliminary locations presented in Appendix C are the best information available? Also, please ensure that we have your best available estimate of numbers of specific components, i.e. solar panels, inverters, etc.

Response:

Yes, the information provided in Appendix C of Exhibit O of the Application, along with all quantities, is the best available estimate at this time.

Witness: Scott Wentzell

C. Section 1.4 of the SAR (Exhibit O) lists 8 different constraints and setbacks, including: f) Non-Participating Property (50 ft to solar installations) and g) Residence (200 ft setback to solar installation).

1. What is the definition of a "non-participating property"?

Response:

"Non-participating properties" are parcels that have not entered into a lease or purchase option with Bobwhite. As such, non-participating properties are not included in the Project boundary, and Bobwhite has no rights to utilize those properties for the Project.

Witness: Scott Wentzell

2. Is the setback noted in this section for a "non-participating" property a minimum 50 feet from that property boundary to a solar panel? If not, please clarify.

Response:

Yes, the setback for a non-participating property is a minimum of 50 feet measured from the non-participating property line to the nearest solar panel.

Witness: Scott Wentzell

3. Is the 200 ft setback between "Residence and solar installation", the minimum distance between the home and the nearest solar panel? If not, please clarify.

Response:

Yes. The minimum setback is 200 feet from the footprint of the residence ("Residential Footprint") to the nearest solar panel. Residential Footprints were digitized using satellite imagery, which can vary from the actual footprint slightly. Bobwhite will update the Residential Footprints and reconfigure the Project, if necessary, after completing an ALTA survey in order to maintain the minimum 200-foot setback.

Witness: Scott Wentzell

D. Site Plans (Appendix C of Exhibit O):

1. The 4 pages of the Site Plan Map indicate nine potential access road points into different areas of the Project Boundary.

a. Will all of those access points actually be utilized during construction?

Response:

Yes. Bobwhite anticipates that all access points will be utilized during construction.

Witness: Scott Wentzell

i. If not, please indicate which access will be used or will primarily be used.

Response: *Not applicable.*

Witness: Scott Wentzell

ii. If yes, what assumptions should be made about the utilization of access points for facility components, construction equipment and construction workers?

Response:

Bobwhite has not yet selected an engineering, procurement and construction (EPC) contractor for the Project. Ultimately, the EPC will determine which access points will be utilized for construction equipment, components and workers and will develop a schedule for site development. More detailed assumptions regarding the access points are not currently available.

Witness: Scott Wentzell

b. Will the total number of final access points be limited during operations and if so, which access points will remain?

Response:

No. Bobwhite anticipates that all access points will remain active through the operations phase of the Project.

Witness: Scott Wentzell

c. Please confirm the locations of the access road points by indicating yes or correcting our interpretation of the maps:

i. Map 1: Access from Horan Road, east of Highway 55.

Response: *Confirmed.*

Witness: Scott Wentzell

ii. Map 2: Are both western access points on Gene Campbell Road, or is one on the Green Valley Drive? Northern access point on Simstown Road. Eastern access point on St. Ivos Road/Willis Trail.

Response:

One of the western access points is located approximately adjacent to the point at which Gene Campbell Road and Green Valley Road fork (with Gene Campbell Road continuing south-southeast and Green Valley Road continuing southwest). There is a northern access point on Simstown Road and an eastern access point on Willis Trail.

Witness: Scott Wentzell

iii. Map 3: western access points on Radio Station Road. What road leads to the southeastern access point?

Response:

A private road maintained by the owners of Parcel 064-001-03 leads to the southwest access point. The access point is located along the parcel line between Parcel 063-017 and Parcel 064-001-03. The private road

terminates at Radio Station Road at approximately 37°35'53.67"N, 85°14'44.12"W.

Witness: Scott Wentzell

iv. Map 4: access from Gene Campbell Road, north of the split with Short Line Pine?

Response: *Confirmed.*

Witness: Scott Wentzell

2. The Application states that "internal roads will be constructed throughout the site and used to deliver construction materials and equipment form the laydown areas to other locations within the Project boundary." The Site Plan maps suggest that those internal roads would generally be constructed to surround the panel parcels. Is that correct?

Response:

Yes. Bobwhite currently anticipates constructing an internal perimeter road that will allow for maintenance staff to access Project infrastructure including panels and inverters. Final engineering and design work may help to incorporate additional efficiencies and reduce overall road construction.

Witness: Scott Wentzell

a. How many feet or miles of roadway will be created within the Project site?

Response:

Approximately 320,000 feet of internal roadways are currently planned. Through further site design, engineering and optimization, Bobwhite expects that the actual installed length of new roadways may be reduced in the final construction layout.

Witness: Scott Wentzell

b. Please confirm that all internal roads would be gravel.

Response: *Confirmed.*

Witness: Scott Wentzell

3. The Site Plan maps indicate one laydown yard and parking area to be located south of the Project Substation in the southwestern area of the Project boundary.

a. Is that laydown yard/parking area the only one that will service the entire Project site during construction and operation? Please identify any additional laydown/parking areas on the map.

Response:

The Site Plan shows the main laydown yard and parking area which will be the only one used for the duration of Project construction. Other temporary staging areas may be designated inside the Project fence line adjacent to active construction. These spaces will be used for transferring construction material, but will not be used for long-term storage. It is possible that these temporary staging areas may be graded, but otherwise will not be improved like the main laydown yard. These temporary staging areas will be built-over and re-seeded as construction progresses.

At this time, Bobwhite is not able to identify the specific locations of these temporary staging areas. Such temporary staging areas will be identified by the construction contractor.

Witness: Scott Wentzell

b. Approximately how large will the laydown/parking area(s) be?

Response:

The laydown area shown on the Site Plan is approximately 3.5 acres. Based on Bobwhite's experience on other solar projects, the exact dimensions and size of a laydown yard can vary according to the type of panel and trackers used, overall construction schedule, and topography of the site.

While the proposed location and dimensions represent Bobwhite's current understanding of the Project's needs, a larger (or smaller) laydown area may

ultimately be required. The exact location and dimensions of the laydown area will be determined in consultation with the Project's EPC contractor.

Witness: Scott Wentzell

c. What will the surface material be for that area (dirt, gravel, paved)?

Response:

Generally, top soil will be stripped from the site and subsoil will be graded and compacted to create a firm, level base. Site conditions may require that a geotextile be laid on top of the subsoil base. The laydown yard will then be finished with gravel rock.

Witness: Scott Wentzell

d. If just one laydown/parking area will be constructed, will facility components and equipment be moved off that site each day?

Response:

Components will be moved from the laydown area to temporary staging areas as needed. Generally, components and equipment will be both entering and exiting the laydown yard on a daily basis; some components and equipment may be stored in the laydown yard for a period of time before being deployed into the Project for construction.

Witness: Scott Wentzell

e. How will construction workers, facility components and equipment reach other areas within the Project boundary if there is no laydown/parking in those areas?

Response:

Workers, equipment and goods will travel on internal access roads when feasible or over public roads as necessary to an access point in order to reach the section of the Project under construction at that time. Components and equipment may be placed in temporary staging areas inside the Project fence of the to-be-constructed section. Workers may also park in or adjacent to these staging areas, also within the Project fence.

Facility components and equipment will be transported be flatbed truck, or in a wagon pulled by a tractor or similar piece of equipment. Heavy machinery may traverse the access roads directly or be delivered by semi-tractor trailer trucks. Workers will take personal and/or work trucks and vehicles to the site and will caravan from the main parking area as practical to reach other portions of the Project.

Witness: Scott Wentzell

i. What are the routes between the laydown/parking area and Project parcels in other areas?

Response:

This information is not available at this time. At the completion of final engineering and system design, the selected engineering, procurement and construction (EPC) contractor will develop a construction and delivery plan that will detail the specific routes that will be traveled during each construction phase. Northern Bobwhite anticipates that internal access roads will be utilized when feasible, and that goods, equipment and workers will traverse public roadways as necessary to access portions of the Project.

Witness: Scott Wentzell

4. How many solar panels will be located within the Project boundary?

Response:

Bobwhite's design configuration currently assumes 535W solar panels will be used. Assuming that wattage module, approximately 325,000 solar panels will be located within the Project boundary. The exact number of panels deployed will depend on the actual wattage of the panels that are procured, as well the final electrical design of the Project.

Witness: Scott Wentzell

5. What is the basis for locating the solar panels within the Project boundary, as shown in the Site Plan maps?

Response:

Solar panels have been arranged within the Project boundary in a manner to maximize the energy produced, minimize costs and avoid sensitive areas such as streams and ponds.

Bobwhite first mapped existing constraints within the Project boundary. These constraints include: existing transmission lines, pipelines, ponds, streams, areas with steep slopes and portions of parcels that landowners have specifically excluded from consideration in their agreements with Bobwhite (these are "Do Not Disturb" areas). Thereafter, appropriate buffers/setbacks, determined through experience and industry best management practices, were applied to each constraint. Bobwhite also provided appropriate setbacks, described elsewhere, from roads, homes and non-participating parcel lines.

This process produced a digital map of buildable land deemed suitable for solar panels. Finally, Bobwhite ran multiple layouts through solar modeling software to determine a layout that maximizes energy output and minimizes costs based on the current understanding of the Project site.

Witness: Scott Wentzell

a. There is a considerable amount of "undisturbed" acreage (areas without any panels or other solar infrastructure) within the Project boundary, especially on the western side. Please explain how those areas will be used or if not, why those areas will not be used.

Response:

Land that is 'undisturbed' within the Project boundary falls into one of several categories: an area specifically excluded from solar development in the landowner's agreement, an area deemed a constraint or within an appropriate setback from a constraint (as previously addressed in our response to Question II.5), or an irregularly shaped, inaccessible or otherwise undesirable area for solar development.

Bobwhite will not construct in any area deemed a constraint or within a setback area, nor will Bobwhite construct in a landowner "Do Not Disturb" area without express written permission from that landowner. As development on the Project continues, Bobwhite's understanding of some constraints may change and as a

result solar infrastructure may be considered in those areas. An example could include a shift in the position of an existing easement or right of way after conducting an ALTA survey.

Witness: Scott Wentzell

b. Why are these undisturbed areas included in the Project boundaries?

Response:

The Project boundary follows the property lines of parcels that are participating in the Project. As previously addressed in our response to Question II.5, portions of these parcels are constraints or have been excluded by landowners from development. As constraints may evolve over time with additional development, and Bobwhite may renegotiate "Do Not Disturb" areas with landowners, Bobwhite has presented the Project boundary to encompass the full extent of possible development areas and to follow parcel line boundaries.

Witness: Scott Wentzell

6. Please explain the use of the Collection Easement area.

Response: *Please refer to Bobwhite's response to the Siting Board Staff's Request No. 5.*

Witness: Scott Wentzell

7. The Site Diagram included in the Environmental Site Assessment (Exhibit O, Appendix F) also indicates several "Do Not Disturb" areas within the Project boundary. Please explain what those are and how they are relevant to the Project.

Response:

These "Do Not Disturb" areas are portions of particular parcels subject to leases with Bobwhite that have been expressly excluded from Project development. The Site Diagram included in Appendix F included an earlier, and now outdated understanding of Do Not Disturb areas. The Do Not Disturb areas were erroneously included in the final appendix. The location of the Do Not Disturb areas within a given parcel are identified in the landowner agreements included in Exhibit K. Bobwhite is seeking confidential treatment for Exhibit K.

Witness: Scott Wentzell

E. The Application states that "access to the site will be controlled through secure access points and the perimeter of the property will be enclosed by a security fence."

1. From the Site Plan maps, it appears that the fencing will be placed generally around the panels and not along the larger Project boundary. Is that correct?

Response: *Yes.*

Witness: Scott Wentzell

a. How tall will it be?

Response: *Fencing will be a minimum of six feet tall.*

Witness: Scott Wentzell

b. What fencing material(s) will be used?

Response: *The fence will either be a standard galvanized steel chain-link, or comparable deer/livestock fence.*

Witness: Scott Wentzell

c. Will there be barbed wire on top of the fencing?

Response:

No, not generally. Barbed wire would only be utilized around the project substation to the extent necessary under North American Electric Reliability Corporation (NERC) standards.

Witness: Scott Wentzell

d. Will the fence have a permeable sight barrier, such as a burlap type cloth, or impermeable sight barrier, such as plywood or siding?

Response: *No.*

Witness: Scott Wentzell

2. What other specific security measures will be in place during construction and during operations?

Response:

One of the first steps in the construction process will be to erect the perimeter fence and gated access points. During the construction phase, the site manager will closely monitor site access and all access points will be locked at night or when not in use.

The EPC contractor may elect to implement additional security measures such as hiring a third-party security firm.

Witness: Scott Wentzell

a. Will there be barbed wire on top of the fencing?

Response:

No, not generally. However, barbed wire may be necessary around certain areas of the Project site, particularly for high-voltage electrical equipment.

Witness: Scott Wenzell

b. Will any security cameras be used?

Response:

Security cameras will be installed around Bobwhite's substation and O&M facility; the security cameras would be installed after construction. Security cameras are not planned around the PV systems.

Witness: Scott Wenzell

c. Will any security personnel be hired?

Response:

Potentially, yes. During construction security personnel may be hired on a temporary basis; however, such hiring is not currently expected.

Witness: Scott Wenzell

d. How will Bobwhite Solar coordinate security with local law enforcement agencies, if at all?

Response:

Bobwhite will notify local emergency management and law enforcement agencies of major Project activities, including the start and completion of construction. At this time, additional coordination is not anticipated but Bobwhite would consider requests for additional coordination from local agencies.

Witness: Scott Wenzell

F. Page 3 of the SAR describes the proposed 161-kV Marion County substation as being located outside of the Project boundary, but the Site Plan maps show it as included within the blue and black dashed outline of the boundary. Please clarify.

Response:

The Marion County substation is outside of the Project boundary. The blue and black dashed outline of the Project boundary on the original Site Plan was incorrect and has been updated. See Exhibit L – Updated Land Control Map.

Witness: Scott Wentzell

G. How will the energy produced by panels located across the eastern and northern portions of the Project connect to the substation located in the southwestern portion of the Project site?

Response:

There will be 34.5kV electric lines connecting the inverters and transformers located in the eastern and northern portion of the Project to the Project substation located in the southwestern portion of the Project. Please refer to Bobwhite's response to the Siting Board Staff's Request No. 5 for a detailed explanation.

Witness: Scott Wentzell

1. The Exhibit A 1.0 Permitting Context Map shows multiple in-service transmission lines running through the Project site, but the Site Plan maps do not indicate any connections with existing in-service transmission lines, except for the POI in the southwestern portion of the Project. Please explain or clarify.

Response:

The Project will not tap directly into any of the existing in-service transmission lines. The existing 161 kV transmission lines connect to EKPC's Marion County substation. The Project will connect to a breaker located in the EKPC Marion County substation.

Witness: Scott Wentzell

H. The Motion for Deviation from Setback Requirements notes that water necessary for construction and operation of the Project may come from wells currently in the Project area fed by underground aquifers OR water hauled in as necessary.

1. Which option should HE assume for the purpose of evaluating impacts?

Response:

The Project intends to use water that will be hauled in as needed for dust suppression.

Witness: Scott Wentzell

2. If water is to be hauled in, how many trucks per day or per month would be required to meet construction requirements? How many per day or month to meet operational requirements?

Response:

At this time, Bobwhite is unable to specify with certainty how many water trucks will be used during construction. Water use is heavily dependent on weather and will be only be required if dust becomes an issue for on-site work or off site. No water will be required during the operation of the Project for dust suppression. The use of internal access roads will be periodic in nature for inspection and repairs.

Witness: Scott Wentzell

I. Appendix B of Exhibit O provides a description of legal boundaries in text form (22 pages).

1. Please provide a single map/ graphic simply indicating the locations of individual tracts/ parcels and their associated acreages included within the Project boundary.

Response:

See Exhibit L Updated Land Control Map.

Please note that the parcel boundaries and acreages shown were exported from Marion County data, and have not yet been independently confirmed by Bobwhite through a survey. It is generally expected that boundaries and precise acreages will shift somewhat after on-the-ground survey verification.

Witness: Scott Wentzell

2. Please confirm that the legal description of the Project site is consistent with the information provided about the adjoining parcels as part of the Kirkland report – i.e. does the boundary of the Project site indicated by the legal description match up with the data describing specific adjacent parcels?

Response:

The parcel data used by Kirkland was obtained from Marion County's PVA office. The legal descriptions provided have not yet been independently verified through surveys. Bobwhite is not able to verify the accuracy of the parcel data obtained from Marion County.

Witness: Scott Wentzell

III. Setback Deviation Request—The Application indicates that a deviation of the statutory setback provisions will be requested.

A. Could the solar panels and other structures be re-configured within the site boundaries to meet the setback requirements? The Project site includes numerous acres that are planned to be undisturbed.

Response:

Bobwhite's response to Harvey Economics' requests II.D.5 through II.D.5.b provide an overview of the process used for siting Project facilities. The majority of the 'undisturbed' acres are not useable for solar development for the reasons described in the prior responses. While Bobwhite anticipates reconfiguration is possible within the currently utilized footprint of the Project boundary, significant alterations, particularly into areas that are not currently planned for development, would be unlikely except as described below.

Development in the areas currently not planned for development would be possible if: (i) landowners renegotiate Do Not Disturb exclusions from their legal agreements, (ii) additional site studies allow Bobwhite to include areas that were previously considered constrained, and (iii) the ALTA survey may more precisely site or identify existing encumbrances, such as rights of way.

Witness: Scott Wentzell

IV. Property values and land use—Local landowners are often concerned about the effects on their property values during construction and operation. HE requests information about current property values in the area surrounding the site and property value impacts during the construction phase. We also need clarification on certain aspects of the Kirkland report.

A. Section 3 of the Application (Public Notice Evidence) states that Bobwhite Solar mailed letters to "75 landowners whose property border and are within 300 feet of the proposed site and…" However, the Kirkland report (Pages 6 and 7) lists 60 different parcels adjacent to the Project site. Please explain this apparent discrepancy.

Response:

Bobwhite provided notice to fifteen additional landowners that were near but not adjacent to the Project Boundary due to their proximity to the Project.

Witness: Kara Price/Richard Kirkland

1. If the text should read "75 landowners whose property borders or is within 300 feet of the proposed site..." (as stated in Section 6 - Public Involvement Activities), please confirm the number of properties that are within 300 feet of the Project site which are NOT adjacent properties.

Response:

There are a total of sixty landowners adjacent to the Property boundary and another fifteen landowners that were within 300 feet of the Property Boundary but not adjacent. The location of these fifteen nearby but not adjacent parcels is identified on pages 7, 8, & 9 of Exhibit M.

Witness: Kara Price/Richard Kirkland

B. What are the current property values of the properties adjacent to the Project site? Please provide property values of raw land or residential structure values per constructed square foot of developed property in Marion County in the vicinity of the Project site?

Response:

Please refer to the table on pages 8 & 9 of Exhibit M.

Witness: Richard Kirkland

C. Pages 5 through 7 of the Kirkland report provide information on parcels adjacent to the Project area.

1. What is the source of that data? Please confirm that the data is consistent with that of the Marion County PVA.

Response:

The source of the data is the Marion County PVA and, therefore, consistent with the same.

Witness: Richard Kirkland

2. We would like Northern Bobwhite Solar to confirm the stated distances between residential homes on the adjacent properties and the closest solar panels:

Response:

Please refer to the table on pages 8 & 9 of Exhibit M.

Witness: Richard Kirkland

3. Please confirm that, for those parcels where the distance between the home and the nearest solar panels is stated as N/A, that the N/A designation is because there is no residential structure on that property.

Response:

Confirmed. Please refer to page 1 of Exhibit M.

Witness: Kara Price/Richard Kirkland

4. Please confirm that the data in the "Adjoin Acres" and "Adjoin Parcels" columns of the table are presented for the general purpose of providing additional information about the land uses surrounding the Project site.

Response:

Confirmed. Please refer to Exhibit M.

Witness: Richard Kirkland

5. For each adjacent parcel, please provide the number of feet that border the Project site.

Response:

Please refer to the table on pages 8 & 9 of Exhibit M.

Witness: Richard Kirkland

D. The Kirkland report provides a matched pair analysis for 44 solar farms ranging from 0.22 MW up to 80 MW, which encompasses properties ranging from 24 acres up to 2,034 acres. The report also provides an analysis of a sub-set of that data, focusing on 15 solar farms larger than 20 MW – that dataset includes five solar farms between 70 MW and 80 MW, two of which are located on properties over 1,000 acres in size. At 96 MW covering about 1,300 acres, the Bobwhite Solar Project would be more similar in scale to the largest five solar farms included in the reported analyses, correct?

Response:

Yes, the Project would be more similar in scale to the largest five projects.

Witness: Richard Kirkland

1. Please isolate the data for each of those five largest properties.

Response:

Please refer to pages 10-14 of Exhibit M.

Witness: Richard Kirkland

2. What conclusions can be made about potential impacts to adjacent property values specifically looking at those five data points?

Response:

Please refer to pages, 2 and 10-14 of Exhibit M.

Witness: Richard Kirkland

E. What roles does visibility of solar panels or other solar infrastructure play in determining potential impacts to property values? For instance, if solar panels are more visible, are impacts to property values greater than if the panels were hidden (by vegetation or other barriers)?

Response:

Please refer to page 2 of Exhibit M.

Witness: Richard Kirkland

V. Traffic—Increased traffic from construction and operation can be an issue for local residents. HE is seeking information about construction phase traffic which was not provided in the Application.

A. Construction phase

1. How many commuter vehicles will the laydown/parking area be able to hold?

Response:

The number of commuter vehicles that will be able to park in the laydown/parking area will be determined in the final design. As described in Bobwhite's response to Board Staff's Request No. 6, multiple areas within the site may be used at different stages of development. Where commuter vehicles are parked will vary with the type of work being performed. Most contractors will be arriving in vehicles with crew and the vehicle will contain materials and equipment for that particular job. These work vehicles will be used within the Project boundary and therefore would not be in a parking area.

Witness: Scott Wentzell

2. The laydown/ parking area appears to exist under an area that is occupied by solar panels (page 168 of the SAR, or "Map Page 3 of 4" Appendix C) – will that area be the last area in which panels are constructed on the land? If not, please explain.

Response:

If the final engineering design determines that the area located under the laydown yard/parking area will be occupied by solar panels, then that area will be the final portion of the site to be constructed. If the final engineering design determines that the area will not be occupied by solar panels, the laydown/parking area will be restored as described in response to sub-part (a.) below.

Witness: Scott Wentzell

a. Please describe how the laydown/parking area will be converted back to its original state (i.e., a non-gravel/dirt area) or otherwise prepared for panels erected on this land?

Response:

The exact approach will depend on the site preparation that was initially required for construction. It is anticipated that, first, the gravel top layer will be removed and either hauled off site or used elsewhere within the project. The geotextile layer will be removed and disposed of. Next, the subsoil will be ripped or otherwise decompacted. Finally, top soil will be spread evenly over the site and re-seeded. The site may be seeded again if the area is constructed with panels.

Witness: Scott Wentzell

3. In Section 2.1 of Appendix E, is Horace Lane (in Table 1) actually Horan Lane, or are these separate roads? If they are separate, where is Horan Lane?

Response:

Horace Lane in Table 1 should be Horan Lane.

Witness: Scott Wentzell

4. Please identify Green Valley Road, Radio Station Road, and Saint Ives Roads on Figure 1 of Appendix E of the SAR.

Response:

Figure 1 has been updated and is provided as Exhibit N.

Witness: Scott Wentzell

5. It appears that SR-55 will carry the bulk of all construction traffic, is that true?

Response:

Yes. State Road 55 (SR-55) is a major state highway in the area that is the preferred route for all commercial and transportation traffic. Most deliveries to the Project area will use SR-55. Traffic may use US 68 depending on the origin of the shipments.

Witness: Scott Wentzell

a. Which direction will that traffic predominately come from heading onto the Site?

Response:

Traffic will predominately enter the general Project area from SR-55 on the western side of the Project. Then using Horan Lane to the north or Radio Station Road. Depending on the construction phase, traffic may also enter the area from US-68 to the south and enter along Green Valley Road to access the site. Traffic can also use US-68 to Short Line Pike to Gene Campbell Road to access the site.

Witness: Scott Wentzell

b. Will any temporary stop lights be installed during the construction to help the control the flow of traffic along SR-55 or other roads? If not, specifically what other traffic control measures will be taken?

Response:

Bobwhite does not anticipate the need for any temporary stop lights. The use of flaggers may be temporarily required, although that is not currently expected. Bobwhite will implement any safety and traffic control measures required by the Kentucky Transportation Cabinet or the Marion County Road Department.

Witness: Scott Wentzell

6. Will any residents experience issues accessing their residences during or after construction?

Response:

Construction will not limit access to other residences or properties adjacent to the Project site.

Witness: Scott Wentzell

7. Please provide an approximate percentage breakdown of where the construction workers will commute from each day, if possible.

Response:

Until construction contracts are bid and established, Bobwhite cannot provide this information. Local and regional contractors will commute from their respective

businesses or homes. Out-of- town workers (those who cannot commute daily from their business or home) will likely be commuting from local hotels.

Witness: Scott Wentzell

8. Please provide an approximate breakdown by point of origin for the traffic from other construction-related vehicles (i.e., component delivery vehicles, trailers, etc.).

Response:

Bobwhite cannot provide this information at this time. Points of origin will be determined based on contracts and origin of deliveries. Site access will be determined before delivery.

Witness: Scott Wentzell

9. Please provide data regarding the estimated weight of each vehicle category (i.e. non-passenger vehicles, heavy-duty delivery trucks, etc. by weight and weight class), including the weight of their loads.

Response:

Type of Vehicle[1]	Class	Vehicle Weight (lbs)	Equipment Weight (lbs)	Total Weight (lbs)	Total Weight (tons)
Commuter Vehicle-Sedan	Class 1	6,000 max	N/A	6,000	3.0
Commuter Vehicle-Mid Size	Class 1	6,000 max	N/A	6,000	3.0
Commuter Vehicle-Full Size	Class 2	10,000 max	N/A	10,000	5.0
Single-Axel Dump Truck with Fill Material	Class 8	15,000	17,000	32,000	16.0
Tri-Axel Dump Truck with Fill Material	Class 8	25,500	42,500	68,000	34.0
Tractor Trailer with Motor Grader (Caterpillar 150)	Class 8	35,000	44,000	79,000	39.5
Tractor Trailer with Skid-Steer Loader	Class 8	35,000	7,500	42,500	21.3
Tractor Trailer with Backhoe loader	Class 8	35,000	15,000	50,000	25.0
Tractor Trailer with Bulldozer (Caterpillar D3)	Class 8	35,000	30,100	65,100	32.6
Tractor Trailer with Solar Panels	Class 8	35,000	30,000	65,000	32.5
Tractor Trailer with Inverters	Class 8	35,000	25,000	60,000	30.0
Tractor Trailer with Solar Panel Racks	Class 8	35,000	35,000	70,000	35.0
Tractor Trailer with main power transformer	Class 8	35,000	205,000	240,000	120.0

Witness: Karen Thompson

[1] Information for this table is derived from the Kentucky Department of Transportation data and typical weights of

10. Will the construction crew work weekends, or only Monday – Friday?

Response:

Construction operations will include weekends.

Witness: Scott Wentzell

11. How often will the construction crew work extended hours (from 6pm – 10pm)?

Response:

Evening construction will take place to the extent required to maintain the Project's schedule and will be influenced by such factors as weather, supply chain disruptions and the specific phase of construction. The extended hours include time until dusk during the summer months. Please refer to Bobwhite's response to Harvey Economics Request No. VII (5) for additional discussion relating to construction between 6pm - 10pm.

Witness: Scott Wentzell

12. In section 2 of Appendix E ("Traffic Assessment"), Table 3 shows an estimated average of 250 class 2 and 3 commuter vehicles and a peak of 350 vehicles. The text immediately below the table says "an anticipated 100 local workers and 150 non-local workers will commute to the site each day…"

a. Is the Applicant assuming one worker will be in each vehicle during average construction times?

Response:

Depending on the tasks, workers can be commuting in crews or in individual vehicles. For the purpose of planning, Bobwhite assumed that on any given day, crew vehicles would have 2 workers and at peaks we could have more than 350 workers on the entire site. Please refer to Bobwhite's response to Board Staff's Request No. 6 for additional discussion on traffic estimates.

Witness: Scott Wentzell

solar project equipment.

b. Does this also mean that during peak construction times, 350 workers will arrive in their own vehicles?

Response:

No. Please see the response to sub-part (a) above.

Witness: Scott Wentzell

c. The Economic Analysis (Exhibit N) and other parts of the SAR state that the Project will provide approximately 400 full-time equivalent (FTE) construction jobs over a 12 to 18 month period. Please explain the discrepancy of 250/350 average/peak construction workers in the Traffic Assessment, and 400 FTEs in the Economic Analysis. If 400 FTE is correct, please revise the traffic assessment.

Response:

400 full time equivalent (FTE) workers is the best estimate for workers over the course of construction of the Project. This estimate includes contractors and employees working both on and off site. Please note that an FTE is adjusted to a 40-hour work week. Construction workers routinely work greater than 8 hours a day, 5 days a week and, as such, a single work may count as more than one FTE. Additionally, not all workers will be working during the full 12-18-month Project construction period. Each contractor will have a specific schedule to complete their task. As an example, the contractor installing fencing will only be on-site during the initial phases of construction.

Witness: Karen Thompson

B. Operational phase

1. Please provide data regarding the weight and frequency of each vehicle category that will be traveling to the site during operations.

Response:

Type of Vehicle[2]	Class	Vehicle Weight (lbs)	Equipment Weight (lbs)	Total Weight (lbs)	Total Weight (tons)
Commuter Vehicle-Mid Size	Class 1	6,000 max	N/A	6,000	3.0
Commuter Vehicle-Full Size	Class 2	10,000 max	N/A	10,000	5.0

Witness: Karen Thompson

[2] Information for this table is derived from the Kentucky Department of Transportation data.

VI. Dust—Dust especially during the construction phase can be an issue for local residents.

A. Construction phase

1. What is the protocol or schedule regarding the frequency of spraying down dirt/ gravel roads with water?

Response:

Water will be applied to roads as needed during the construction phase to suppress dust and, accordingly, a specific schedule is unavailable.

Witness: Scott Wentzell

2. Will there be any odorous effects generated by the construction of the solar panels?

Response: *No.*

Witness: Scott Wentzell

a. What might the sources of those odors be?

Response:

No odors will be generated.

Witness: Scott Wentzell

3. Will there be odor impacts from diesel fumes or other sources from construction vehicles that will be noticeable by nearby residents?

Response:

Because of the distance from the construction activities to residential structures, it is extremely unlikely that exhaust from construction vehicles would be detectable outside of the construction site. Any exhaust fumes that may be noticeable by nearby residents would be temporary in nature and comparable to fumes from other heavy equipment such as semi-tractor trailer trucks or farming equipment.

Witness: Scott Wentzell

4. **Will any hazardous material be required in the construction of the solar panels at the Project site? If yes, please describe them and the extent of their use.**

   Response:

   The Project will store diesel fuel on-site for equipment use. Diesel fuel will be stored in accordance with all applicable requirements. Other chemicals used on-site would be limited to commercial items stored in small quantities at the Project site including but not limited to Loctite, WD-40, Off (mosquito repellant), and other similar items.

   Witness: Scott Wentzell

5. **Will the Applicant apply Best Management Practices (BMPs) during construction, besides those listed in Section 3 of Appendix E (revegetation measures, application of water, covered spoil piles, covered loads, or compacted gravel for roads)?**

   Response:

   The general contractor will obtain and comply with the required construction stormwater general permit. The construction team will follow applicable BMPs for stormwater during construction.

   Witness: Scott Wentzell

6. **Has the Applicant determined whether any potential runoff from the construction site may contaminate wetlands or ponds in the area? If yes, please describe the results of those studies and measures intended to eliminate that runoff.**

   Response:

   Construction plans have not been completed. The general contractor will obtain and comply with the required construction stormwater general permit. Construction plans will include Best Management Practices for potential runoff to identified wetlands and ponds, as required by the construction stormwater permit.

   Witness: Scott Wentzell

B. Operational phase

1. Will the site be irrigated to promote vegetation growth and reduce potential erosion?

Response:

Irrigation will likely not be required unless drought conditions are present. After construction is complete, portions of the Project site disturbed by construction activities will be seeded with grass mixtures compatible for the geographic region and the project. Several commercial suppliers provide these mixtures for highway, utility, and other large construction sites.

Witness: Scott Wentzell

VII Noise—Similar to dust and traffic, noise especially during construction can be an issue for local residents.

A. Construction phase

1. What is the number of days, or weeks, that any single-family home might experience periodic noises greater than 55 dB throughout the day?

a. Please provide the number of noise receptors, such as homes, that are within 300 feet of a noise generation source of greater than 55 dB during construction, and provide the maximum dB produced by those sources.

b. Same question for homes 300 to 600 feet of generation sources.

Response for sub-parts (a) & (b):

The 55 dB level should only be used as a reference point and should be evaluated as an equivalent A-weighted sound level exposure over a 24-hour period. Periodic noises above 55 dB can occur at any particular residence at any time that may not be related to construction. For instance, farm equipment or a passing truck, unrelated to construction, may temporarily raise noise levels above 55 dB at any given home.

In the guidance document, "Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety" (provided as Exhibit O), the U.S. EPA emphasizes that since the protective sound levels were derived without concern for technical or economic feasibility and contain a margin of safety to ensure their protective value, they must not be viewed as standards, criteria, regulations or goals. U.S. EPA views these as levels which there is no reason to suspect that the general population will be at risk from any of the identified effects of noise at these levels. U.S. EPA identifies a 24-hour exposure level of 70 decibels as the level of environmental noise which will prevent any measurable hearing loss over a lifetime. Likewise, levels of 55 decibels outdoors and 45 decibels indoors are identified as preventing activity interference and annoyance.

Note that the levels are not single event, or peak levels. They represent averages of acoustic energy over periods of time (24 hours), and over long periods of time such as years. For example, occasional higher noise levels would be consistent with a 24-hour energy average of 70 decibels, so long as a sufficient amount of relative quiet is experienced for the remaining period of time.

It is not feasible to predict the number of days or weeks that a home may experience periodic noises greater than 55 dB.

Nearly every construction activity will produce noise greater than 55 dB at the source, which would dissipate with distance. Bobwhite interprets the intent of this question is to measure noise above 55 dB at the home, rather than noise at the source. There are 5 homes with 300 feet of construction activities and a total of 20 homes within 600 feet. Bobwhite has committed to a minimum setback for Project components from homes of 200 feet, which would be the minimum distance from a home to the loudest noise generator (a pile driver). At 200 feet, the maximum noise expected at the receptor would 88.96 dB; at 600 feet the loudest expected noise at the receptor would be approximately 79.8 dB. These noises are the maximum expected, are temporary and would dissipate with distance and due to terrain. They are similar in impact to other construction projects.

Construction equipment and construction activities will not be constant in the same area for the entire 12-18 month anticipated construction timeline. Each activity will have a scheduled time. As installation of piles (that will require the use of the pile driver) moves further away from the receptor, the less likely these sounds will be noticeable. The maximum values presented above would be realized for a matter of minutes and only while the closest pile was driven; each subsequent pile would be less loud at the receptor as they are further away. A single pile driver can drive approximately 50-120 piles per day; ten or more pile drivers may be used across this Project, likely operating in different areas at once. The loudest noise impacts from pile driving should be limited to days or weeks for any single receptor.

Witness: Scott Wentzell

2. How many days and what hours during the day will this level of noise be produced?

Response:

The exact noise experienced by any given home will depend on its distance from construction, existing obstructions, and the exact layout and construction design for the facilities. Bobwhite is not able at this time to predict how many days, nor at what hours, residences may experience periodic noise levels. Please also refer to Bobwhite's response to Harvey Economics' Request No. VII.A.1.

Witness: Scott Wentzell

3. **How far away is the Lebanon-Springfield airport from the nearest solar panel?**

   Response:

   The nearest solar panel is approximately 2,010 feet from the southeast corner of the runway at the Lebanon-Springfield airport.

   Witness: Scott Wentzell

4. **Has the Applicant worked with the Lebanon-Springfield airport to ensure noise from construction activities will not interfere with any Federal Aviation Administration guidelines?**

   Response:

   Bobwhite has not reached out to the Lebanon-Springfield airport to date other than providing them a notice about the Project. Bobwhite will coordinate with the Federal Aviation Administration, obtain necessary approvals and implement any mitigation required by applicable regulations. At this time, Bobwhite does not anticipate any mitigation efforts will be required, nor is Bobwhite aware of other solar projects encountering noise-related issues at other airports.

   Witness: Scott Wentzell

5. **What construction activities will occur between 6pm – 10 pm?**

   Response:

   Bobwhite does not anticipate a distinction between construction activities prior to 6pm and between 6pm – 10pm. Although evening construction is generally expected to be an infrequent occurrence, it may be necessary to complete time sensitive tasks or to maintain the Project's schedule in the event of unforeseen delays. Further details are provided in response to sub-part (b) below.

   Witness: Scott Wentzell

a. What are the average and peak noise levels during this period in those areas where active construction is occurring?

Response:

The nature of existing noise at the Project site was described in Section 2 of the Noise Study that accompanied the application (Appendix D to the Site Assessment Report (Exhibit O)). Please also refer to Bobwhite's response to Harvey Economics' Request No. VII.A.1. Please also refer to Bobwhite's response to Harvey Economics' Request No. VII.A.1.

Witness: Scott Wentzell

b. Why will it be necessary for construction activity to occur during those hours?

Response:

Solar projects generally have a contractual obligation to begin commercial operations by a certain date; failure to complete construction on time can lead to large financial penalties, the loss of beneficial tax credits, and the default on power purchase agreements. Construction timelines can be impacted by adverse weather and supply chain disruptions, among other issues. Bobwhite requires the flexibility to extend construction hours into the evening to make up for schedule delays and to complete time-sensitive construction activities such as pouring cement or completing high-voltage electrical work during planned outage timeframes. Bobwhite will make efforts to limit the duration, frequency and impact of any unavoidable evening construction activities. Any disruption would be geographically limited and temporary in duration.

Witness: Scott Wentzell

B. Operational phase

1. Has the Applicant decided on whether the solar panels will be equipped with tracking motors, and can we assume that for the purposes of this review?

a. If the Project includes tracking motors, how many tracking motors would be required?

b. Same question for homes 300 to 600 feet of generation sources.

Response for sub-parts (a) & (b):

Bobwhite currently plans to implement trackers on this site; trackers should be assumed for the purposes of this review. The exact location of tracking motors will not be determined until final technology selection and after additional design and engineering work. As a result, it is not possible to predict how many homes will be within 300 or 600 feet of a tracking motor. Tracking motors are generally placed in the middle of a row of panels, hence away from homes. However, if the tracking motors were to be placed at the end of a row nearest to the fence line, there would be five residences within 300 feet and 20 within 600 feet. The actual number of homes within 300 or 600 feet of tracking motors will be less.

Based on other operational facilities, noise levels beyond the fence line originating from the facility will be negligible.

Operational solar projects produce a low level of noise. A Massachusetts Study published in 2012 conducted measurements of noise levels at solar projects ranging from 1,000 to 3,500 kW in size. A copy of this study is included as Exhibit D. Sound levels generally followed the hemispherical wave spreading law (noise levels decrease 6 dB at every doubling of distance). Average sound levels 10 feet from the invertors varied over a range of 48 to 72 dBA across all sites surveyed. Sound levels were less in the perpendicular direction with an average of 4 to 14 dBA at 10 to 30 feet.

The study found that when sounds were recorded at the fence line of the project it was a low "hum". Measurements were also taken at 50 and 150 feet from the fence line. At 150 feet sound levels that could be records were approaching background.

Please also refer to Bobwhite's response to Harvey Economics' Request No. VII.A.1

Witness: Scott Wentzell

2. In Section 2.4.1. of Appendix D, the SAR states that "at a distance just beyond 200 feet from the source, the sound from the tracking motor would be similar to indoor residence noise levels." Please state what that noise level is in dB and indicate what the dB of a tracking motor is at 200 feet.

Response:

At 200 feet, the expected noise level of a tracking motor would be approximately 42.5 dB. According to U.S. EPA, indoor noise levels below 45 dB are unlikely to cause annoyance or interference.

Witness: Scott Wentzell

3. Is there a cumulative noise effect for the transformer, inverters, and motors during daytime hours?

Response:

Yes, though the cumulative impact is very minor. Please refer to Exhibit P and Bobwhite's response to Harvey Economics' Request No. VII.A.1.

Witness: Scott Wentzell

a. If so, what is the likely range of that cumulative noise?

Response:

The applicant commissioned an additional sound study in December of 2020, which was not included as an exhibit or appendix to the application due to the timing of its completion and the fact that the study only addressed noise during the operations of the project. That sound study, provided as Exhibit P, models the cumulative noise profile of the project during operations.

The modeled cumulative sound level at the worst-case residence is 42 dBA, which is below World Health Organization and US EPA guidelines for long-term noise exposure.

Witness: Scott Wentzell

VIII Topography/ Scenery—Visual impacts can be important for some projects, depending on the topography, surrounding land uses, and the nature of the project. Computer generated imaging is an effective way to demonstrate these effects; please provide if available.

A. Construction phase

1. **What is the extent of tree removal that the Applicant will undertake (e.g., percent of forest acreage that will be removed)?**

   Response:

   Bobwhite's current site plan would require approximately 106 acres of tree removal. This value was calculated using satellite imagery, and, therefore, is an estimate and does not address the density of the tree cover (occasional spread-out trees or completely forested). The exact amount of tree clearing will be determined by the Project's final design and layout. Bobwhite does not anticipate significantly more tree clearing would be required than what is shown in the current site plan.

   Witness: Scott Wentzell

2. **How many acres of land is the Applicant expecting to disturb (i.e., clear, flatten, grade, etc.) during the construction period?**

   Response:

   Bobwhite currently expects that up to 30% of the site may require grading prior to constructing the solar facility. Additional site engineering and design will be required to precisely understand the maximum extent of ground disturbance. The applicant's current expectation is that up to 750 acres of the site will be disturbed.

   Witness: Scott Wentzell

3. **Appendix H (Threatened and Endangered Species Assessment) states that any tree clearing should occur from October 1st to March 31st. Is the Applicant committing to not removing any trees from April 1st to September 30th?**

   Response: *Yes.*

   Witness: Scott Wentzell

B. Operational phase

1. Will vegetative buffers be grown inside or outside the perimeter fence?

Response:

Vegetative buffers will be installed outside of the fence line of the project.

Witness: Scott Wentzel

a. If the vegetative buffer will be grown outside the property fence, but inside the property line, will the Applicant perform any maintenance on the vegetative buffer? For example, if a storm knocks down trees and/or branches onto the roadsides and/or neighboring residences' property, will the Applicant's maintenance crew be responsible for cleaning up the area?

Response:

Vegetative buffers will be installed outside of the fence line of the project. Bobwhite will perform necessary maintenance to the buffer to ensure it does not encroach on to neighboring properties. In most instances, Bobwhite expects that the vegetative buffer will be installed at great enough distance from roadways and property lines that maintenance/clean up should not be required on neighboring properties. In the provided example, Bobwhite would be responsible for cleaning up the storm damage.

Witness: Scott Wentzell

b. Will damaged or failing buffers be replaced with similar vegetative buffers?

Response:

Bobwhite will take commercially reasonable efforts to maintain the vegetative buffer, and repair or replace buffers if necessary. For the sake of clarity, Bobwhite will consider a buffer damaged or failing if greater than 50% of the plant material dies or is irreparably damaged. Vegetative buffers will be inspected for damage on a yearly basis for the first five years after establishment, and on an as needed basis after the fifth year.

Witness: Scott Wentzell

2. On page 5 of Appendix I ("Master Plant List"), various trees and shrubs possess a "size" and "mature size." Is the "size" of the tree/shrub the height at the time of planting? If not, please provide size at the time of planting.

Response:

See Bobwhite's response to sub-part (a) below.

Witness: Scott Wentzell

a. How many years will it take each tree/shrub to reach a height of 8 feet?

Response:

Please refer to Exhibit Q. The column labeled "size" on the "Master Plant List" refers to the plant size at the time of installation. This table has been updated to include caliper size (trunk diameter) as well as approximate height at the time of planting. The Master Plant List has also been updated to include the approximate time for each plant to reach a height of 8-feet, and for each plant to reach maturity.

Witness: Scott Wentzell

b. How many years will it take each tree/shrub to reach their respective "mature" sizes?

Response:

See Bobwhite's response to sub-part (a).

Witness: Scott Wentzell

3. On page 6 of Appendix I ("Sheet 5 of 12 – Facility Site Context Map"), of the SAR, what do the black outlines represent?

Response:

The black outlines on the Facility Site Context Map represent locations of solar panels based upon the preliminary Project layout.

Witness: Scott Wentzell

4. **For the "Module 1" conceptual planting design, please provide a map (or multiple maps) showing where the potential buffer will be planted along the roadsides.**

   Response:

   Bobwhite has provided a map showing a representative section of the Project. Please see Exhibit R.

   Witness: Scott Wentzell

5. **For the "Module 2" conceptual planting design, please provide a map (or multiple maps) showing where the potential buffer will be planted along roadsides.**

   Response:

   Bobwhite has provided a map showing a representative section of the Project. Please see Exhibit R.

   Witness: Scott Wentzell

6. **For the "Module 3" conceptual planning design, please provide a map (or multiple maps) showing the "adjacent homes or visually sensitive resources" that the vegetative buffer will be placed.**

   Response:

   Bobwhite has provided a map showing a representative section of the Project. Please see Exhibit R.

   Witness: Scott Wentzell

7. **From page 9 of Exhibit O, how will the Applicant ensure that "each roadway or neighboring residence" will be properly screened by a planted vegetative buffer?**

   Response:

   Implementation of the three modules described in the Conceptual Visual Mitigation Plan will ensure that each roadway or neighboring residence receives the appropriate level of visual screening based on site conditions.

   Witness: Scott Wentzell

a. How will Northern Bobwhite determine whether "mitigation is warranted"?
Response:

Mitigation is warranted when solar panels and racking are within 500 feet of residences located on non-participating properties and/or within 300 feet of public roadways, unless sufficient natural visual buffering already exists such as vegetation or topography.

Witness: Scott Wentzell

8. Regarding the Gen-Tie Line, please describe how the 70-100 feet tall poles are comparable to existing transmission infrastructure?

Response:

They are generally comparable in height and appearance to the existing transmission infrastructure.

Witness: Scott Wentzell

a. Is existing infrastructure of comparable height between or in proximity to the three poles, as viewed in the sight line or viewpoint locations?

Response:

The existing infrastructure is of comparable height to the proposed Gen-Tie, though Bobwhite does not know the exact height of the existing infrastructure at this time. The Gen-Tie will be sited outside of existing utility right of ways but will be in close proximity to those existing transmission lines. The specific visual impact will depend on the viewer's location, but Bobwhite does not anticipate that the Gen-Tie will materially alter the current viewshed from any angle.

Witness: Scott Wentzell

b. Why is the Gen-Tie line unlikely to "materially alter" the Project's scenic surroundings?

Response:

The 161 kv Gen-Tie line is short in length (approximately 700 to 1,000 feet in length), is similar in size and type, and will be located near other existing high voltage transmission lines. As a result, the view will be similar to the current

surroundings and largely indistinguishable from the existing infrastructure in and adjacent to the Marion County 161kV substation.

Witness: Scott Wentzell

9. We will need to know if any glare exists as the panels rotate over the course of the day and during different times of the year.

Response:

Glare from panels is expected to be minimal over the course of the day and throughout the year. Modern PV panels reflect as little as two percent of incoming sunlight, about the same as water and less than soil or even wood shingles. See Exhibit T, "Solar and Glare Fact Sheet".

Witness: Scott Wentzell

a. Please provide any studies or independent data or evaluation that justifies the Applicant position that glare will not impact human activity in the vicinity of the Project.

Response:

"A Study of the Hazardous Glare Potential to Aviators from Utility-Scale Flat-Plate Photovoltaic System" in Exhibit E modeled the amount of visible radiation that would be reflected from a PV module every hour between 1998 and 2004 and calculated the hourly retinal irradiance. The results show that the potential for hazardous glare from flat-plate PV systems is similar to that of smooth water and not expected to be a hazard to air navigation.[3]

The 2017 Michigan Technological University study "General Design Procedures for Airport-Based Solar Photovoltaic Systems" in Exhibit F found that the reflection off a solar PV panel from the most near normal angles is less than 3% and represents no risk to air traffic.[4]

Witness: Scott Wentzell

[3] EVAN RILEY AND SCOTT OLSON, A STUDY OF THE HAZARDOUS GLARE POTENTIAL TO AVIATORS FROM UTILITY-SCALE FLAT-PLATE PHOTOVOLTAIC SYSTEM (2011).

[4] ANURAG ANURAG ET AL., GENERAL DESIGN PROCEDURES FOR AIRPORT-BASED SOLAR PHOTOVOLTAIC SYSTEMS (2017).

b. If the Applicant selects panels that do not tilt, we will still need justification about the presence, frequency and intensity of glare.

Response:

See response to sub-part (a).

Witness: Scott Wentzell

c. The SAR says the Applicant "will follow Federal Aviation Administration guidelines for determining glare issues for ingress and egress from the airport." Has the Applicant performed any analyses related to potential glare impacts to traffic, residences, businesses, the airport, or other glare-sensitive structures in the Project area? We would request a copy and interpretation of such a study.

Response:

The 2015 Federal Aviation Administration study "Evaluation of Glare as a Hazard for General Aviation Pilots on Final Approach" in Exhibit S determined that any sources of glare at an airport may be potentially mitigated if the angle of the glare is greater than 25-degrees from the direction that the pilot is looking. The report recommended that the design of any solar installation is placed such that pilots will not have to face glare straight ahead of them or within 25-degrees of straight ahead during final approach.

Lebanon-Springfield Airport has one runway designated 11/29. There will be no solar panels installed within the 2-mile final approach or within 25-degress of the final approach to runway 11. There are no solar panels installed within the 2-mile final approach of runway 29 or 25-degress to the north. Solar panels that are installed south of the approach to runway 29 will be installed at a 30-40-degree tilt, facing 180-degrees south. Aircraft approach runway 29 at a heading of 290-degrees, which is 110-degrees offset from the angle of highest glare and greater than the FAA recommended 25 degree minimum. A detailed glare study is forthcoming, and the Applicant will consult with Lebanon-Springfield Airport and/or Federal Aviation Administration (FAA) officials.

Bobwhite has not performed any studies regarding glare impacts on traffic, residences or businesses, nor are studies planned at this time.

Witness: Scott Wentzell

10. Are there any computer-generated images of what the solar panels, fencing, and other structures will look like immediately after construction is complete? If yes, HE would like to see pictures from different viewpoints (roadways, nearby residences, etc.) around the property and please index those to a map.

Response:

No computer-generated images have been created.

Witness: Scott Wentzell

11. Please provide any additional photos looking into or out of the Project property at different vantage points. We are especially interested in photos that clearly show the topography and existing vegetation at different points along the Project perimeter.

Response:

There are no additional photos.

Witness: Scott Wentzell

a. Please also provide an index map of the location where each photo is taken.

Response:

There are no geo-referenced pictures.

Witness: Scott Wentzell

IX Public meeting materials—We want to make sure that the information in the Application is consistent with the information provided to the public thus far.

A. We are aware of the Public Information Meeting documents provided in Exhibit D and the Public Involvement Documents provided in Exhibit F. Please provide any additional documents/ maps/ graphics/ other materials that have been presented to the community/ other groups as part of outreach efforts, if applicable.

Response:

Northern Bobwhite utilized a two-page information sheet to introduce the Project to the Marion County Community. A copy of this information sheet is attached as Exhibit U. This information sheet may have been shared with current and potential landowners, local County officials, as well as neighbors of the project who attended the "office hours" portion of the Public Information Meeting. All other information used as part of Bobwhite's community outreach efforts were included in Exhibits D and F to the Application.

Witness: Kara Price

B. Exhibit D.7 provides a summary transcript of the Public Information Meetings and provides a list of topics raised during the meetings. What specific issues or concerns have been brought up by the public or others as the result of public meetings or through other avenues?

Response:

The topics addressed at the virtual Public Information Meeting are indicative of other questions and comments from citizens of Marion County throughout the development process.

Witness: Kara Price

1. Are full transcripts available for the public meetings? We request any written or oral comments offered by the public or government agencies.

Response:

The full transcript of virtual public information meeting is included as Exhibit V. Bobwhite has not received any written comments from any government agencies on the Project. Bobwhite has received numerous oral comments from both the public and governmental agencies regarding the Project; however, does not have a specific catalog of those oral comments. The substance of those comments is similar to the comments and questions received during the virtual public information meeting.

Witness: Kara Price

X. Other permitting activities—HE wants to confirm information provided by the Applicant is consistent with information provided in other permitting processes

A. Section 13 of the Application lists other permits which Northern Bobwhite Solar may have already obtained or will obtain from other agencies before construction or operation. Please provide copies of any submittals to those agencies, other than those provided, that address any of the specific topics addressed in this inquiry.

Response: *The following is an updated list of permits expected for this Project.*

Permit	Status
KPDES Construction Storm Water Discharge General Permit	To date, no application has been submitted. A notice of intent to seek coverage will be submitted after final design and prior to construction.
General Permit for Floodplain Development	To date, no application has been submitted. If required, an application will be submitted after final design and prior to construction.
Section 404 Clean Water Act Permit/ Permit (Individual)	To date, no application has been submitted. If required, an application will be submitted after final design and prior to construction.
Section 401 Water Quality Certification	To date, no application has been submitted. If required, an application will be submitted after final design and prior to construction.

Witness: Scott Wentzell

XI. Economic Analysis (Exhibit N)—This topic is not specifically called for in these applications, but the Board will have an interest in Project benefits.

A. Project Assumptions (Section 2.2)

1. The text states that the Project is estimated to provide approximately 400 FTE construction jobs and assumes 50 to 100 "local hires". What is meant by the term "local hires"? Does this mean from among existing residents within Marion County?

Response:

In the analysis, the term "local hires" means residents of Marion County or employees who may reside in other counties but work for companies that currently operate in Marion County.

Witness: Karen Thompson

B. Section 3 (Assessment)

1. The text notes that assuming a quarter of employment is local (100 people), then a quarter of the labor and value added benefits would accrue to the "local community"

i. What is meant by the term "local community"?

Response:

The assumption is that local community means Marion County.

Witness: Karen Thompson

ii. Please provide a table presenting the range of potential employment related benefits specific to Marion County.

Response:

The Implan model used for the economics analysis provides the following value-added industries/areas. This is not an exhaustive list of all industries that could have related benefits.

Industries (categories) with Projected Growth
Retail -building material and garden equipment supply
Architectural, engineering and related services (possible surveyor)
Personal and household goods repair and maintenance
General consumer goods rental
Automotive repair and maintenance
Legal services
Accounting, tax preparation, bookkeeping and payroll services
Car Washes
Truck Transportation
Equipment lease and rental
Full-service restaurants
Limited Service Restaurants
Retail Gasoline Stations
Greenhouses and nursery production

Witness: Karen Thompson

2. **Does labor income include wages and benefits? Based on the table data, labor income per FTE is about $50,500, while the average salary was stated as $34,000 per year earlier in the report. Please clarify or correct.**

   Response:

   The average base salary for a solar installer is approximately $34,000 a year in Kentucky based on information gathered from employment sources (internet and interviews) that ranged from $14 to $18 per hour. This is approximately $16 per hour and would be not be out of range for other laborer jobs. This information is included to provide clarity that those jobs will not necessarily be $50,000 per year jobs for all construction jobs. For the prediction of economic impacts, the "construction of a new power and communication structure" category was used as a proxy since local (Marion County) data was available meaning economic data for this type of construction exist because construction is complete. As a note, true economic data does not exist for Kentucky from construction of a solar farm. Economic impacts predicted by Implan are best estimates and should be viewed as such.

   The $50,500 value from Implan includes salaries for individuals not on the construction site such as engineers, accountants, managers, and legal, and salaries for electricians and other skilled labor.

   Witness: Karen Thompson

3. **Please confirm the benefits over the life of the Project (whether 12 or 18 - months) is not an annualized table?**

   Response:

   The information provided is not annualized.

   Witness: Karen Thompson

4. Section 2.2 suggests that capital construction costs would be $125 million, and Section 3 state that solar material will be purchase from out of state.

i. What portion of the $125 million in capital costs will be spent in Kentucky?

Response:

Bobwhite is not able to provide a detailed estimate at this time.

While some of the building materials for the site may originate in Kentucky, that is not known at this time. A sizeable portion of the Project's capital costs will be labor, equipment and construction costs, which is estimated at $60 million. A significant portion of this $60 million will be spent in Kentucky, but exact figures will not be available until contractors and subcontractors are selected.

It is assumed that not all contractors will be Kentucky based companies since the state does not have a large solar industry.

Witness: Scott Wentzell

ii. What portion of the $125 million in capital costs will be spent within Marion County?

Response:

The portion of capital costs spent directly in Marion County is attributable to local subcontractors employing approximately 50 to 100 people during construction. Actual numbers are dependent on final contracts awarded.

Witness: Scott Wentzell

iii. What are the indirect and induced benefits produced by that level of direct expenditure?

Response:

Indirect and induced benefits are assumed to be proportional to the figures provided. Bobwhite assumes most indirect and induced impacts would be related to increased local employment , and increase use of local

restaurants, gas stations, hotels, and other establishments supporting out-of-town workers.

Witness: Karen Thompson

5. Section 2.2 states that the Project will require approximately 2 permanent positions for on-going O&M of the facility. What is the expected annual salary level for those positions?

Response:

Please see Exhibit W. Bobwhite is seeking confidential treatment for Exhibit W.

Witness: Scott Wentzell

6. What are the anticipated annual expenditures associated with facility O&M?

Response:

Please see Exhibit X. Bobwhite is seeking confidential treatment for Exhibit X.

Witness: Scott Wentzell

i. What portion of those expenditures will be made in Marion County?

Response:

Bobwhite expects up to 20% of O&M expenditures may be made in the County (this excludes technician salaries). The exact proportion will depend on if Bobwhite is able to contract with local providers for vegetation management, lawncare, facility maintenance, and other similar tasks. These services will not be procured prior to the start of construction.

Witness: Scott Wentzell

C. Section 4 (Government Revenue)

1. Please provide context for the benefits to the local school system - $400K over 35 years averages about $11,500 per year.

Response:

Northern Bobwhite Solar, LLC has agreed to enter into a Payment in Lieu of Taxes Agreement as part of the issuance of the bonds that provides for annual contractual payments of $10,000 per year. The bonds will have a forty-year term, generating $400,000 of payments over the bond term.

Witness: Scott Wentzell

i. Please provide details or calculations for how that amount was determined?

Response:

Northern Bobwhite Solar, LLC has agreed to enter into a Payment in Lieu of Taxes Agreement as part of the issuance of the bonds that provides for annual contractual payments of $10,000 per year. The bonds will have a forty-year term, generating $400,000 of payments over the bond term. The payments are to be made to Marion County, and the County will determine the amount of the annual payment that will be distributed to the school district. The school district will also receive an estimated $78,000 per year from property taxes (land) to Marion County.

Witness: Scott Wentzell

ii. What portion of the annual school system budget is that?

Response:

According to Kentucky Department of Education, the Marion County School District's total tentative annual budget for the School District's 2020-21 school year[5] is $22,162,812 (calculated as $11,339,434 state SEEK funds plus school tax revenues of $10,823,378 (total assessment of $1,573,165,408 multiplied by the School District's levied equivalent tax rate of 68.8 cents per $100 of fair cash value)). The total annual pilot

[5] *SEEK Calculations*, KY. DEP'T OF EDUC. https://education.ky.gov/districts/SEEK/Documents/FY2020-2021%20SEEK%20Tentative%20Calculations%20Update%2012.1.2020.pdf (last visited Feb. 13, 2021).

payment would be approximately 0.045% of the School District's tentative annual budget. The $78,000 property tax contribution would be approximately 0.39% of the budget.

Witness: Scott Wentzell

2. How will the $6 million in taxes be distributed over the life of the Project?

Response:

See response to sub-parts 2.i and 2.ii.

Witness: Scott Wentzell

i. What entities will receive those tax monies and how much will each of those entities receive per year?

Response:

The following governmental entities are estimated to receive the following additional average annual tax revenues during the first ten years of the term of the bonds:

County	Extension District	Health District	Library District	Air Board	School District	Total
$51,000	$4,000	$4,000	$7,000	$1,000	$78,000	$145,000

In the first year (during construction), the State and Marion County will also receive an estimated $500,000 and $68,000 in state individual income taxes and county occupational license tax, respectively, on wages paid for construction labor. These amounts were not included in the $6M estimate

Witness: Scott Wentzell

ii. How was the $6 million amount determined? Exhibit N, Appendix A (Memorandum of Industrial Revenue Bond Agreement) notes an Exhibit that is described as the agreement regarding the obligation to make payments in lieu of taxes. Please provide that document.

Response:

The $6 million was determined by summing the additional annual local tax revenues and PILOT over the 40-year term of the bonds, adding the

additional first year income and occupational license taxes, and rounding to the closest million-dollar amount.

The tax amounts were calculated using 2019 tax rates. The tax revenue streams for the local taxing districts include the increase in local ad valorem taxes on the land leased for the Project. The land currently is taxed on its agricultural value but will be reassessed at fair cash value when the Project is placed in service and the current use of the land is changed. Fair cash value per acre was determined by taking the estimated average rent per acre and capitalizing it at a 7% capitalization rate. The increase in taxable value of the underlying land was determined by deducting the current highest per acre value of agricultural land in the County from the determined fair cash value per acre. The additional ad valorem taxes were determined by multiplying the increase in taxable value by each local taxing district's 2019 tax rate.

In addition to the additional ad valorem tax revenue, Marion County's tax revenue stream also includes the following additional annual taxes: (i) county insurance premiums tax on the Project's estimated annual property and casualty insurance premiums; (ii) county net profits tax on the rent paid to land owners; and (iii) county net profits tax paid on Project net profits.

A copy of the exhibit is enclosed as Exhibit Y. This is a form of the PILOT Agreement. That actual PILOT agreement will be completed at the time the Industrial Revenue Bonds are finalized.

Witness: Scott Wentzell

XII Decommissioning

A. The application package suggests that at the end of the Project, the land within the Project boundary will be returned to pre-existing conditions and uses.

1. Please provide a description of decommissioning plan, including what will happen to the facilities/structure on site and how the area will be returned to pre-existing conditions and uses.

Response:

Equipment Decommissioning and Removal
The basic components of the Project are photovoltaic (PV) modules, mechanical racking system, electrical cabling, inverter racks, transformers, inverters, electrical equipment, cabling and concrete pads. They will be removed, placed in a truck and transferred to a recycler or disposal as applicable.

Roads, Parking Area
All access roads and the parking area will be removed to allow for the complete rehabilitation. Typically, the granular base covering of these areas will be removed using a wheel loader to strip off the material and dump trucks to haul the aggregate to a recycling facility or approved disposal facility. The underlying subsoil, if exhibiting significant compaction (more likely for the site entrance road than the interior access roads), will then be diced using a tractor and disc attachment to restore the soil structure and to aerate the soil. Clean topsoil will be imported on site by dump truck, replaced over the area and leveled to match the existing grade. A cover crop or perennial seed mix of grasses may be applied to stabilize the soil if farming operations are not planned to recommence.

Site Restoration
These activities will be undertaken to restore the site to substantially its previous condition: site cleanup, restoration of surface drainage swales and ditches if impacted, and trenches/drains constructed for the Project will be filled with suitable materials and leveled.

Witness: Scott Wentzell

2. What commitments regarding land restoration are included in the landowner lease agreements?

Response:

At the termination of each lease, Bobwhite shall restore the land to substantially its condition as of the effective date of the lease using prudent engineering practices where applicable, (including, without limitation, all fencing, roads, solar panels and mounting, and other improvements or alterations) and any electrical or communication or other utility poles, lines and connections. If the landowner provides written consent, roads and fences could remain. The restoration shall be completed within twenty-four (24) months after the termination of the lease and Bobwhite shall continue to pay rent during the restoration period. Bobwhite is not obligated to regrade the property or replant any crops or plants. Copies of the leases are provided under seal in response to Board Staff Request No. 2b.

Witness: Scott Wentzell