Request No 1: Refer to the Application, Attachment I, pages 1 and 4.

- Explain how the model distinguishes between short-term and longterm economic effects in Russell County from the project.
- b. . Explain why the model was tailored to Russell County only and not to include contiguous counties.
- c. Explain whether it is reasonable to assume that some of the labor needed for the construction phase could reside in and be drawn from surrounding counties
- d. Explain whether any of the 199 new jobs generated as a result of the project will last beyond year one.

Response:

- a. The short-term effects are related to construction, over 12+ months. The long-term effects are the modest operations and maintenance required over three or four decades, with only two or three jobs involved.
- b. In other similar studies, I have found almost no difference in predicted total impacts when looking at the host county alone versus a group of contiguous counties, and hence did not include that analysis in my report. However, to respond, I have analyzed the expected impact across multiple counties in the region, as well as a statewide analysis. The results do not differ much from what I provided in my May 2020 report. This is because most of the materials for the solar farm are supplied by companies outside of

Kentucky. That is, the spinoff impacts are modest whether one looks at Russell County alone, Russell plus contiguous counties, or all counties in Kentucky.

Table 1 below provides a summary of predicted employment impacts from construction using three different geographic scopes. Census data show that 72 percent of employees in Russell County are also Russell County residents. Adair, Casey, and Pulaski counties contribute several hundred workers, and combined with Russell residents account for 95 percent of all workers in Russell County. I have built an IMPLAN model of those four counties combined and label that a Regional model. There has been another year of county-level economic data released since my original analysis, so here the impacts are provided using 2019 data.

Table 1

Comparison of Results from Three IMPLA	N Models		
	Russell County only	Russell County Region (four counties)	State of Kentucky
Predicted total employment impact of 150 construction jobs	191.4	206.1	234.5
Top 9 industries affected (spinoff jobs from c	onstruction)		
Retail - Building material and garden equipment and supplies stores	4.0	4.1	4.1
Hospitals	3.0	2.0	3.6
Limited-service restaurants	2.1	2.4	3.1
Retail - Food and beverage stores	1.4		
Automotive repair and maintenance, except car washes	1.3		
Full-service restaurants	1.3	1.9	3.4
Individual and family services	1.1		
Retail - Nonstore retailers	1.1		
Monetary authorities and depository credit intermediation	1.0		
Other real estate		2.1	3.0
Employment services		2.6	3.5
Architectural, engineering, and related services		1.6	2.9
Offices of physicians		1.5	2.2
Retail - General merchandise stores		1.6	2.1

Source: IMPLAN models using 2019 economic data; simulation of 150 jobs in Sector 52, Construction of new power and communication structures.

One can see that the total number of jobs predicted varies little with the geographic scope. The four-county regional model predicts only 15 more jobs than the Russell County-only model. Zooming out to the whole state of Kentucky yields only 43 more

total jobs than the Russell County-only model. I have also included some detail, showing the top sectors impacted by the construction activity in each model. Retail building supplies and hospitals are the leading sectors for spinoff jobs in each model. In all three models, the employment multiplier effects are modest, ranging from 1.28 for the single county to 1.56 for the state as a whole.

- c. There is no way to know in advance where all the construction workers reside, though it is quite reasonable to assume some of the labor would be supplied by local residents. The hiring decisions will be made by the contractors. Presumably, experienced solar electricity specialists will need to be brought in from outside the region for much of the work. But there should be many opportunities for local workers in site preparation, concrete installment, landscaping, and fencing. It is in the interest of developers to hire local people when available, as labor costs are generally lower than if nonresident workers have to be brought in, housed, and fed.
- d. There is no expectation that the construction-related jobs will last beyond the construction period.

<u>Request No 2:</u> Refer to the Application, Attachment I, page 3. Explain how \$50,000 for the average annual pay was estimated.

<u>Response:</u> This is a working number, subject to revision where more detail is available. I began with an estimate by ENGIE for another project in Kentucky, which worked out to be \$50,000 per job. They have global experience with solar farm developments. This is in line with the pay by occupation shown in the table in my report. The US Bureau of Labor Statistics reports that for 2020, the median annual pay for a solar photovoltaic installer was \$46,470. Some other occupations, such as engineers and managers make much more, while occupations like fence erectors and landscapers make much less.

<u>Request No 3:</u> Refer to the Application, Attachment I, page 4. Explain whether the tax payments made to the county generate any new jobs, and if not, explain how much sustained stimulus is required to begin generating new public sector jobs.

<u>Response:</u> "New public sector jobs" is not an issue we have considered. The tax payments to the County could be deployed in many different ways, some requiring more labor, some not. Possibilities include using the funds to (a) purchase equipment, (b) pay down debt, (c) build a structure, (d) repair older buildings, (e) add employees, (f) give raises to current employees. This is a decision for the County Fiscal Court, the school system, and other jurisdictions receiving more tax revenues.

<u>Request No 4:</u> Refer to the Application, Attachment I, page 5. Explain if increased local expenses in the construction phase were included in the model.

<u>Response:</u> Yes, the model explicitly predicts local spending by the construction company, as well as local spending linked to the new payroll generated in the region. See Table 1 above for examples of the job impacts of local expenditures. Table 2 provides some industry detail on predicted local spending.

Table 2

Top 30 Industries Affected by Solar Farm Construction, Russell County									
	Indirect	Induced	Total						
Owner-occupied dwellings	\$0	\$596,748	\$596,748						
Hospitals	\$0	\$482,885	\$482,885						
Retail - Building material and garden equipment and supplies stores	\$390,158	\$26,627	\$416,785						
Ready-mix concrete manufacturing	\$330,907	\$1,879	\$332,786						
Monetary authorities and depository credit intermediation	\$115,535	\$184,922	\$300,456						
mmercial and industrial machinery and equipment rental and leasing	\$188,938	\$2,987	\$191,924						
Limited-service restaurants	\$3,226	\$159,731	\$162,957						
Retail - Nonstore retailers	\$23,923	\$118,516	\$142,439						
Wholesale - Petroleum and petroleum products	\$116,871	\$22,048	\$138,919						
Tenant-occupied housing	\$0	\$133,357	\$133,357						
Other real estate	\$76,283	\$53,410	\$129,692						
Petroleum refineries	\$103,640	\$18,064	\$121,704						
Electric power transmission and distribution	\$48,392	\$61,015	\$109,407						
Wired telecommunications carriers	\$43,359	\$61,838	\$105,197						
Automotive repair and maintenance, except car washes	\$55,228	\$41,276	\$96,504						
Retail - Food and beverage stores	\$2,072	\$89,102	\$91,174						
Full-service restaurants	\$5,572	\$75,326	\$80,898						
Wholesale - Machinery, equipment, and supplies	\$75,168	\$3,516	\$78,685						
Commercial and industrial machinery and equip repair and maint	\$69,208	\$8,898	\$78,105						
Architectural, engineering, and related services	\$70,148	\$692	\$70,840						
Legal services	\$42,242	\$21,531	\$63,773						
Retail - Health and personal care stores	\$581	\$51,911	\$52,492						
Radio and television broadcasting	\$27,037	\$25,264	\$52,302						
Funds, trusts, and other financial vehicles	\$107	\$50,482	\$50,589						
Car washes	\$21,811	\$28,145	\$49,956						
Retail - General merchandise stores	\$9,399	\$40,512	\$49,912						
Outpatient care centers	\$0	\$49,612	\$49,612						
Offices of physicians	\$0	\$43,733	\$43,733						
Truck transportation	\$34,792	\$8,448	\$43,240						
Iron and steel mills and ferroalloy manufacturing	\$40,930	\$954	\$41,884						

Source: IMPLAN model of Russell County, using 2019 economic data; simulation of 150 jobs in Sector 52, "Construction of new power and communication structures".

<u>Request No 5</u>: Explain the process that Mt. Olive Creek will employ to construct the fencing surrounding the boundary of the project and the noise level associated with the construction at the five nearest receptors measured in dBA.

<u>Response:</u> Solar projects install the same type of fences as private residences, farming operations or other businesses. Steel fence posts are usually installed using pneumatic handheld post drivers. While the noise level might exceed 90dBA at the source, fence post driving is a short intermittent activity (<2min/post), moving past residences quickly.

<u>Request No 6:</u> Refer the Site Assessment report, page 11, the proposed language for mitigation measures. Describe the methods that Mt. Olive Creek proposes to employ to mitigate noise impact.

<u>Response:</u> Mt Olive Creek is proposing to limit construction to certain hours, to implement setbacks that will minimize the impact of noise on sensitive receptors during construction, and to work with neighbors that express concerns during the construction phase. Construction inherently involves some level of noise. Mt Olive Creek knows of no proven or verifiable method of mitigating noise other than limiting construction hours and establishing setbacks.

<u>Request No 7:</u> Provide a detailed proposed construction schedule.

<u>Response:</u> See below.

ID	WBS	Task Name	Duration	Start	Finish	Ц2	2020 µ1	 2021
1	1	Mt. Olive Creek Solar Farm_Russell County, KY_60MWac	1040 days	Mon 1/6/20	Fri 12/29/23		111	
2	1.1	Project Milestones	675 days	Fri 5/28/21	Fri 12/29/23			
3	1.1.1	Feasibility Study Agreement	0 days	Fri 5/28/21	Fri 5/28/21			
4	1.1.2	Conceptual Design Complete	0 days	Fri 12/3/21	Fri 12/3/21			
5	1.1.3	Procurement Start	0 days	Mon 6/21/21	Mon 6/21/21			
6	1.1.4	EPC NTP	0 days	Tue 7/19/22	Tue 7/19/22			
7	1.1.5	Start Construction	0 days	Mon 2/13/23	Mon 2/13/23			
8	1.1.6	Mechanical Completion(Ready for Backfeed Power)	0 days	Wed 10/18/23	Wed 10/18/23			
9	1.1.7	TIF In Service Date	0 days	Thu 7/21/22	Thu 7/21/22			
10	1.1.8	Energize Project Substation (Backfeed Power)	0 days	Wed 10/25/23	Wed 10/25/23			
11	1.1.9	IRS Placed-In-Service Date	0 days	Wed 11/15/23	Wed 11/15/23			
12	1.1.10	PJM Protocol Complete	0 days	Thu 12/21/23	Thu 12/21/23			
13	1.1.11	Substantial Completion ECCA COD	0 days	Fri 12/29/23	Fri 12/29/23			
14	1.2	Project Development	695 days	Mon 1/6/20	Fri 9/2/22	I		
39	1.2.5	Pre-Construction	197 days	Mon 8/23/21	Tue 5/24/22			
40	1.2.5.1	Estimating	40 days	Wed 1/19/22	Tue 3/15/22			
41	1.2.5.1.1	Indicative Estimate	8 wks	Wed 1/19/22	Tue 3/15/22			
42	1.2.5.2	Preliminary Engineering	147 days	Mon 8/23/21	Tue 3/15/22			
43	1.2.5.2.1	Conceptual Design	15 wks	Mon 8/23/21	Fri 12/3/21			
44	1.2.5.2.2	10% Engineering Design	6 wks	Mon 12/6/21	Fri 1/14/22			
45	1.2.5.2.3	10% Engineering Design & Estimate Complete	0 wks	Tue 3/15/22	Tue 3/15/22			
46	1.2.5.3	Preliminary Geotech	40 days	Mon 1/17/22	Fri 3/11/22			
47	1.2.5.3.1	Preliminary Geotech Onsite Investigation	6 wks	Mon 1/17/22	Fri 2/25/22			
48	1.2.5.3.2	Pile Load Testing	4.9 wks	Mon 1/31/22	Fri 3/4/22			
49	1.2.5.3.3	Preliminary Structural Design	2 wks	Mon 2/28/22	Fri 3/11/22			
50	1.2.5.3.4	Geotech Report	2 days	Mon 2/28/22	Tue 3/1/22			
51	1.2.5.4	BOP EPC RFP	50 days	Wed 3/16/22	Tue 5/24/22			
52	1.2.5.4.1	Issue Bid Invitation	5 days	Wed 3/16/22	Tue 3/22/22			
53	1.2.5.4.2	BOP EPC Review and Compile Bid	20 days	Wed 3/23/22	Tue 4/19/22			
54	1.2.5.4.3	Bid Due	0 days	Tue 4/19/22	Tue 4/19/22			
55	1.2.5.4.4	Bid Evaluation	20 days	Wed 4/20/22	Tue 5/17/22			
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ID	WBS	Task Name	Duration	Start	Finish	20	020		2021
56	1.2.5.4.5	BOP EPC Bid Award	5 days	Wed 5/18/22	Tue 5/24/22	<u>H2</u>	H1	<u> </u>	<u> </u>
57	1.3	Project Material Procurement	557 days	Mon 6/21/21	Tue 8/8/23				
58	1.3.1	Racking System	185 days	Wed 10/12/22	Tue 6/27/23				
59	1.3.1.1	PO Negotiations	60 days	Wed 10/12/22	Tue 1/3/23				
60	1.3.1.2	Place Order	5 days	Wed 1/4/23	Tue 1/10/23				
61	1.3.1.3	Manufacturing	100 days	Wed 1/11/23	Tue 5/30/23				
62	1.3.1.4	Delivery to Site	20 days	Wed 5/31/23	Tue 6/27/23				
63	1.3.1.5	Racking Deliveries Complete	0 days	Tue 6/27/23	Tue 6/27/23				
64	1.3.2	Modules	215 days	Wed 10/12/22	Tue 8/8/23				
65	1.3.2.1	PO Negotiations	60 days	Wed 10/12/22	Tue 1/3/23				
66	1.3.2.2	Place Order	5 days	Wed 1/4/23	Tue 1/10/23				
67	1.3.2.3	Manufacturing	130 days	Wed 1/11/23	Tue 7/11/23				
68	1.3.2.4	Delivery to Site	20 days	Wed 7/12/23	Tue 8/8/23				
69	1.3.2.5	Modules Deliveries Complete	0 days	Tue 8/8/23	Tue 8/8/23				
70	1.3.3	Main Power Transformer	529 days	Mon 6/21/21	Thu 6/29/23				
71	1.3.3.1	MPT Contractually Secured	2 wks	Mon 6/21/21	Fri 7/2/21				
72	1.3.3.2	Procurement (ITC Materials)	15 wks	Fri 7/2/21	Fri 10/15/21				
73	1.3.3.3	MPT Assignment	10 wks	Mon 7/5/21	Fri 9/10/21				
74	1.3.3.4	Engineering	10 mons	Mon 7/18/22	Fri 4/21/23				
75	1.3.3.5	Manufacturing	22 wks	Mon 12/5/22	Fri 5/5/23				
76	1.3.3.6	Final Tests (FAT)	1 wk	Fri 6/16/23	Thu 6/22/23				
77	1.3.3.7	Delivery	1 wk	Fri 6/23/23	Thu 6/29/23				
78	1.4	Project Delivery	625 days	Mon 8/9/21	Fri 12/29/23				
79	1.4.1	Delivery Milestones	378 days	Tue 7/19/22	Fri 12/29/23				
80	1.4.1.1	BOP-EPC NTP	0 wks	Tue 7/19/22	Tue 7/19/22				
81	1.4.1.2	BOP Engineering Drawings (30%) Complete	0 wks	Tue 10/11/22	Tue 10/11/22				
82	1.4.1.3	BOP Engineering Drawings (60%) Complete	0 wks	Mon 11/28/22	Mon 11/28/22				
83	1.4.1.4	BOP Engineering Drawings (90%) Complete	0 wks	Mon 1/23/23	Mon 1/23/23				
84	1.4.1.5	BOP Engineering Drawings IFC	0 wks	Mon 2/13/23	Mon 2/13/23				
85	1.4.1.6	BOP Mobilization	0 wks	Mon 2/13/23	Mon 2/13/23				
86	1.4.1.7	Start Substation Construction	0 wks	Mon 4/10/23	Mon 4/10/23				
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ID	WBS	Task Name	Duration	Start	Finish		2020		2021
87	1.4.1.8	Start O&M Building	0 days	Tue 4/11/23	Tue 4/11/23	<u> </u>	<u> </u>	<u> </u>	<u> </u>
88	1.4.1.9	O&M Building Complete	0 wks	Mon 10/9/23	Mon 10/9/23				
89	1.4.1.10	Collection System Construction Complete	0 wks	Wed 10/4/23	Wed 10/4/23				
90	1.4.1.11	Substation Construction Complete	0 wks	Wed 10/18/23	Wed 10/18/23				
91	1.4.1.12	Mechanical Completion(Ready for Backfeed Power)	0 days	Wed 10/18/23	Wed 10/18/23				
92	1.4.1.13	MC Funding	0 days	Tue 10/24/23	Tue 10/24/23				
93	1.4.1.14	Energize Project Substation (Backfeed Power)	0 wks	Wed 10/25/23	Wed 10/25/23				
94	1.4.1.15	IRS Placed-In-Service Date	0 wks	Wed 11/15/23	Wed 11/15/23				
95	1.4.1.16	Substantial Completion/ECCA (Tax Equity) COD	0 wks	Fri 12/29/23	Fri 12/29/23				
96	1.4.2	Owner's SOW	139 days	Tue 7/19/22	Mon 1/30/23				
97	1.4.2.1	Agreements	0 days	Tue 7/19/22	Tue 7/19/22				
98	1.4.2.1.1	BOP-EPC Agreement	0 days	Tue 7/19/22	Tue 7/19/22				
99	1.4.2.1.1.1	BOP-EPC Executed	0 wks	Tue 7/19/22	Tue 7/19/22				
100	1.4.2.1.1.2	BOP-EPC NTP (Full)	0 wks	Tue 7/19/22	Tue 7/19/22				
101	1.4.2.1.1.3	BOP-EPC Agreement Milestones Complete	0 wks	Tue 7/19/22	Tue 7/19/22				
102	1.4.2.2	Construction Permits	139 days	Wed 7/20/22	Mon 1/30/23				
103	1.4.2.2.1	Federal	125 days	Wed 7/20/22	Tue 1/10/23				
104	1.4.2.2.1.1	DOT Permits	25 wks	Wed 7/20/22	Tue 1/10/23				
105	1.4.2.2.2	State	126 days	Wed 7/20/22	Wed 1/11/23				
106	1.4.2.2.2.1	State Permits	25.2 wks	Wed 7/20/22	Wed 1/11/23				
107	1.4.2.2.3	Local / County	139 days	Wed 7/20/22	Mon 1/30/23				
108	1.4.2.2.3.1	County Permits	27.8 wks	Wed 7/20/22	Mon 1/30/23				
109	1.4.2.2.4	Pre-Con Permits & Agreements Complete	0 wks	Mon 1/30/23	Mon 1/30/23				
110	1.4.3	TIF EPC SOW	220 days	Fri 9/17/21	Fri 7/22/22				
111	1.4.3.1	TIF Switchyard Pad Complete(BOP EPC)	0 days	Fri 9/17/21	Fri 9/17/21				
112	1.4.3.2	Switchyard Construction	11 mons	Mon 9/20/21	Fri 7/22/22				
113	1.4.3.3	TIF In Service Date	0 days	Fri 7/22/22	Fri 7/22/22				
114	1.4.3.4	TIFEPC SOW Complete	0 wks	Fri 7/22/22	Fri 7/22/22				
115	1.4.4	Solar Plant EPC Contractor SOW	625 days	Mon 8/9/21	Fri 12/29/23				
116	1.4.4.1	BOP-EPC Milestones	378 days	Tue 7/19/22	Fri 12/29/23				
117	1.4.4.1.1	Notice to Proceed	0 wks	Tue 7/19/22	Tue 7/19/22				
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118	1.4.4.1.2	Guaranteed Project Substantial Completion	0 wks	Fri 12/29/23	Fri 12/29/23	<u> </u>		<u> </u>	<u> HI</u>
119	1.4.4.1.3	Guaranteed Project Final Completion	0 wks	Wed 10/18/23	Wed 10/18/23				
120	1.4.4.2	BOP-EPC (General) SOW	625 days	Mon 8/9/21	Fri 12/29/23				
121	1.4.4.2.1	Engineering	149 days	Wed 7/20/22	Mon 2/13/23				
122	1.4.4.2.1.1	Civil Design	115 days	Wed 8/17/22	Tue 1/24/23				
123	1.4.4.2.1.1.1	Civil Engineering 30%	30 days	Wed 8/17/22	Tue 9/27/22				
124	1.4.4.2.1.1.2	Civil Engineering 30% Review	10 days	Wed 9/28/22	Tue 10/11/22				
125	1.4.4.2.1.1.3	Civil Engineering 60%	20 days	Wed 10/12/22	Tue 11/8/22				
126	1.4.4.2.1.1.4	Civil Engineering 60% Review	10 days	Wed 11/9/22	Tue 11/22/22				
127	1.4.4.2.1.1.5	Civil Engineering 90%	20 days	Wed 11/23/22	Tue 12/20/22				
128	1.4.4.2.1.1.6	Civil Engineering 90% Review	10 days	Wed 12/21/22	Tue 1/3/23				
129	1.4.4.2.1.1.7	Civil Engineering IFC	15 days	Wed 1/4/23	Tue 1/24/23				
130	1.4.4.2.1.1.8	Civil Engineering Complete	0 wks	Tue 1/24/23	Tue 1/24/23				
131	1.4.4.2.1.2	Collection System Design	149 days	Wed 7/20/22	Mon 2/13/23				
132	1.4.4.2.1.2.1	30% Collection Design	30 days	Wed 7/20/22	Tue 8/30/22				
133	1.4.4.2.1.2.2	30% Collection Design R&C	10 days	Tue 8/30/22	Mon 9/12/22				
134	1.4.4.2.1.2.3	30% Collection System Studies	20 days	Tue 9/13/22	Mon 10/10/22				
135	1.4.4.2.1.2.4	60% Collection Design	20 days	Tue 10/11/22	Mon 11/7/22				
136	1.4.4.2.1.2.5	60% Collection Design R&C	15 days	Tue 11/8/22	Mon 11/28/22				
137	1.4.4.2.1.2.6	90% Collection Design	20 days	Tue 11/29/22	Mon 12/26/22				
138	1.4.4.2.1.2.7	90% Collection Design R&C	20 days	Tue 12/27/22	Mon 1/23/23				
139	1.4.4.2.1.2.8	IFC Collection Design	15 days	Tue 1/24/23	Mon 2/13/23				
140	1.4.4.2.1.2.9	Collection System Engineering Complete	0 wks	Mon 2/13/23	Mon 2/13/23				
141	1.4.4.2.1.3	High Voltage (HV) Engineering	125 days	Wed 7/20/22	Tue 1/10/23				
142	1.4.4.2.1.3.1	30% HV Engineering	30 days	Wed 7/20/22	Tue 8/30/22				
143	1.4.4.2.1.3.2	30% HV Engineering Review	10 days	Wed 8/31/22	Tue 9/13/22				
144	1.4.4.2.1.3.3	60% HV Engineering	30 days	Wed 9/14/22	Tue 10/25/22				
145	1.4.4.2.1.3.4	60% HV Engineering Review	10 days	Wed 10/26/22	Tue 11/8/22				
146	1.4.4.2.1.3.5	90% HV Engineering	20 days	Wed 11/9/22	Tue 12/6/22				
147	1.4.4.2.1.3.6	90% HV Engineering Review	10 days	Wed 12/7/22	Tue 12/20/22				
148	1.4.4.2.1.3.7	HV Engineering IFC	15 days	Wed 12/21/22	Tue 1/10/23				
		Task Project Summary	Manual	Task	Start-o	only	C		Dea
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149	1.4.4.2.1.3.8	HV Enginee	ering Complete		0 wks	Tue 1/10/23	Tue 1/10/23	<u>п</u> ∠		<u> </u>	пі
150	1.4.4.2.1.4	BOP-EPC Engi	neering Complete	2	0 wks	Mon 2/13/23	Mon 2/13/23				
151	1.4.4.2.2	Procurement			200 days	Tue 8/30/22	Mon 6/5/23				
152	1.4.4.2.2.1	Long Lead Ite	ms		120 days	Tue 8/30/22	Mon 2/13/23				
153	1.4.4.2.2.2	Control Buildi	ing		135 days	Tue 11/29/22	Mon 6/5/23				
154	1.4.4.2.2.3	BOP-EPC Proc	curement Comple	te	0 wks	Mon 6/5/23	Mon 6/5/23				
155	1.4.4.2.3	Construction			573 days	Mon 8/9/21	Wed 10/18/23				
156	1.4.4.2.3.1	Switchyard Pa	ad		30 days	Mon 8/9/21	Fri 9/17/21				
157	1.4.4.2.3.1.1	Switchyard	Pad Mobilization		1 wk	Mon 8/9/21	Fri 8/13/21				
158	1.4.4.2.3.1.2	Switchyard	Pad Constructior	1	5 wks	Mon 8/16/21	Fri 9/17/21				
159	1.4.4.2.3.1.3	Switchyard	Pad Complete		0 days	Fri 9/17/21	Fri 9/17/21				
160	1.4.4.2.3.2	Sitework			167 days	Tue 2/14/23	Wed 10/4/23				
161	1.4.4.2.3.2.1	Training &	Planning		6 days	Tue 2/14/23	Tue 2/21/23				
162	1.4.4.2.3.2.2	Grade Offic	e / Laydown Area	3	6 days	Thu 2/23/23	Thu 3/2/23				
163	1.4.4.2.3.2.3	Mobilizatio	'n		10 days	Tue 2/14/23	Mon 2/27/23				
164	1.4.4.2.3.2.4	Grade Subs	station Area		10 days	Thu 2/23/23	Wed 3/8/23				
165	1.4.4.2.3.2.5	Survey & La	ayout		40 days	Tue 2/14/23	Mon 4/10/23				
166	1.4.4.2.3.2.6	Install / Ma	aintain Erosion Co	ntrol	150 days	Thu 2/23/23	Wed 9/20/23				
167	1.4.4.2.3.2.7	Roads			160 days	Thu 2/23/23	Wed 10/4/23				
168	1.4.4.2.3.2.7.1	Access R	oads		100 days	Thu 2/23/23	Wed 7/12/23				
169	1.4.4.2.3.2.7.2	Road Ma	aintenance & Dust	t Control	160 days	Thu 2/23/23	Wed 10/4/23				
170	1.4.4.2.3.2.7.3	Roads Co	omplete		0 wks	Wed 10/4/23	Wed 10/4/23				
171	1.4.4.2.3.2.8	Sitework Co	onstruction Comp	lete	0 wks	Wed 10/4/23	Wed 10/4/23				
172	1.4.4.2.3.3	Collection Sys	stem		157 days	Tue 2/28/23	Wed 10/4/23				
173	1.4.4.2.3.3.1	Mobilizatio	on & Training		10 days	Tue 2/28/23	Mon 3/13/23				
174	1.4.4.2.3.3.2	Trench/Pla	ce Cable/Backfill	Circuits	80 days	Thu 3/16/23	Wed 7/5/23				
175	1.4.4.2.3.3.3	Install Rack	ing & Modules		65 days	Thu 4/27/23	Wed 7/26/23				
176	1.4.4.2.3.3.4	Wire Mana	gement/Above G	round Electrical	50 days	Thu 6/8/23	Wed 8/16/23				
177	1.4.4.2.3.3.5	Circuit Test	ing		65 days	Thu 7/6/23	Wed 10/4/23				
178	1.4.4.2.3.3.6	Collection S	System Construct	ion Complete	0 wks	Wed 10/4/23	Wed 10/4/23				
179	1.4.4.2.3.4	Substation			167 days	Tue 2/28/23	Wed 10/18/23				
		Task		Project Summary	Manual	Task	Start-o	only	C		De
Projec	ct: Horseshoe Bend_60	MW Split		Inactive Task	 Duratio	n-only	Finish-	only	C		Pro
Date:	FII 0/23/21	Milestone	<u>+</u>	Inactive Milestone	 Manual	Summary Rollup	Extern	al Tasks			Ma
		Summary		Inactive Summary	Manual	Summary I	Extern	ai Milestone	e 🔷		
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ID	WBS	Task Name	Duration	Start	Finish	2	.020		2021
180	1.4.4.2.3.4.1	Control Building	30 days	Tue 2/28/23	Mon 4/10/23	H2	<u>H1</u>	<u>H2</u>	<u> </u> H1
181	1.4.4.2.3.4.2	Mobilization & Training	15 days	Mon 3/20/23	Fri 4/7/23				
182	1.4.4.2.3.4.3	Install Foundations & Grounding	60 days	Tue 4/11/23	Mon 7/3/23				
183	1.4.4.2.3.4.4	Install Support Steel	45 days	Fri 5/5/23	Thu 7/6/23				
184	1.4.4.2.3.4.5	Buswork	45 days	Fri 6/9/23	Thu 8/10/23				
185	1.4.4.2.3.4.6	Receive & Terminate Main Power Transformers	35 days	Fri 7/7/23	Thu 8/24/23				
186	1.4.4.2.3.4.7	Install & Terminate Equipment	50 days	Fri 7/7/23	Thu 9/14/23				
187	1.4.4.2.3.4.8	Test / Commission Substation	30 days	Thu 9/7/23	Wed 10/18/23				
188	1.4.4.2.3.4.9	Substation Construction Complete	0 wks	Wed 10/18/23	Wed 10/18/23				
189	1.4.4.2.3.5	O&M Building	130 days	Tue 4/11/23	Mon 10/9/23				
190	1.4.4.2.3.5.1	O&M Construction	130 days	Tue 4/11/23	Mon 10/9/23				
191	1.4.4.2.3.5.2	O&M Building Construction Complete	0 wks	Mon 10/9/23	Mon 10/9/23				
192	1.4.4.2.3.6	Restoration	40 days	Thu 7/13/23	Wed 9/6/23				
193	1.4.4.2.3.6.1	Reclaim Roads	40 days	Thu 7/13/23	Wed 9/6/23				
194	1.4.4.2.3.6.2	Cleanup & Demobilization	40 days	Thu 7/13/23	Wed 9/6/23				
195	1.4.4.2.3.6.3	Seed Reclamation Areas	40 days	Thu 7/13/23	Wed 9/6/23				
196	1.4.4.2.3.6.4	Restoration Complete	0 wks	Wed 9/6/23	Wed 9/6/23				
197	1.4.4.2.3.7	BOP-EPC Construction Complete	0 wks	Wed 10/18/23	Wed 10/18/23				
198	1.4.4.2.4	Commissioning	47 days	Thu 10/26/23	Fri 12/29/23				
199	1.4.4.2.4.1	Inverter Hot Commissioning	15 days	Thu 10/26/23	Wed 11/15/23				
200	1.4.4.2.4.2	Trackers Hot Commissioning	15 days	Thu 10/26/23	Wed 11/15/23				
201	1.4.4.2.4.3	SCADA Control	15 days	Thu 10/26/23	Wed 11/15/23				
202	1.4.4.2.4.4	Performance Testing	32 days	Thu 11/16/23	Fri 12/29/23				
203	1.4.4.2.4.5	Commissioning Complete	0 days	Fri 12/29/23	Fri 12/29/23				
204	1.4.4.2.5	BOP-EPC SOW Complete	0 wks	Fri 12/29/23	Fri 12/29/23				
205	1.4.5	Project Delivery Complete	0 wks	Fri 12/29/23	Fri 12/29/23				
206	1.5	Market Readiness Grid (PJM) Compliance	126 days	Thu 6/29/23	Thu 12/21/23				
207	1.5.1	Site Synchronization	65 days	Fri 8/25/23	Thu 11/23/23				
208	1.5.1.1	Complete Commissioning Plan - 45 days prior to Back feed (Owner)	2 wks	Fri 8/25/23	Thu 9/7/23				
209	1.5.1.2	Complete FIS Stability Study - 45 days prior to back feed (Owner)	0 days	Fri 8/25/23	Fri 8/25/23				
		Task Project Summary	Manual	Task	Start-c	only	C		De
Proje	ct: Horseshoe B	end_60MW Split Inactive Task	Duratio	n-only	Finish-	only	J		Pro
Date:	Fri 6/25/21	Milestone Milestone	Manual	Summary Rollup	Externa	al Tasks			Ma
		Summary I Inactive Summary	Manual	Summary	Externa	al Milestone	\diamond		
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D WBS	Task Name	Duration	Start	Finish	112	2020		2021
210 1.5.1.3	PJM Operations Checklist Complete	0 wks	Wed 10/18/23	Wed 10/18/23	HZ		H2_	F
211 1.5.1.4	PJM Market Checklist Complete	0 wks	Wed 10/18/23	Wed 10/18/23				
212 1.5.1.5	PJM Administrative Checklist Complete	0 wks	Wed 10/18/23	Wed 10/18/23				
213 1.5.1.6	PJM Systems Communications Checklist Complete	0 wks	Wed 10/18/23	Wed 10/18/23				
214 1.5.1.7	PV Park Mechanical Completion	0 days	Wed 10/4/23	Wed 10/4/23				
215 1.5.1.8	Substation Mechanical Completion	0 wks	Wed 10/18/23	Wed 10/18/23				
216 1.5.1.9	Complete Pre-Energization Engie Checklist	10 days	Thu 10/5/23	Wed 10/18/23				
217 1.5.1.10	Tax Equity MC Funding (Funding #1)	5 days	Thu 10/19/23	Wed 10/25/23				
218 1.5.1.11	Energize Project Substation	1 day	Thu 10/26/23	Thu 10/26/23				
219 1.5.1.12	Mechanical Completion (Backfeed) Milestone 2	0 wks	Tue 10/24/23	Tue 10/24/23				
220 1.5.1.13	Complete Pre-Synchronization Checklist (Owner)	2 days	Wed 10/25/23	Thu 10/26/23				
221 1.5.1.14	Final Hot Commissioning Start	0 days	Thu 10/26/23	Thu 10/26/23				
222 1.5.1.15	Review of Plant Controls	15 days	Fri 10/27/23	Thu 11/16/23				
223 1.5.1.16	Final Hot Commissioning Complete	0 days	Thu 11/16/23	Thu 11/16/23				
224 1.5.1.17	Fine Tune, Commission and Test All plant controllers	5 days	Fri 11/17/23	Thu 11/23/23				
225 1.5.1.18	Substation Completion (Plant Substantial Completion) COD Achieved	0 days	Thu 11/23/23	Thu 11/23/23				
226 1.5.2	PJM Activities	126 days	Thu 6/29/23	Thu 12/21/23				
227 1.5.2.1	Operations Checklist	3 mons	Thu 7/27/23	Wed 10/18/23				
228 1.5.2.2	Market Checklist	1 mon	Thu 9/21/23	Wed 10/18/23				
229 1.5.2.3	Administrative Checklist	4 mons	Thu 6/29/23	Wed 10/18/23				
230 1.5.2.4	Systems Communications Checklist	1 mon	Thu 9/21/23	Wed 10/18/23				
231 1.5.2.5	Training Checklist	4 wks	Fri 11/24/23	Thu 12/21/23				
232 1.5.3	Market Readiness SOW Complete	0 wks	Thu 12/21/23	Thu 12/21/23				
233 1.6	Project Complete	0 wks	Fri 12/29/23	Fri 12/29/23				
233 1.6	Project Complete	0 wks	Fri 12/29/23	Fri 12/29/23				

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	Summary	I	Inactive Summary	0	Manual Summary	· · · · · · ·	External Milestone	\$	
Date: Fri 6/25/21	Milestone	•	Inactive Milestone	\diamond	Manual Summary Rollup		External Tasks		Ma
Project: Horseshoe Bend_60MW	Split		Inactive Task		Duration-only		Finish-only	3	Prc
	Task		Project Summary		Manual Task		Start-only	C	De



<u>Request No 8:</u> Provide the distance from the substation to the five nearest sound receptors and the anticipated noise level measured in dBA.

<u>Response:</u> Please refer to the provided map, showing the locations of these neighboring residential homes and their respective distance from the substation. Please note the site design is not finalized, so these are the minimum distances that the project will be from noise receptors. The actual distances will vary based on the final site plan, which will be designed once the sourcing decisions are made and equipment chosen for the facility.

House	Approximate Distance (ft)	Anticipated Noise Level
		(dBa)
А	1,575	>15
В	2,100	>15
С	1,545	>15
D	1,665	>15
Mt Olive Baptist Church	1,900	>15



<u>Request No 9:</u> Provide the distance from the string inverters to the five nearest sound receptors and the anticipated noise level measured in dBA

<u>Response</u>: Please refer to the map provided here, showing the locations of the five closest nonparticipating residential homes to the project.

The distances in the table below assume the setbacks proposed in the Application. Please note the site design is not finalized, so these are the minimum distances that the project will be from noise receptors. The actual distances will vary based on the final site plan, which will be designed once the sourcing decisions are made and equipment chosen for the facility.

House	Approximate Distance (ft)	Anticipated Noise Level
		(dBa)
А	150	40
В	150	40
С	150	40
D	150	40
Ε	150	40





Mt Olive Creek Solar: Nearest Noise Receptors

Sano Rd



Residence A, 100ft from Potential Project Footprint Residence D, 50ft from Potential Project Footprint

Residence B, 170ft from Potential Project Footprint

Residence C, 115ft from Potential Project Footprint



Existing EKPC transmission line



Mt Olive Creek Solar Potential Project Footprint

Residential Buildings

Kentucky State Roadways

<u>Request No 10:</u> Provide the distance from the central inverters to the five nearest sound receptors and the anticipated noise level measured in dBA

<u>Response:</u> The distances in the table below assume the setbacks proposed in the Application. Please note the site design is not finalized, so these are the minimum distances that the project will be from noise receptors. The actual distances will vary based on the final site plan, which will be designed once the sourcing decisions are made and equipment chosen for the facility.

House	Approximate Distance (ft)	Anticipated Noise Level (dBa)
А	450	~43.75
В	450	~43.75
С	450	~43.75
D	450	~43.75
Е	450	~43.75

<u>Request No 11:</u> Provide the distance from the BESS Heating, Ventilation, and Air Conditioning Units to the five nearest sound receptors and the anticipated noise level measured in dBA.

<u>Response:</u> The distances in the table below assume the setbacks proposed in the Application. Please note the site design is not finalized, so these are the minimum distances that the project will be from noise receptors. The actual distances will vary based on the final site plan, which will be designed once the sourcing decisions are made and equipment chosen for the facility.

BESS Heating, Ventilation, and Air Conditioning (HVAC) Units to 5 nearest sound receptors (assuming 400ft setback from non-participating residences).

House	Approximate Distance (ft)	Anticipated Noise Level (dBa)
А	400	37.5
В	400	37.5
С	400	37.5
D	400	37.5
E	400	37.5

<u>Request No 12:</u> Provide the distance from the tracking motors to the five nearest sound receptors and the anticipated noise level measured in dBA

Response: See response to Request #9. String inverters and tracking motors will belocated in

substantially the same place.

<u>Request No 13</u>: Provide a description of any construction method that will suppress the noise generated during the pile-driving process (i.e., semi-tractor and canvas method; sound blankets on fencing surrounding the solar site; or any other comparable method) that Mt. Olive Creek plans to employ and the associated reduction in noise that each method produces.

<u>Response:</u> We reviewed this question with construction companies that work on solar projects, and the companies we talked with have not had this specific requirement for projects to date. Typically, if there has been a noise restriction, it has been to limit pile driving to specific hours during the day (for example, pile driving only between 7AM – 7PM).

Mt. Olive Creek is aware of testimony in a recent hearing in Case No. 2020-00280 involving Ashwood Solar I, indicating that at least one contractor has used either a semitractor-trailer truck with canvas over the trailer, or sound blankets draped over the perimeter fencing of the site. The witness in that case indicated that these methods were used when the project was at a much closer distance than what was proposed in that case. Our initial assessment of the first of these two potential technical solutions is that parking trucks at the perimeter of the site does not seem feasible at Flat Run because there are no roads that could carry a large truck located in the right places around the perimeter of the site. Additionally, the well-established installation companies we contacted had no experience using sound blankets and generally believed it to be an impractical approach to mitigating sound.

At this stage, we cannot estimate the reduction in noise that these methods provide, as we have no experience with these methods and neither do our construction contractors.

<u>Request No 14:</u> Provide any studies or guidelines that Mt. Olive Creek relied on to determine that noise levels from the construction and operation of the solar facility are insignificant contributors to the operational sound levels of the site.

<u>Response:</u> Please refer to Site Assessment Report, Attachment F. All studies and guidelines used as sources in the report are listed. Additionally, based on professional experience operating similar solar projects, noise levels from operating a solar facility are insignificant contributors to the operational sound levels of the site.

<u>Request No 15:</u> Refer to the Site Assessment Report, Attachment A, Preliminary Project Layout, which shows the property boundary extending beyond the border of the map. Provide a new map to accompany the Preliminary Project Layout that includes the T. Wethington Road area. Include the same layers and legend in this map.

Response: See Below.

adjusted within the Potential Project Footprint Area



Caroli 400 W Durhar Suite 5

Mt Olive Cr 60 MWAC

Drawing Legend	SSUE 6.28.21 5.14.21 5.04.21 4.29.21 9.23.20
Utility Easement	40 0000
––– Array Setbacks	e X
Vegetative Buffer	ECT ve Cre
Potential Project Footprint Area	PROJ Mt Oli
Parcel Boundary	
Preliminary Locations*	
Fence Boundary	BY
Access Roads	AWN
Array Area	ä 7
Construction Entrance	a
Inverter, Battery, and Transformer Equipment Areas	

02

<u>Request No 16:</u> Refer to Application, Attachment A, Context Map. Revise the map to coincide with the property boundary in the Preliminary Project Layout. Revise the 2,000-foot buffer and two-mile buffers accordingly and include the R.F. Tarter Wildlife Management Area.

<u>Response:</u> See below.

Mt Olive Creek Solar Context Map		
	Mt Olive Creek Solar Project Outline	
	Residential Neighborhoods (as defined in KRS 278.700(6))	
	Residential Buildings	
	East Kentucky Power Cooperative Transmission Line	
	Kentucky State Roadways	
	Involved Landowner Residences	
	A A F	
2 mile radius		
ounty		
School	Cumberland Pkwy	
	Cumberland Pixty	

<u>Request No 17:</u> Refer to Application, Attachment I, Economic Report. Explain in detail whether the absence of the northernmost property in the T. Wethington Road area has any effect on this report.

Response:

Request No 18:

a. Identify the number of property owners that have executed lease agreements with Mt Olive

Creek for the proposed solar facility site; and

b. Provide a copy of each lease agreement referenced above

Response: See attached

Request No 19: Refer to the questions propounded by Harvey Economics, which are attached as

an appendix to this information request, and provide responses to those questions.

Response: See Below

Responding Witness: Various
<u>Harvey Economics Request No I. A:</u> Both the Economic Report and the Noise and Traffic Study suggest a construction period of 8 to 12 months. Is that the most accurate and up to date assumption for the construction period? If yes, for the purposes of evaluating potential construction related impacts, HE will assume a 12-month construction timeframe to avoid under-stating impacts. Please confirm.

<u>Response:</u> That is still the most accurate assumption available. Please refer to draft construction schedule provided in response to Request No 7 for additional detail.

<u>Harvey Economics Request No I. B:</u> Please provide a detailed description of construction activities, including a construction timeline and schedule

Response: Please refer to Request No 7.

<u>Harvey Economics Request No I. C:</u> Will construction activities occur sequentially across the entire Project site, or will different activities take place at different times in different areas?

<u>Response</u>: This will depend on a variety of factors and may vary from one day to the next. The likely scenario is that multiple crews of the same trade as well as different trades will be working in different areas at the same time.

<u>Harvey Economics Request No I. D:</u> When will the peak activity period occur and how long will the peak period last?

Response: Peak activity will begin approximately 2 months after mobilization. The peak period

will last approximately 4 months.

Harvey Economics Request No I. E: Various places throughout the Application note an average

of 150 construction workers required to construct the Project.

- 1. Please confirm the average of 150 workers on-site at any one time.
- 2. How many construction workers will be on-site during the peak period?

Response:

- 1. Confirmed.
- 2. Approximately 200.

<u>Harvey Economics Request No I. F:</u> How many worker commuter vehicles will be on-site at the following times:

- 1. An average day?
- 2. During the peak period?
- 3. What is the assumption of workers per vehicle traveling to the project site?

Response:

- 1. Approximately 100.
- 2. Approximately 130.
- 3. 1-2.

Harvey Economics Request No I. G: Will construction activity take place:

- 1. On Saturdays?
- 2. On Sundays?
- 3. If construction is anticipated to occur on the weekend, what are the anticipated hours of activity on Saturdays and Sundays?

Response:

- 1. Yes.
- 2. Yes, if permitted.
- 3. Same hours as during the weekday, with restrictions if places of worship are located nearby.

<u>Harvey Economics Request No I H:</u> The Application states that construction work will occur between the hours of 7am and 9pm.

- 1. How often will construction work take place after 6pm?
- 2. What activities would occur during that time?

Response:

- 1. This will depend on the overall time to complete construction and how often crews will need to work late in order to make up for lost time or delays.
- 2. Any construction activities permitted.

<u>Harvey Economics Request No I I:</u> Are any special construction activities or personnel required to connect the Project to the existing transmission line, and if so, please describe.

<u>Response:</u> Project will install a substation with transformer, connecting to a newly built EKPC switchyard, which is connected to high-voltage transmission system. This work requires highly skilled workers, particularly for any high-voltage work.

Harvey Economics Request No II. A: How many solar panels will be installed on-site?

<u>Response:</u> This will depend on the wattage class of available solar modules. Total number is

expected to be 130-150,000 modules.

Responding Witness:

<u>Harvey Economics Request No II. B:</u> The Application states that "A fence meeting the National Electric Safety Code requirements, typically a six-foot fence with three strings of barbed wire at the top, will enclose the facility."

- 1. Will that fencing be located along the Project boundary line?
- 2. Will additional fencing be placed around the Substation and Interconnection Equipment area?
- 3. Will fencing provide a visual block or be transparent?

Response:

- 1. Yes.
- 2. Yes.
- 3. The fencing will be standard chain link fencing, so largely transparent.

<u>Harvey Economics Request No II. C:</u> The Application states that "A fence meeting the National Electric Safety Code requirements, typically a six-foot fence with three strings of barbed wire at the top, will enclose the facility."

- 1. Will any other security measures be in place during construction?
- 2. Will any other security measures be in place during operations?
- 3. Will Mt Olive Creek staff coordinate security with local law enforcement agencies?

Response:

- 1. Security guards will likely be employed.
- 2. The site will be camera monitored.
- 3. Mt Olive Creek would be happy to coordinate security with the local agencies.

Harvey Economics Request No II. D: Map Inconsistencies

- SAR Attachment A Preliminary Project Layout (map)--The Parcel Boundary line is unclear for the northeastern most portion of the property (east of Millerfield Road). Please revise the map to show the full Project boundary enclosed in the thick orange line.
- 2. The Project Outline included on the Mt Olive Solar Context Map (Attachment A of the Application) (incorrectly referred to as the Horseshoe Benjamin Lindermeierd Solar Project Outline) does not appear to include the entire Project site in the northeast corner. The outline on this map is not consistent with the Preliminary Project Layout Map (Attachment A of the SAR), the Tax Parcel Map included in the Property Value Impacts Report (Attachment B of the SAR), or the Boundary Survey (Attachment E of the SAR). Please explain the difference, or revise.

Response:

- 1. See response to request # 15.
- See response to request # 16. The proposed project footprint does not match the tax parcel map or the boundary survey as the project is leasing partial parcels and not always occupying full legal lots.

Harvey Economics Request No II. E: Map Inconsistencies

- 1. Will any construction staging areas be developed onsite within the Project boundary?
 - a. If not, please confirm that the following statement included in the Cumulative Environmental Assessment (attached to the Applicant's Motion for Deviation) is incorrect: "Approximately 10 to 15 acres of the Project site will be used as construction assembly areas for worker assembly, vehicle parking, and material storage during construction."
 - b. If yes:
 - i. Please identify the location(s) of the construction staging area(s)
 - ii. How many acres will each construction staging area be?
 - iii. iii. Will the construction staging areas be paved? Or gravel?
 - iv. Will worker parking also be located within the staging area(s)?
 - v. Will the staging area(s) have their own separate security fencing?
 - vi. Will the staging area(s) be removed and returned to their original conditions once construction is complete?
- 2. Nine individual construction entrances are located on the map. Are there certain entrances that would be considered the primary access points to the Project site during construction?
- 3. Will the nine access points identified as construction entrances also be used for access during operations?

Response:

1. Yes

- a. That is still correct and applicable. Staging, parking, assembly areas are often times in the same location.
- b.
- i. That will be determined by the future general contractor, their space needs, access points, and construction sequence.
- ii. That will be determined by the future general contractor, their space needs, access points, and construction sequence.
- iii. Gravel.
- iv. There will likely be multiple staging and parking areas in different project locations.
- v. Likely, no.
- vi. Most areas will be restored. A limited number of smaller areas might remain for maintenance vehicle parking.
- 2. Yes. A main entrance with office trailer will be identified by the future general contractor
- 3. Permanent project access will likely be limited to one access point per project section.

Harvey Economics Request No II. F: On-site buildings

- The Application states "There is likely to be no permanent project office building on site. If there is a permanent building on site, it will likely be a trailer or container to store operations and maintenance equipment and parts."
 - a. In contrast to the statement above, the Cumulative Environmental Assessment attached to the Applicant's Motion for Deviation states that "An operations and maintenance building will remain on site during the life of the Project". Please reconcile the permanent building plan.
 - b. If a permanent building will be constructed, what is the likely location of that structure on the Project site?
- 2. The Cumulative Environmental Assessment attached to the Applicant's Motion for Deviation states "Temporary construction trailers intended for material storage and office space will be parked onsite" If any temporary building facilities will be located onsite, please identify the location(s) of such facilities.

Response:

1.

- a. O&M buildings on solar projects are often times simply office or shipping containers. The decision whether on-site or off-site storage will be used, will be made at a later stage cloder to the project coming operational.
- b. That would have to be determined.
- 2. That would have to be determined.

<u>Harvey Economics Request No II. G</u>: Please confirm that the existing transmission line on the map is the Sewellton Jct – Webbs Crossroads 69kv transmission line, which will serve the facility and carry electricity generated by the Project.

Response: Confirmed.

<u>Harvey Economics Request No II. H:</u> Approximately how many miles of internal roadways will be developed within the Project site? Will internal roadways be gravel?

<u>Response:</u> Internal roads will be gravel. Project's intent is to minimize extent of roads while being able to access all project areas. Exact location and length will be defined during project design phase, estimated to happen around mid-2022.

<u>Harvey Economics Request No II. I:</u> Section 1 of the SAR (Description of Proposed Facility) lists a number of proposed setbacks from "the Potential Project Footprint". Does that mean minimum distances to the Project boundary line?

Response: That refers to project equipment.

Harvey Economics Request No II. J: Distance to structures

- 1. Please provide a detailed table showing the number of residential structures located within 300 foot intervals from the Project fence line, i.e. from 0 300 feet, from 300-600 feet, up to 2,100 2,400 feet.
- Please provide a detailed table showing the number of non-residential structures, by type of structure (ie church, school, commercial, barn, etc.) located within 300 foot intervals from the Project fence line, from 0 300 feet up to 2,100 2,400 feet.
- 3. Please provide a map indicating residences within 300 feet of the Project fence line and a table stating the distances (within 10 feet) of those residences to the fence line.
- Please provide a detailed table showing the number of residential structures located within 300 foot intervals from the nearest solar panels, from 0 -300 feet up to 2,100 2,400 feet.
- 5. Please provide a detailed table showing the number of non-residential structures, by type of structure (ie church, school, commercial, barn, etc.) located within 300 foot intervals from the nearest solar panels, from 0 300 feet up to 2,100 2,400 feet.
- 6. Please provide a map indicating residences within 300 feet of the nearest solar panels and a table stating the exact distances of those residences to the nearest panels.
- 7. What is the distance between the cemetery and the nearest solar panel?
- 8. What is the distance between the cemetery and the nearest inverter?

Response:

- 1-6. See responses to requests 8-12.
- 7. Minimum of 25 ft from boundary to cemetery.

8. Minimum of 25 feet from boundary of cemetery.

Responding Witness: Tyler Caron, Benjamin Lindermeier

<u>Harvey Economics Request No II. K:</u> Please confirm that there are 12 different parcels included in the Project site. Are there also 12 separate lease agreements with participating property owners? <u>Response:</u> The project controls parts or all of 13 parcels through 6 lease agreements with eleven (11) individuals (5 families) and 2 purchase-and-sale agreements with 4 individuals (2 families).

<u>Harvey Economics Request No II. L:</u> Will any existing structures on the Project site be demolished or removed in order to accommodate the Project?

Response: It is currently not anticipated that any existing useable structures will need to be

demolished. It is not unusual to encounter some need to clean up dilapidated barns or storage sheds.

Harvey Economics Request No III. A: What is the justification for requesting such a deviation, i.e.

loss of generation capacity, cost, etc.?

<u>Response:</u> See the Motion for Deviation.

Responding Witness: N/A

<u>Harvey Economics Request No III. B:</u> Could the solar panels and other structures be re-configured within the site boundaries to meet the setback requirements?

<u>Response:</u> See the Motion for Deviation.

Responding Witness: N/A

<u>Harvey Economics Request No IV. A:</u> What are the current property values of each property adjacent to the Project site?

Response: That information is not possessed by Mt Olive Solar LLC.

<u>Harvey Economics Request No IV. B:</u> Please provide property values of raw land or residential structure values per constructed square foot of developed property in Russell County in the vicinity of the Project site.

<u>Response:</u> That information is not possessed by Mt Olive Solar LLC.

<u>Harvey Economics Request No IV. C:</u> The Kirkland Report states that the Project will be constructed on a portion of a 526.02 acre assemblage. The data in the Boundary Survey (Attachment D of the SAR) indicates a total Project site acreage of about 560 acres. Please confirm the correct total acreage included in the Project site.

<u>Response</u>: The size of all parcels partially or fully controlled for construction of the project is 560ac,

<u>Harvey Economics Request No IV. D:</u> Please confirm that the solar panels and other infrastructure will cover 475 acres of the total Project site.

<u>Response:</u> The area contained in the project perimeter will be about 475 acres. Due to large interrow spacing between tracker rows, only a portion of this acreage will actually be covered. The exact covered acreage will depend on the final design. Considering row spacing, access roads, setbacks, and buffers, less than 30% of total project area are usually covered.

<u>Harvey Economics Request No IV. E:</u> Pages 4 and 5 of the Kirkland report provide information on parcels adjacent to the Project area.

- What is the source of that data? Please confirm that the data is consistent with that of the Russell County PVA.
- 2. We would like Mt Olive Creek Solar LLC to confirm the Kirkland report stated distances between residential homes on adjacent properties and the closest solar panels are consistent with those provided under II. J. requested above.
- 3. Please confirm that, for those parcels where the distance between the home and the nearest solar panel is stated as N / A, that the N / A designation is because there is no residential structure on that property.
- 4. One adjacent property is identified as Commercial. What commercial activities occur on that property?

Response:

Responding Witness:

<u>Harvey Economics Request No IV. F:</u> The matched pair analyses included on pages 100 - 108 of the Kirkland report note the degree of vegetative buffer associated with the properties adjacent to the solar facilities, with the buffers described as light, medium or heavy.

- 1. What are the definitions of light, medium or heavy buffers, in terms of amount of vegetation?
- 2. How was the level of buffering at each location measured or evaluated?
- 3. What portion of the designated level of buffer reflect the existing vegetation in the area vs. the solar company's mitigation plantings?
- 4. Was the characterization of the level of buffer (light, medium or heavy) for different projects completed consistently in such a way that a light buffer for one project is comparable to a light buffer of another project?
- 5. What are the main conclusions of the landscaping analyses provided on page 104 of the report?

Response:

Responding Witness:

Harvey Economics Request No V. A: Traffic: Construction Noise

- The Noise and Traffic Study suggests that US Route 127 will carry the bulk of all construction traffic. Please confirm that understanding.
 - a. Which direction will that project-related traffic predominately come from heading onto the Site from US Route 127?
 - b. Will any temporary stop lights be installed during construction to help control the flow of traffic along US Route 127 or other roads? If not, specifically what other traffic control measures will be taken and where?
 - c. Figure 6 of the Noise and Traffic Study describes daily construction vehicles on the various roads leading to the Project site. iAre these daily construction vehicle figures averages or maximums? Please indicate the highest number of construction vehicles that will travel each of these roads.
- 2. Will any residents experience issues accessing their residences during or after construction?
- Please provide an approximate percentage breakdown of where the construction workers will commute from each day, if possible.
- 4. Are all workers anticipated to commute from their homes daily, or will any temporary housing be developed on-site?
- 5. Please provide an approximate breakdown by point of origin for the traffic from other construction-related vehicles (i.e., component delivery vehicles, trailers, etc.).
- The Noise and Traffic Study describes the type of trucks and equipment by weight class that will access the site.

- a. The Study states that "a maximum of 15 trucks (Class 9) are anticipated to deliver components daily". Please provide a breakdown of the traffic volume by truck category on an average day.
- b. Please provide a breakdown of the traffic volume by truck category on a peak day.
- 7. With regards to the weight of the loads for the various deliveries to the site; please elaborate on the short-term impacts anticipated from Route 127 to KY Route 1545 or KY Route 76.
 - a. Are those roads classified for the weights of vehicles required by the Project?
 - b. The Application states that "Mt Olive Creek or its contractors will fix or pay for damage resulting from any vehicle transport to the project site, as may be required by the applicable transportation permits obtained from State and local road authorities" Does this mean Mt. Olive Creek will pay or fix any road damage if requested?
- 8. Section 3.2 of the Noise and Traffic Study states "There is no left turn lane at the KY Route 76 intersection, though there are full-width paved shoulders that can be used for throughtraffic to pass stopped left turning vehicles, which reduces potential conflicts from additional traffic".
 - a. We assume that this statement refers to the intersection of KY Route 76 and US Route 127. Is that correct?
 - b. Is the use of full-width paved shoulders for through-traffic to pass stopped leftturning vehicles a legal option?
 - c. Is this the safest option at that location? Please describe this solution in more detail.

- Have you met with the Russell County Road Department or the Kentucky Transportation Cabinet about traffic management at this or other intersections? If so, please describe the scope and resolution of those discussions.
- The Noise and Traffic Study suggests that traffic stoppages may occur on Sano Road, Miller-Short Road, Mt Olive Creek Road, and/or Huff Lane/T Wethington Road during construction.
 - a. How often would stoppages occur on each road?
 - b. How long would each stoppage period last?
 - c. What time of day would the stoppage occur?
 - d. What is the Company's plan for managing these stoppages?
- 11. Does Sano Road become a County Road east of the Junction with Sulphur Creek Road?
- 12. What are the traffic volumes along Sano Road through the Project site to Mt. Olive Creek Road?

Response:

- 1. Yes, that is what is anticipated, though ultimately the construction traffic will be determined by construction contracts once awarded.
 - a. We assume site traffic during construction will arrive and depart like existing traffic patterns, with the predominant movement coming to/from US 127 south of the Project. Russell Springs and the Cumberland Parkway interchange are reached along US to the south. Until site contracts are awarded and a workforce hired, we cannot specifically determine site trips.

b. The construction contractor is anticipated to conduct flagging operations to facilitate deliveries at construction entrances in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) Chapter 6E Flagger Control and applicable figures such as 6H-13 for a temporary stoppage and 6H-14 for a haul road intersection. Temporary stoppages may occur on narrower roads for oversized deliveries. Traffic control will be coordinated through the Encroachment Permit process. The contractor is expected to follow applicable MUTCD figures for work along or outside the shoulders, such as Figure 6H-1 and Figure 6H-3 which consist of Road Work and Shoulder Work advance temporary warning signs and channelizing devices.

Temporary traffic signals are generally not applicable for shorter-term temporary construction projects of this smaller size, since any temporary signal would have to meet signal warrants. Based on the 165 anticipated maximum peak daily construction vehicles throughout the project area (up to 110 peak hour trips for intersection movement), these increased traffic volumes during construction are not expected to satisfy traffic signal warrants within the roadway network. Site driveways are along lower volume roads so warrants would not be met at these entrances.

c. Figure 6 shows the typical daily maximums for construction trips of 15 trucks and 150 employees, which is noted in Section 3.2, "Combining employee and typical delivery vehicles, up to 165 maximum daily vehicles are anticipated servicing the Project during construction." Occasionally an additional Class 21 truck may be used for a delivery. With the nature of this and other similar projects, typical daily
maximum volumes usually occur for one third to one half of the construction schedule, with the other months lower. Upon award of the contract, the construction contractor will be required to obtain an Encroachment Permit.

- Construction is not anticipated to block access to residences. There will be a few shortduration traffic stoppages on some of the narrower roadways to facilitate delivery trucks, but these impacts should not disrupt access by more than 10 minutes per stoppage.
- Construction workers are anticipated to come from the general surrounding area, so commuting patterns are anticipated to be like existing traffic patterns shown in Figure 5. However, until construction contracts are awarded, and workers hired, we are unable to provide an exact breakdown.
- 4. No temporary housing is expected; all workers are anticipated to commute daily.
- 5. We anticipate construction-related vehicles will match typical truck traffic use on area roadways, specifically US 127 which is on the National Truck Network. Since construction contracts have not been awarded, we cannot specify the point of origin for traffic from other construction-related vehicles. To obtain Encroachment Permits, the construction contractor will coordinate specific construction delivery information as required for those permits.

6.

a. This will depend on the future contractors' detailed delivery and construction schedule and engineering details like extent of grading, length of roads, etc. which is unknown at this point. Class 9 trucks will only come to site during times of major material deliveries, such as modules and racking.

b. This will depend on the future contractors' detailed delivery and construction schedule and engineering details like extent of grading, length of roads, etc. which is unknown at this point. Class 9 trucks will only come to site during times of major material deliveries, such as modules and racking.

7.

- a. US 127 is the only route on the National Truck Network, and KY Route 1545 and KY Route 76 are within 15 miles of a National Truck Network route. Use of these roads will be evaluated by the contractor through the Encroachment Permit process with the preferred route selected and agreements for monitoring or repair made.
- b. The Project will reimburse or fix road damage they cause when specified and documented through the Encroachment Permitting process.

8.

- a. Yes, that is correct.
- b. The full-width paved shoulders are not striped for through traffic to legally pass stopped left-turning vehicles, though no physical barrier prevents traffic from doing so.
- c. US 127 is on the National Truck Route, so intersections along US 127 are typically suitable for truck use. The proposed project has an 8-to-12-month construction schedule; planned improvement projects are typically based on longterm transportation needs by the Kentucky Transportation Cabinet (KTC).

KTC conducted a safety improvement study along KY 76 including this intersection, Project 8-8302.00, which was completed in February of 2009. The study recommended widening KY 76 with paved shoulders but noted that should only a less extensive project be funded, making spot improvements along KY 76 including widening the US 127 and KY 76 intersection to permit wider turns and adding turn lanes. We are not aware of a construction schedule for that project. The Encroachment Permit process will determine whether trucks should turn left from US 127 to KY 1545 or KY 76, as either could be used to access the project, and as well as if any project-specific upgrades are needed.

9. The construction contractor will perform all necessary coordination through the Encroachment Permit process.

10.

- a. The construction contractor will determine what is required, as it will largely depend on what is required by their construction schedule.
- b. Generally, a stoppage would last just long enough for a larger construction vehicle to traverse a narrow road or turn in or out of a driveway. The construction contractor will determine what is required, as it will largely depend on what is required by their construction schedule. With construction driveways within a mile of wider roads suitable to carry two-way traffic, stoppages are not anticipated to last longer than 10 minutes.

- c. Work hours are anticipated to be from 7 AM to 9 PM, so stoppages would be limited to that time. However, as stoppages would only be to facilitate construction deliveries, most would be spread out during typical working hours.
- d. Stoppages will only be conducted where necessary and will be conducted as short of a duration as possible. The Company will work with all area residents and stakeholders to minimize impacts during construction. The construction contractor will follow applicable MUTCD figures for temporary stoppages.
- 11. Yes, Sano Road becomes a County Road (CR-1374) east of Sulphur Creek Road.
- 12. County Road traffic volumes are not available, though traffic volumes can be inferred based on the surrounding roads of similar typology. Sano Rd (KY 1729) west of the intersection has an ADT of 530. To the east of the intersection, Sano Road connects to Bottoms Road (KY 1545) which has an ADT of 259. South of the intersection, Sulphur Creek Rd has an ADT of 867. North of the intersection Abrell Road (the continuation of Sulphur Creek Road) an ADT of 253. Therefore, the county-owned Sano Road is anticipated to have similar traffic volumes as its surrounding roads in the 200 to 800 vehicles per day range.

Responding Witness: Sharon Dodson, Benjamin Lindermeier

<u>Harvey Economics Request No V. B:</u> Traffic: Operational Noise: Please provide data regarding the weight and frequency of each vehicle category that will be traveling to the site during operations.

Response:

Typically, daily operations will be traveling on the site with a 4x4 pickup truck that weighs about 6,000 lbs. When on site, the groundskeeper will be in a 4x4 pick up with trailer and tractor, which will weigh about 20,000 lbs. There would be occasional delivery of parts and components and cranes to assist with major component repairs. I would estimate the max weight for this mobile equipment at 40,000 lbs.

Responding Witness: Benjamin Lindermeier

Harvey Economics Request No VI. A: Dust: Construction Phase

- The Noise and Traffic Study states that fugitive dust emissions impacts are anticipated to be minor. What is the basis for that conclusion?
- 2. The Noise and Traffic Study states that "Water will be applied in accordance with industry best practices to control dust along site roadways and clean equipment and vehicles when needed". Please elaborate on industry best practices; what is the protocol or schedule regarding the frequency of spraying down dirt/ gravel roads with water?
- 3. Will there be odor impacts from diesel fumes or other sources from construction vehicles that will be noticeable by nearby residents?

Response:

- Contractor(s) will provide dust control measures via water trucks during site-disturbing activities and the site will be re-seeded once major site disturbance activities are complete.
- Approximately 4-6 water trucks will be on site during construction activities to wet down site roads as needed. Dedicated water trucks will also be present alongside major earthwork activities to provide dust suppression.
- 3. No.

<u>Harvey Economics Request No VI. B:</u> Dust: Operational Phase: Will the Project site be irrigated to promote vegetation growth and reduce potential erosion?

Response: Once the site is fully revegetated and ground-cover and vegetative buffer are fully

established, no further irrigation will take place

Harvey Economics Request No VII. A: Noise: Construction Phase:

- Does the "Proposed Distance to Residences" shown in Table 1 of the Noise and Traffic Study refer to the distance between residences A – P and the Project boundary, the nearest solar panel, or the nearest noise source?
- 2. The distances of the residences in Table 1 of the Noise and Traffic Study are expressed in "at least" numbers. To ensure we are looking at worst case impacts, we will assume that those are the exact distances. If not please provide more precise detail i.e., to the nearest 10 feet.
- 3. Please expand Table 2 of the Noise and Traffic Study to 2,500 feet or to the point at which noise is reduced to 55 dBA.
- 4. Please provide a table that combined the information presented in Tables 1 and 2 of the Noise and Traffic Study to show how many houses are at each distance and what level of noise they will experience during the construction period.
- 5. How many days, or weeks, will any single-family home experience periodic noises greater than 55 dBA throughout a day?
- Please provide the number of noise receptors, such as homes, that are within 300 feet of noise generation sources that produce 55 dBA or more during construction by distance and corresponding dBA.
 - a. How many days and what hours during the day will this level of noise be produced?
- Please provide the number of noise receptors, such as homes, that are between 300 feet and 600 feet of a noise generation s sources that produce 55 dBA or more during construction by distance and corresponding dBA.
 - a. How many days and what hours during the day will this level of noise be produced?

- 8. For construction activities occurring after 6pm, what are the average and peak noise levels during this period in those areas where active construction is occurring?
- 9. Has the Applicant met with or coordinated with the area church to ensure noise from construction activities will not interfere with any church activities?
- 10. The Noise and Traffic Study indicates that the local sound environment has significant ambient noise coming from State Routes 1729 and 76.
 - a. Would the noise from this traffic only affect noise receptors in the vicinity of those roads?
 - i. How many noise receptors are within 300 feet of either of those routes and the Project boundaries?
 - ii. How many noise receptors are within 600 feet of either of those routes and the Project boundaries?
 - b. What is the basis for the statement that the ambient noise around the Project is between 50 and 60 dBA?
 - c. Has an ambient noise study been completed? If so, please provide that study.
 - d. Is traffic on these routes the primary source of ambient noise?
 - e. Please provide the average daily and peak hourly traffic volume producing ambient noise within 600 feet of the Project boundary

Response:

 Distances to project boundary. Please see disclaimer above Table 1. Where the distance between project boundary and non-participating residence is smaller than 150ft, the project will still not install any equipment closer than 150ft.

- 2. N/A
- 3. See Table below.
- 4.

Anticipated Noise Produced by Very Loud Construction Equipment (pile driver)				
Distance from Source to Receptor (ft)	Sound Level Experienced at Receptor (dBA)			
25	106.6			
50	100.6			
100	94.5			
150	91.0			
200	88.5			
300	85.0			
500	80.6			
1,000	74.5			
1,500	71.0			
2,000	68.5			
3,000	65.0			
4,000	62.5			
5,000	60.6			
6,000	59.0			
7,000	57.6			
8,000	56.5			
9,000	55.5			

5. The duration of specific activities will depend on contractors' schedule against overall available construction time, site conditions, weather, and other factors. Focusing on pile driving as the most sound-emitting activity, the estimated duration for a project of this size is between one month and four months. As construction moves across the site,

activities would only occur in immediate proximity to individual receptors for a limited duration.

6. There are 16 homes, 2 landowner residences (Adamson and Benjamin Lindermeiernet), 1 commercial operation (a "scrap processing facility") and 1 church within 300ft of the potential project footprint.

Regarding distance and corresponding dBA, kindly refer to the previous question.

- a. Please see response to question 5 regarding number of days and noise level.Overall proposed construction hours are 7am to 9pm.
- Please see response to question 5 regarding number of days and noise level. Overall proposed construction hours are 7am to 9pm.
- 8. Please see response to question 5.
- 9. ?
- 10. :
- a. The roadway noise would have the greatest impact on those noise receptors closest to the roadways due to proximity. However, the noise from the traffic will generally have an impact on the entire surrounding area with that impact diminishing as distance increases from the roadway source
 - Number of receptors in vicinity of existing State Routes has not been analyzed.
 - Number of receptors in vicinity of existing State Routes has not been analyzed.
- b. This statement was made upon GAI's best engineering judgement and experience with sites like this one proposed and in conjunction with noise standards for

various project types. For example: Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare With an Adequate Margin of Safety (U.S. EPA office of Noise Abatement and Control , March 1974) states that < or = 55 dBA (Ldn) is the accepted level of sound that would create "Outdoor activity interference and annoyance" for "Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use." (pg 4). https://nepis.epa.gov/Exe/ZyPDF.cgi/2000L3LN.PDF?Dockey=2000L3LN.PDF

- c. An Ambient Noise Study was not conducted for this project location.
- d. Based on GAIs understanding of the project area, yes.
- e. The number of maximum daily vehicles is assumed to be around 165, with around 150 of them passenger cars that are parked during the day and around 15 construction deliveries. Average daily volumes will be less, as some weeks will have more labor-intensive operations than other weeks during the construction timeline. Exact scheduling will be determined by the construction contractor. Based on experience with other projects, maximum daily volumes will occur for one third to one half of the construction timeframe. The location of on-site parking and routing of construction deliveries will be managed by the site contractor.

Responding Witness: Susan Dodson, Benjamin Lindermeier

Harvey Economics Request No VII. B: Noise: Operational Phase:

- The Application states that either string inverters or central inverters will be used in the Project. In order to evaluate a worst-case noise scenario, we will assume central inverters will be used.
 - a. Please confirm that there will be 15 central inverters and 15 energy storage systems (co-located).
 - b. The Noise and Traffic Study refers to energy storage HVAC units or BESS HVAC units. Please confirm those are the same as the energy storage systems.
- 2. Please provide a table showing the number of residential structures located within 300-foot intervals from the nearest inverter, from 0 -300 feet up to 2,100 2,400 feet.
- 3. Please provide a detailed table showing the number of non-residential structures, by type of structure (ie church, school, commercial, barn, etc.) located within 300 foot intervals from the nearest inverter, from 0 -300 feet up to 2,100 2,400 feet.
- Please provide a detailed table showing the number of residential structures located within 300 foot intervals from the substation, from 0 300 feet up to 2,100 2,400 feet.
- 5. Please provide a detailed table showing the number of non-residential structures, by type of structure (ie church, school, commercial, barn, etc.) located within 300 foot intervals from the nearest substation, from 0 -300 feet up to 2,100 2,400 feet.
- 6. The Applicant indicates that the total sound level would only increase by approximately 1.5 dBA above ambient sound levels by the installation of a single source. Please indicate the total dBA including ambient noise for each of the project components at 200, 400, and 600 feet from noise receptors.

- 7. Is there a cumulative noise effect for the inverters, BESS HVAC units, substation, and tracking motors during daytime hours?
 - a. In yes, please provide the cumulative dBA produced by all noise sources (inverters, BESS HVAC units, motors, substation) from the substation and the distance to the nearest noise receptor.
 - b. Will all these components be completely silent at night?
- 8. How many tracking motors will be installed on-site?
- 9. Will the transformer be co-located with the sub-station?
 - a. If not, please indicate the dBA of the transformer at 200, 400 and 600 feet, respectively.

Response:

- 1. :
- a. Confirmed. However, the current plans reflect a preliminary design which will most likely change depending on various factors such as permitting, market availability, technology advancement, etc.
- b. Confirmed.
- 2. See responses to Requests #9 and 10.
- 3. See responses to Requests #9 and 10.
- 4. See response to Request #8.
- 5. See response to Request #8.

6. The 1.5 dBA contribution for a single source was for a Central Inverter at 300 ft. The following tables provide the contribution information for 200, 400, and 600 feet for all sources considered during the study.

Unit: Central Inverters								
Distance (ft)	Sound Level at Distance dBA	Ambient Sound Level dBA	Differential dBA	dBA Contribution (based on Table 7)	Total dBA			
200	51.1	50.0	1.1	2.5	53.6			
400	45.1	50.0	4.9	1.0	51.0			
600	41.6	50.0	8.4	0.5	50.5			
	Unit: BESS HVAC Units							
Distance (ft)	Sound Level at Distance dBA	Ambient Sound Level dBA	Differential dBA	dBA Contribution (based on Table 7)	Total dBA			
200	43.5	50.0	6.5	0.5	50.5			
400	37.5	50.0	12.5	0	50			
600	34	50.0	16	0.0	50.0			
	Unit: String Inverters							
Distance (ft)	Sound Level at Distance dBA	Ambient Sound Level dBA	Differential dBA	dBA Contribution (based on Table 7)	Total dBA			
200	37.5	50.0	12.5	0	50			
400	31.5	50.0	18.5	0	50			
600	28	50.0	22	0.0	50.0			
Unit: Substation								

Distance (ft)	Sound Level at Distance dBA	Ambient Sound Level dBA	Differential dBA	dBA Contribution (based on Table 7)	Total dBA
200	34.5	50.0	15.5	0	50
400	28.5	50.0	21.5	0	50
600	25	50.0	25	0.0	50.0

- 7. Yes. An additive effect from multiple sources would exist. These can be calculated at a distance and can be determined based on Tables 1, 3, 4, 5, and 6, as well as Table 7.
 - An exact location for each source on the project is to be determined. However,
 Central Inverters, Battery Storage Systems, and all other equipment will maintain
 the applicable setbacks in Section 2.3.
 - b. Panel tracker motors will not operate at night. BESS HVAC systems might operate at times. In case the system would provide voltage regulation support to the grid, there is a potential for inverters to operate during night-time hours.
- 8. This will depend on tracker manufacturer and installed capacity and cannot be determined at this point. The number will likely be between 1,250 and 1,700 trackers.
 - a. The term substation is meant to include the project transformer.
- 9. Yes, the transformer is part of the project substation.
 - a. N/A

Responding Witness: Susan Dodson, Benjamin Lindermeier

<u>Harvey Economics Request No VIII. A:</u> Visual: Construction Phase: Will any existing vegetation (trees, bushes, etc.) be removed from the Project site to accommodate construction activities or to make room for solar infrastructure? This would include existing vegetation located along the Project boundary line or within the overall Project site.

<u>Response:</u> On site vegetation would be largely removed unless in wetland buffers. Vegetation around the project boundary will be kept intact to the greatest extent possible.

Harvey Economics Request No VIII. B: Visual: Operational Phase:

- Has a visual impact assessment or other visual impact study been completed for the Mt Olive Creek Project? If so, please provide that study.
- 2. The revised Preliminary Project Layout map (included in the Applicant's supplemental filing) indicates proposed vegetative buffers in six specific locations. Please provide an explanation of why those specific locations were chosen.
 - a. What criteria were used to evaluate the need for a buffer in a certain location, or to determine that an additional buffer was unnecessary?
- 3. Are there existing visual buffers in place for all other residences/ properties surrounding the Project site or within sight of solar panels?
 - a. Will some residences in areas that do not include a proposed vegetative buffer be able to see the Project?
- 4. Will the proposed vegetative buffers be located outside the Project fencing?
- 5. The solar panels are described as 15 feet in height and the mature shrubs are anticipated to be 15 feet in height. Did you consider any elevational factors (i.e. valleys and hills) when evaluating visual impacts and the need for buffers?
- 6. The Application states that evergreen shrubs will grow to a mature height of 15 feet. How many years will it take for the shrubs to reach that height?
- 7. Will any other forms of visual barrier be implemented between the time of shrub planting and the time that those shrubs will reach mature height?
- 8. Will the same evergreen shrubs be used as the vegetative buffer in all locations?
- Please describe the plan for maintaining the shrubs and replacing dead shrubs throughout the operational period.

- 10. We are aware of the Surrounding Area Images photos provided in Attachment D to the SAR, which includes two computer generated images of views with panels, fencing and vegetative buffers at different locations.
 - a. In the first computer generated image (panels, fencing and buffers superimposed on Photo 2), it appears that panels in that location (as seen on the righthand side of the photo) would be visible to drivers and others on T. Wethington Rd. Is that correct?
 - b. In the second computer generated image (panels, fencing and buffers superimposed on Photo 9), it appears that existing vegetation will be removed from the area. Is that correct? The panels in that location appear to be quite visible from Sano Road.
 - c. Have you generated any additional computer-generated images portraying the solar panels, six-foot fence, and newly planted shrubs after construction is complete? If yes, please provide them.
- 11. Has a glare study been completed to evaluate the potential for any types of glare at any locations surrounding the Project site? If yes, please provide a copy of that study.
- 12. Will the Project use anti-glare panels?
- 13. The SAR states that "The Project will also be visible from Millerfield Road (HWY 76), which is classified as a rural minor collector. Millerfield Road (HWY 76) is a more frequently traveled road, and therefore the Project has proposed to fully buffer the view from Millerfield Road (HWY 76) with vegetative buffering to obscure the view of the facility." Will that buffering eliminate the risk of glare immediately or how long will it take to buffer the Project facilities from Millerfield Road?

- 14. Will there be any glare affecting drivers on other roads surrounding the Project site, including Sano Road, W Sulphur Creek Road, or Mt Olive Creek Road, as the panels rotate over the course of the day during different times of the year?
- 15. Will any residences surrounding the Project site experience glare as the panels rotate over the course of the day during different times of the year?
- 16. Will the Company ensure that there are no glare impacts resulting from Project operations? If glare occurs, how will glare be mitigated?

Response:

- Visual renderings were provided in Attachment D of the SAR, on pages 9 and 10. No further formal visual assessment has been performed.
- Locations for plantings of additional vegetative buffering have been determined based on existing vegetation and proximity to existing structures. Existing vegetation deemed additional plantings redundant in most locations.
 - a. See above.
- 3. Extensive existing vegetation surrounds large portions of the project.
 - a. Potentially, yes.
- 4. Yes.
- 5. Yes, topography was considered.
- 6. The expectation is 3-5 years.
- 7. No.
- 8. Environmental consultants will identify a mix of well-suited plants. On previous projects the following plants were used amongst others: Nellie Stevens Holly, Wax Myrtle,

Emerald Green Arborvitae, Chindo Viburnum. The project will confirm that the selected plants are suitable for Kentucky.

 Engie will have groundskeeper on staff to manage the vegetation management process. The site will have a vegetation management and wildfire management procedure.

10. :

- a. Correct.
- b. That is not correct. The existing vegetation visible in the underlying photo #9
 would be kept intact. The rendering focused on height of panels and fence but did
 not correctly depict the existing buffer which would not be removed.
- c. No.
- 11. No glare study has been produced. This is usually only a requirement in direct proximity to airports. Glare has proven not to be a significant issue for similar solar projects.
- 12. Yes. The goal of a solar panel is to absorb as much sunshine as possible. Any reflected sunrays would mean a loss to the system.
- 13. The main intent of vegetative buffering is not the elimination of glare, although it will reduce reflection if it were to occur. In addition to anti-glare panels and vegetation, Millerfield Road is a N-S road, just like the panel rows. Hence, drivers on this road would never directly face the panels.

14. No.

15. No.

- 16. Installation of non-glare panels will minimize occurrence of glare. In order to generate as much electricity as possible, the goal for every panel is to absorb as much light as possible. Glare would constitute a loss to the system's efficiency.
 - a. In addition to maintaining existing vegetation around the site, planting of

vegetative screening would shield from glare if it occurred.

Harvey Economics Request No IX. A: We are aware of the following attachments to the Application: Proof of Notice of Application (Attachment B), Public Involvement Activities (Attachment E), and Public Meeting Documentation (Attachment 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:

Responding Witness:

Harvey Economics Request No IX. B: 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:

Responding Witness:

<u>Harvey Economics Request No IX. C:</u> Are full transcripts available for the public meetings? We request any written or oral comments offered by the public or government agencies

Response: Recordings and chat logs exist for both public meetings. Those are large files and will

be provided separately.

<u>Harvey Economics Request No IX. D:</u> Do you know how many individuals attended the public meetings?

Response: The first public meeting had 4 attendees that were not affiliated with the project and the

second public meeting had none.

<u>Harvey Economics Request No IX. E:</u> Have issues or concerns been brought up from the public or others regarding the small cemetery located just north of Sano Road on the west side of the Project?

<u>Response:</u> See response to HE Request IX. B.

<u>Harvey Economics Request No IX. F:</u> Is there, or will there be, a plan in place to coordinate with local landowners or others in case of complaints or other issues that arise during the course of construction or operations?

<u>Response:</u> Yes. Mt Olive Creek Solar will have multiple layers of project and construction managers, and health and safety personnel. Contact information will be made publicly available on site. We will further create a website and a social media site with contact information for concerned residents to reach out.

<u>Harvey Economics Request No X. A:</u> Section 6 of the SAR (Mitigation Measures) lists other permits which Mt Olive Creek 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.

<u>Response</u>: Project is in an early development stage and has not submitted any permit applications to these agencies.

<u>Harvey Economics Request No XI. A:</u> The Economic Report notes an anticipated investment of "approximately \$90 - \$120 million."

- How much money is likely to be spent on purchases of materials, supplies, equipment or other items in Russell County in support of facility construction?
 - a. How much sales or use tax revenue would be generated for Russell County due to construction activity?
- 2. How much money is likely to be spent on purchases of materials, supplies, equipment or other items outside of Russell County, but within the Commonwealth of Kentucky in support of facility construction?
 - a. How much sales or use tax revenue would be generated due to construction activity?
- 3. What will be the direct and total estimated construction-related economic impact (output) including labor costs from the Project.
 - a. For Russell County?
 - b. For the Commonwealth?

Response:

 The IMPLAN model I constructed has detailed estimates of local spending, as well as sales by local businesses. These detailed estimates, across 500 industries, are the basis for predictions of the spinoff impacts of the construction project. Table 2 (provided in response to Request # 4) provides estimates for the top thirty impacted industries, ranked by their total impacts. The column labeled Indirect provides estimates of the interindustry linkages to construction, i.e., the local supply chain. The column labeled Induced

measures the impact of rounds of re-spending of new payroll in the County, i.e., the household impacts. Hence, one sees the top two entries – spending on homes and at hospitals – are related to households. The total impact is the sum of the indirect and induced impacts.

- a. There is no <u>local</u> sales tax allowed in Kentucky. The construction project will generate some Kentucky state sales tax, from purchases of materials in the state. The project will also generate some fuel taxes for the Kentucky Road Fund. And the construction payroll will result in a one-time increase in Kentucky individual income and sales taxes paid by households. These may or may not be considered "net new" tax revenues, depending upon the who purchases the electricity generated by the solar farm.
- 2. To answer this question, I constructed a state-level model, and used it to simulate the statewide effects of the construction project, and then compared that to the County-level results. By subtracting the Russell County results from the statewide results, we can reveal which industries are likely to be impacted most outside the County. Table 3 provides the result for the top 30 industries.

3. Table 3

Top 30 Industries Affected in Kentucky but Outside of Russell County		
Other real estate		
Architectural, engineering, and related services		
Owner-occupied dwellings		
Offices of physicians	\$302,471	
Wholesale - Other durable goods merchant wholesalers	\$287,369	
Employment services	\$279,479	
Insurance carriers, except direct life	\$271,879	
Truck transportation	\$218,666	
Management of companies and enterprises	\$199,618	
Commercial and industrial machinery and equipment rental and leasing	\$194,041	
Hospitals	\$167,850	
Wholesale - Other nondurable goods merchant wholesalers	\$142,632	
Petroleum refineries	\$138,322	
Full-service restaurants	\$136,397	
Other local government enterprises	\$134,920	
Wireless telecommunications carriers (except satellite)	\$118,593	
Wholesale - Household appliances and electrical and electronic goods	\$116,309	
Stone mining and quarrying	\$112,333	
Insurance agencies, brokerages, and related activities	\$111,831	
Wholesale - Petroleum and petroleum products	\$106,228	
Retail - General merchandise stores	\$105,412	
Religious organizations	\$97,225	
Legal services	\$96,683	
Monetary authorities and depository credit intermediation	\$94,930	
Accounting, tax preparation, bookkeeping, and payroll services	\$85,878	
Warehousing and storage	\$81,823	
Wholesale - Professional and commercial equipment and supplies	\$80,919	
Wholesale - Drugs and druggists' sundries	\$79,630	
Limited-service restaurants	\$78,575	
Data processing, hosting, and related services	\$74,497	

Source: IMPLAN models of Russell County and the State of Kentucky, using 2019 economic data; simulation of 150 jobs in Sector 52, "Construction of new power and communication structures".

However, as suggested in the answer to the last question, this discussion requires a

technical caveat. I have purposely not treated the solar farm project as 'new' economic

activity to the Commonwealth. This is because it is unclear whether the power generated from the solar facility will be sold to customers outside the state or whether it is simply a substitute for power already being provided to Kentucky customers by electricity companies in the state. If the electricity will be sold to current customers of a state-based utility, then the project is a substitute, and one should weigh the positive economic impacts of the solar farm against the negative economic impacts on incumBenjamin Lindermeiert electricity providers in the state. The net result could be positive, neutral, or negative. By limiting the geographic scope to Russell County, I can avoid the displacement effect because clearly the solar farm and economic activity will be new to Russell County.

- a. I do not have enough information to answer this. The state of Kentucky will receive some sales and use tax as the construction company purchases materials locally. To estimate the tax amount, I would need some details on purchasing requirements for the solar farm, as well as some way to determine the taxing jurisdiction of the purchase.
- 3. See Tables 2, 3, and related discussion.

Responding Witness: Paul Coomes

<u>Harvey Economics Request No XI. B:</u> Assuming an average of 150 construction workers, what approximate percentage of those construction workers will come from Russell County (local hires)?

<u>Response:</u> The project will hire as much staff locally as possible, depending on availability of suitable workforce. Functions that can be trained on the job are usually hired locally while it is often necessary to bring in more specialized trades or project oversight functions.

<u>Harvey Economics Request No XI. C:</u> The report states that the Project will require approximately 2 permanent positions for on-going O&M of the facility.

- 1. What is the expected annual salary level for those positions?
- 2. Should we assume those positions will be held by Russell County residents?

Response:

- 1. Based on the absence of large solar projects in Kentucky, I do not have enough information to make an estimate of average pay for the permanent positions.
- 2. That would be preferred if qualified candidates are available.

Responding Witness: Benjamin Lindermeierjamin Lindermeier

<u>Harvey Economics Request No XI. D:</u> How much money will be spent on the purchase of materials / supplies in the local area (Russell County) each year during the operational phase?

1. What types of items would be purchased locally?

<u>Response</u>: The amount of money spent and the types of items purchased locally each year will depend somewhat on the availability of desired materials and supplies in the local area. For instance, some supplies will be purchased from local hardware stores, but the amount of supplies purchased will depend heavily on the price and variety of items offered for sale in nearby hardware stores.

Responding Witness: Benjamin Lindermeierjamin Lindermeier
<u>Harvey Economics Request No XI. E:</u> The Economic Report lists the jurisdictions in Russell County that collect property taxes and the applicable 2020 tax rates.

- 1. How much PILOT revenue will go to each jurisdiction during years 1-20?
- 2. How much PILOT revenue will go to each jurisdiction during years 21-40?

Response:

1. The Fiscal Court of Russell County, Kentucky adopted a resolution on April 12, 2021, agreeing to undertake to issue Industrial Revenue Bonds with a 40-year term with respect to the Project. The bonds will be issued near the commencement of construction of the project. As part of this bond issuance, the County and the Company will enter into a Payment in Lieu of Taxes Agreement ("PILOT Agreement") that will also have a 40-year term. Pursuant to the terms of the PILOT Agreement, the Company will agree to pay \$1,000 per installed MWac of the project for the first 20 years after the commencement of the PILOT Agreement. The Company intends to construct 60 MWac of solar panels, which will result in a \$60,000 payment each year that will be allocated among the Ambulance District, the County, the Extension District, the Hospital District, the Library District, the Public Health Taxing District, the School District and the Soil Conservation District. The allocation will be made pro rata based on each districts respective tax rate. If the allocation to the School District results in the School District receiving an amount less than the amount of property taxes it would have received from the Company if the bonds had not been issued, the Company will make an additional payment to the School District in the amount of such shortfall.

 During second 20 years after commencement of the PILOT Agreement, the payment structure and allocation will be the same as described above except that the amount will be based on \$350 per installed MWac of the project.

<u>Harvey Economics Request No XI. F:</u> How much PILOT revenues will go to the Commonwealth during years 1-20?

<u>Response:</u> The PILOT Agreement is executed among the Company and the local taxing districts. No State governmental agency will be a party to that agreement, which is customary for such agreements, and the PILOT Agreement will not require the Company to make any payment directly to State government. The project will be subject to state level property taxes in the same manner as any other business.

Harvey Economics Request No XI. G: How much PILOT revenues will go to the Commonwealth during years 21-40?

<u>Response:</u> The PILOT Agreement is executed among the Company and the local taxing districts. No State governmental agency will be a party to that agreement, which is customary for such agreements, and the PILOT Agreement will not require the Company to make any payment directly to State government. The project will be subject to state level property taxes in the same manner as any other business.

Harvey Economics Request No XII. A: Please confirm that the expected life of the Project is approximately 40 years.

<u>Response:</u> This is the minimum expectation.

<u>Harvey Economics Request No XII. B:</u> Section 6 of the SAR (Mitigation Measures) states the following: "Mt Olive Creek, its successors or assigns, shall decommission the entire site if the Project ceases producing electricity for a period of more than twelve (12) months. Decommissioning shall involve the removal of all solar panels, racking, and equipment including concrete pads and trenched electrical wiring. Fencing and internal access roads shall also be removed, unless the landowner states in writing that they prefer fencing and internal roads to remain in place."

- Please provide a description of decommissioning plan, including what will happen to the facilities/ structures on site.
- 2. Will the Project site be returned to pre-existing conditions?
- 3. What commitments regarding land restoration are included in the landowner lease agreements?
- 4. Will you agree to remove all facilities above and below ground, except those requested to remain by the landowners?
- 5. Will you agree to a decommissioning bond?

Response:

- 1. See attached decommissioning plan.
- 2. Substantially, yes, with the exception of changes in grade that may be necessary for erosion and sediment control measures.
- 3. See Section 8 of the lease agreements.
- 4. Yes. See decommissioning plan for detail.
- 5. Yes. See decommissioning plan for detail.