Exhibit H

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

In the Matter of:

ELECTRONIC APPLICATION OF HUMMINGBIRD ENERGY LLC FOR A CERTIFICATE OF CONSTRUCTION FOR AN APPROXIMATELY 200 MEGAWATT MERCHANT ELECTRIC SOLAR GENERATING FACILITY AND NONREGULATED ELECTRIC TRANSMISSION LINE IN FLEMING COUNTY, KENTUCKY PURSUANT TO KRS 278.700 AND 807 KAR 5:110	))))))))))	Case No. 2022-00272

Site Assessment Report (SAR)

Hummingbird Energy LLC (the "Applicant" or "Hummingbird"), a wholly owned subsidiary of Recurrent Energy, LLC ("Recurrent"), files this Site Assessment Report (SAR) as specified in KRS 278.708 contemporaneously with its application requesting from the Kentucky State Board on Electric Generation and Transmission Siting (the "Siting Board") a Certificate of Construction for an approximately 200 megawatt (MW) Alternating Current (AC) photovoltaic (PV) solar energy conversion facility pursuant to KRS 278.704.

As part of the SAR, the Applicant submits herewith SAR Exhibits A–G. The facts on which the SAR are based are contained in the concurrently filed SAR Exhibits and other information and the statements further made by Hummingbird as follows:

I. Description of Proposed Project Site

1. Pursuant to KRS 278.708(3)(a), the proposed Hummingbird solar electrical generation facility and nonregulated transmission line (the "Project") is situated on approximately 2,352 acres

located near Mt. Carmel, Kentucky, in Fleming County (SAR Exhibit A). The site consists mainly of 38 parcels secured from 35 landowners pursuant to real estate agreements with each landowner. The parcels and those surrounding parcels have generally experienced row crop agriculture, pastureland, and residential use. The proposed project is a 200 MW solar facility capable of providing enough clean, renewable electricity to power approximately 40,000 Kentucky homes. Photovoltaic (PV) solar modules are used to convert sunlight into direct current (DC) electricity which is then converted to alternating current (AC) electricity through inverters. Transformers step up the AC electricity to a higher voltage so that it can connect to the regional transmission grid.

2. Project components will include a PV solar array field, which consists of modules mounted on metal structures anchored to the ground with pilings. Panels will move to track the sun over the course of the day. Other Project components include: an onsite substation, a DC collection system of underground cabling and combiner boxes, and power conversion stations (PCS) with inverters, transformers, and emergency backup power to convert DC to AC. An underground and/or overhead collection system will be used to convey electricity from the solar array field to the substation. An operation and maintenance (O&M) area for the Project will also be installed and could include, as necessary, an O&M building, parking area, and other associated facilities such as above-ground water storage tanks, security gate, signage, and flagpoles. In addition, the Project will also include an onsite transmission line, fiber optic cable for communications via underground or on overhead lines, a meteorological station mounted on a concrete foundation, interior access ways, and a facility perimeter road. During construction, the Project will include a temporary construction mobilization and laydown area for construction trailers, construction workforce parking, above ground water and fuel tanks, materials receiving, and materials storage.

3. Approximately 11,602 linear feet of private access roads will be utilized within the facility

and will be constructed of all-weather gravel. Roads will not exceed 16 feet (4.9 meters) in width, except for turning radii, which will not exceed 50 feet (15.2 meters) in radius. All entrances and driveways will comply with applicable design requirements for safe access and egress. The Project solar arrays will be secured with approximately 402,362 linear feet of perimeter fence and will consist of six-foot chain link fence with three strand barbed wire. Fixed lighting at the perimeter will be limited to gates and the substation area and will be motion-activated to minimize light spillage. The Project will utilize construction methods that minimize large-scale grading and removal of native soil. Clearing and grubbing will occur only where necessary. Minimal grading may be required to level rough or undulating areas of the site and to prepare soils for concrete foundations for substation equipment and inverters. Access roads will also be grubbed, graded, and compacted. The site cut and fill will be appropriately balanced, with no anticipation of import/export necessary.

4. The PV solar arrays, consisting of modules in individual rows placed on a racking structure, will be supported by steel piles driven into the soil. Piles typically are spaced approximately 25 feet apart, and the maximum height of the PV arrays will not exceed 15 feet. The spacing between array rows is estimated to be approximately eight to 15 feet. Modules will be oriented in rows running from north to south utilizing a single-axis tracking system. The racking system will be supported by steel posts installed with a combination of pile-driving machines and augers. The center height of the racking structures will be approximately four feet (1.2 meters) to 6.8 feet (2.1 meters) above the ground. The modules will be connected using DC cables that can either be buried in a trench or attached to the racking system. The DC cables gather at the end of racking systems to combiner boxes which are connected to cables routing to an inverter.

5. Approximately 53 inverters will be installed throughout the Project to convert the DC

power from the 1,500-volt DC collection system to AC power, which will then be transmitted to a Project substation via the 34.5-kilovolt (kV) collection system. The AC collection system will include underground and/or overhead segments. Underground segments of the AC collection system will be buried a minimum of three feet (0.9 meters) below grade; and overhead portions will not exceed a maximum height of 45 feet (13.7 meters) above grade. The AC collection system will be comprised of medium voltage (MV) cable that will transfer electricity to the Project substation. Approximately 410,500 linear feet of collection system cables would be installed throughout the Project. Collection cables are congregated into common trenches and run adjacent to one another. All electrical inverters and the transformer will be placed on concrete foundations or steel skids.

6. The Project will require one substation that will include one 230-mega volt ampere (MVA) transformer equipment, control building foundation, an oil containment area, and a battery storage component with storage capacity of up to 200MW. Concrete pads will be constructed as foundations for substation equipment, and the remaining area will be graveled. Concrete for foundations will be brought on-site from an external batching plant. The substation area will serve as the general parking area for permanent employees and contain all necessary equipment to step up incoming MV electricity to the high voltage electricity necessary to interconnect into the existing 138KV Goddard-Plumsville transmission line owned and operated by the East Kentucky Power Cooperative (EKPC). The substation gen-tie line will be no more than 500 feet (152.4 meters) in length, will be located entirely within the project footprint, and will be constructed by the Applicant. EKPC will be responsible for any additional transmission equipment located within the switchyard for the Project. It is anticipated that the gen-tie poles and substation components will not exceed 85 feet (25.9 meters) above grade.

7. Pursuant to KRS 278.708(3)(a)(1), a detailed description of the surrounding land uses is identified in the Property Value Impact Study conducted by Kirkland Appraisals, LLC, and attached as SAR Exhibit B. A summary of the surrounding land use is contained in the chart below:

	Acreage	**Parcels**
Residential	4.64%	46.71%
Agricultural	37.40%	25.00%
Agri/Res	57.94%	27.63%
Cemetery	0.02%	0.66%

8. Pursuant to KRS 278.708(3)(a)(2), SAR Exhibit C contains the legal description of the proposed site.

9. Pursuant to KRS 278.708(3)(a)(3), the proposed facility layout is included in SAR Exhibit A. The layout shows the proposed access to the site. A security fence meeting National Electric Safety Code (NESC) requirements will consist of a six -foot chain link fence with three strings of barbed wire at the top, to secure the facility.

10. Pursuant to KRS 278.708(3)(a)(4), the proposed locations of all Project infrastructure (buildings, transmission lines, and other structures) are included in the Preliminary Site Layout in SAR Exhibit A.

11. Pursuant to KRS 278.708(3)(a)(5), proposed access points are shown in SAR Exhibit A. There are no adjacent railways that could be used for construction or operational activities related to the Project.

12. Pursuant to KRS 278.708(3)(a)(6), there are two Goddard-Plumville 138-kV transmission lines bisecting the central portion of the Project, connecting to the proposed switchyard to be constructed and located in the central portion of the Project. The EKPC 138-kV line runs northwest to southeast through the central portion of the Project. The proposed switchyard and transmission lines are owned by EKPC. The location of the switchyard and transmission lines are shown in SAR

Exhibit A. Currently, it is not anticipated that the Project will need to receive external utility services during typical plant operation.

13. Pursuant to KRS 278.708(3)(a)(7), Fleming County has not enacted any zoning ordinances or setback requirements for the location of the Project and, therefore, no setbacks by such a planning commission exist. The Applicant will request a deviation from the setback requirements provided at KRS 278.704(2) by filing a Motion to Deviate pursuant to KRS 278.704(4), and thus the Project will comply with the relevant setback requirements provided at KRS 278.704.

14. Pursuant to KRS 278.708(3)(a)(8), a noise assessment was completed for the Project in September 2022 (SAR Exhibit D). The noise assessment evaluated existing noise as well as proposed noise from construction and operation of the facility. Minimal intermittent noise related to the panel tracking system and the noise of the inverters is expected. Existing noise on the Project site consists of noises typically produced by agricultural activities. These noises include tractors, trucks, and all-terrain vehicles. Existing rural wildlife noises contribute to the existing noise conditions including birds, frogs, and insects. Construction of the facility will result in increased traffic noise temporarily, mainly between sunrise and sunset and will be of limited duration at any given location within the Project. The noisiest portion of construction will be from the use of pile drivers, which would intermittently and temporarily produce approximately 64.8-69.8 dBA at the nearest receptor. Construction levels without pile driving onsite are approximately 73.8 dBA at the sound level of a dishwasher. Construction noise and activities would travel intermittently throughout the site and are not anticipated to be performed near any sensitive receptor for more than a few weeks.

15. All site visits, outside of emergency maintenance, will occur during daylight hours. Operational noise is expected to be intermittent from panel tracking, and constant from inverters

during daylight hours. The increase in noise is negligible due to the distance between the panels/inverters and the nearest noise-sensitive receptors. Maximum sound levels from the tracking system can be expected to be the levels of a refrigerator hum at the nearest receptor. During average daytime operation, the inverters will be similar in noise level (~48 dBA max) to a quiet library at the nearest receptor. At the remaining nearest receptors, no elevated and prolonged noise levels above background levels are expected either during operation of the Project. At night, all inverters are inactive, and noise is restricted to the substation.

II. Compatibility with Scenic Surroundings

16. Pursuant to KRS 278.708(3)(b), a Property Value Impact Study was completed for the Project by Kirkland Appraisals, LLC, in March 2022 (SAR Exhibit B). Please refer to Sections IX-XIII from SAR Exhibit B which address appropriate setbacks, topography, impacts during construction, scope of research, and compatibility in detail.

17. An excerpt from Section XIII, page 127 reads as follows:

> "[L]arger solar farms using fixed or tracking panels are a passive use of the land that is in keeping with a rural/residential area. As shown below, solar farms are comparable to larger greenhouses. This is not surprising given that a greenhouse is essentially another method for collecting passive solar energy. The greenhouse use is well received in residential/rural areas and has a similar visual impact as a solar farm. General rolling terrain with some distant solar panel views show no impact on adjoining property value. Solar facilities using panels of 15 feet in height have a similar visual impact as large greenhouse. Further, ample vegetative screening will be implemented to mitigate any visual impacts of the Facility. The solar panels are all less than 15 feet high, which means that the visual impact of the solar panels will be similar in height to a typical greenhouse and lower than a single story residential dwelling. Were the subject property developed with single family housing, that development would have a much greater visual impact on the surrounding area given that a two-story home with attic could be three to four times as high as these proposed panels."

III. Property Value Impacts

18. Pursuant to KRS 278.708(3)(c), SAR Exhibit B provides the Property Value Impact Study,

which was prepared by Kirkland Appraisals, LLC to assess the potential property value impacts to owners adjacent to the proposed facility. The conclusion of the report, Section XIV on page 129, reads as follows:

> "The matched pair analysis shows no negative impact in home values due to abutting or adjoining a solar farm as well as no impact to abutting or adjacent vacant residential or agricultural land. The proposed setbacks are further than those measured showing no impact for similar price ranges of homes and for areas with similar demographics to the subject area. The criteria that typically correlates with downward adjustments on property values such as noise, odor, and traffic all support a finding of no impact on property value.
>
> Very similar solar farms in very similar areas have been found by hundreds of towns and counties not to have a substantial injury to abutting or adjoining properties, and many of those findings of no impact have been upheld by appellate courts. Similar solar farms have been approved adjoining agricultural uses, schools, churches, and residential developments.
>
> I have found no difference in the mix of adjoining uses or proximity to adjoining homes based on the size of a solar farm and I have found no significant difference in the matched pair data adjoining larger solar farms versus smaller solar farms. The data in the Southeast is consistent with the larger set of data that I have nationally, as is the more specific data located in and around Kentucky.
>
> Based on the data and analysis in this report, it is my professional opinion that the solar farm proposed at the subject property will have no negative impact on the value of adjoining or abutting property. I note that some of the positive implications of a solar farm that have been expressed by people living next to solar farms include protection from future development of residential developments or other more intrusive uses, reduced dust, odor and chemicals from former farming operations, protection from light pollution at night, it's quiet, and there is no traffic."

IV. Anticipated Noise Levels at Property Boundary

19. Pursuant to KRS 278.708(3)(d), a Noise Assessment was prepared by Stantec Consulting and is included in SAR Exhibit D. Noise will occur temporarily and intermittently during the construction phase of the project due to increases in vehicular traffic, construction equipment and assembly of the solar facility components. This construction noise is expected to be of short duration at any given location within the Project site. The majority of the Project area is currently

used for crop production or cattle grazing, so the need for extensive tree removal and earthmoving to prepare the site is anticipated to be minor. Project construction will rely on equipment, such as dozers, graders, loaders, pile drivers, and trucks. The U.S. Department of Transportation, Federal Highway Administration (FHWA), publishes sound levels for typical construction equipment, which are shown in Table 2 below. Construction for the Project will consist of building roads, fencing, solar arrays, a substation, and associated electrical infrastructure (buried lines, etc.).

Table 2. Typical noise level for construction equipment at 50 feet.

Equipment	Typical Noise Level (dBA) 50 Feet from Sources
Air Compressor	80
Backhoe	80
Dozer	85
Generator	82
Pickup Truck	55
Pile Driver (Impact)	95-101
Pneumatic Tool	85
Pump	77
Spike Driver	77
Tie Cutter	84
Tie Handler	80
Tie Inserter	85
Tractor	84
Truck	84
Welder/Torch	73

20. The amount of noise generated during construction will vary depending on the types of activities occurring on a given day. Grading and earthmoving equipment, pile drivers, and other construction equipment typically emit sounds between 76 to 90 dBA at 50 feet (FHWA 1999, 2006). Sounds associated with these types of equipment will primarily occur during the initial site

set up – grading and access road construction, which is expected to last approximately 12 months. It is anticipated that pile driving for rack support foundations will create the loudest sound (98 and 101 dBA at 50 feet, FHWA 1999, 2009). Installation of each rack support foundation takes between 30 seconds to two minutes, depending on soil conditions; it is anticipated this activity will take up to six to eight months across the entire Project. Finally, the installation of the solar panels on the tracking racks will emit sound levels similar to general construction (75 to 85 dBA at 50 feet). Typically, a forklift is used to place individual panels on the tracking rack system. The sounds from all construction activities will dissipate with distance and will be audible at varying levels, depending on the locations of the equipment and receptors. Note that the Project is approximately six miles from North to South; thus, construction noise will not be isolated to a particular area for long periods of time (i.e., 30 days), except for prime access ways and laydown areas. These areas would experience noise from worker vehicles and delivery trucks. The noisiest portion of the construction includes the use of pile drivers to install the solar panel supports. Typical noise level within 50-feet of pile driving equipment is 84-101 dBA.

21. The noise model was also evaluated without the inputs of the pile driver since that is more typical of ongoing construction sound levels. The onsite sound levels for typical construction (without pile driving) are approximately 64.2 dBA, which is comparable to a dishwasher. Construction activities would move around the Project site and are not anticipated to be near any sensitive receptor for more than a few weeks.

22. Construction traffic will use the existing county roadway system to access the Project site and deliver construction materials and personnel. Based upon the sound levels published by FHWA, the sounds contributed by construction vehicles such as semi-trucks, light passenger cars, and trucks fall within acceptable ranges if the sounds do not occur between 11:00 p.m. and 6:00

a.m. Construction traffic sounds will be similar to common farm equipment and typical vehicles on local roadways. Sound generated during construction is expected to only occur during daylight hours and will be generated by heavy equipment, passenger cars and trucks, and tool use during assembly of the Project. Sound will be present in the Project area during construction; however, because of the size of the Project and the distance to the nearest receptors, construction will not contribute to a significant sound increase when compared to sound currently occurring onsite (i.e., the operation of farming equipment, crop harvesting, and roadway traffic) and baseline ambient sound levels. See SAR Exhibit D for the full report studying noise levels associated with the facility's construction at the Project boundary.

23. Potential noise-sensitive receptors were evaluated within a 1,000-foot buffer from the Project Boundary. Two churches and 136 residents were identified within this buffer and were assessed within the Noise Assessment. No schools, nursing homes, childcare centers, outdoor recreational facilities, medical centers, or other types of noise-sensitive receptors were observed within the noise assessment area. The nearest concentration of sensitive receptors is near the town of Mt. Carmel, along Carpenter and Mt. Carmel Roads along the central portion of the Project. The nearest receptor (R105) to a solar panel is approximately 260 feet; the nearest receptor to an inverter (R109) is approximately 624 feet away; and the nearest receptor to the Project substation (R91) is approximately 792 feet. Noise receptors and their distance to Project elements are discussed in SAR Exhibit D.

24. Forty-three residents are located within five areas that meet the definition of “residential neighborhood” under KRS 278.700(6). The Beech Springs Drive Neighborhood contains 16 receptors (R17 – R32). The nearest receptors in this neighborhood to a fence, panel, inverter, and substation are: R24 (305 feet); R24 (352 feet); R26 (1,252 feet); and R26 (11,525 feet),

respectively. The Maddox Road Neighborhood contains five receptors (R40 – R44). The nearest receptors in this neighborhood to a fence, panel, inverter, and substation are: R43 (309 feet); R40 (398 feet); R42 (1,054 feet); and R40 (8,581 feet), respectively. The Poplar Grove Neighborhood contains 11 receptors (R63 – R73). The nearest receptors in this neighborhood to a fence, panel, inverter, and substation are: R68 (317 feet); R68 (373 feet); R72 (1,011 feet); and R72 (11,317 feet), respectively. The Mount Carmel Neighborhood contains six receptors (R80 – R85). The nearest receptors in this neighborhood to a fence, panel, inverter, and substation are R81 (320 feet), R81 (394 feet), R80 (1,529 feet), and R85 (3,162 feet), respectively. The Foxport Road Neighborhood contains five receptors (R126 – R130). The nearest receptors in this neighborhood to a fence, panel, inverter, and substation are: R129 (243 feet); R129 (306 feet); R129 (1,287 feet); and R130 (9,555 feet), respectively.

25. There are three principal sound sources associated with normal daytime operation of the Project: solar panel array DC motors; the substation step-up transformer; and the electric current inverters, which are distributed through the panel arrays. Tracking systems involve the panels being driven by small, 24-volt brushless DC motors to track the arc of the sun to maximize each panel's potential for solar absorption. Panels would turn no more than five degrees every 15 minutes and would operate no more than one minute out of every 15-minute period during daylight hours. These tracking motors are a potential source of mechanical noise and are included in this assessment. Tracking motors will not be installed closer than 100 feet from the Project boundary. The sound typically produced by panel tracking motors (NexTracker or equivalent) is approximately 78 dBA. Comparing similar noise values and distances from the RCNM, at the nearest receptor (R105) the tracking system will be approximately 49.7 dBA as a worst-case maximum noise [Lmax (dBA)] which is similar to a refrigerator hum. The equivalent continuous

sound level [Leq (dBA)] from the tracking motors is 26.6 dBA, which is lower than a soft whisper.

26. The proposed substation and battery storage area covers approximately 14 acres and will be located on the central portion of the Project. Transformers associated with the project are expected to include an SBG-SMIT 3 phase 230 kVA transformer or similar. According to manufacturer specifications the loudest the transformer is expected to be is just over 60 dBA, measured 3.2 feet (one meter) from the source, or the level of a normal conversation. The nearest sensitive receptor (R91) is approximately 792 feet away, which equates to a sound level of 12.2 dBA, comparable to normal breathing.

27. Solar facilities generate minimal sound while in operation during daylight hours. Inverters are the main source of sound within a solar facility with typical noise levels averaging 75 dBA at the point source, comparable to a vacuum cleaner, and sound dissipates quickly from the point source. Due to proposed landscaping, setbacks, fence lines, and perimeter roads, noise-generating equipment will not be located in proximity to sensitive receptors or near the Project boundary. Approximately 53 inverters are expected to be installed across the Project site. Inverters installed onsite are expected to be SMA Energy PCS or General Electric (GE) LV5 PCS or similar. Because the GE LV5 PCS approximate sound levels are higher than the SMA Energy PCS sound levels, the GE LV5 PCS sound levels were relied upon for the assessment. The GE LV5 PCS ranges from 73.6 dBA at lowest cooling level to 91.3 dBA at highest cooling levels at 10 meters (32.8 feet) from the source, which is approximately 48 dBA at the nearest receptor (R109) and comparable to a refrigerator. The noise produced by the inverters can be characterized as a hum and during average operation is similar in noise level at the unit to a household air conditioner.

28. During site operation, intermittent noise related to the panel tracking system and the constant noise of the inverters is expected. The increase in noise is negligible due to the distance

between the panels/inverters and the nearest noise sensitive receptors. The nearest receptor to solar panels (R105) is approximately 260 feet from the panels, and the nearest receptor to an inverter (R109) is approximately 624 feet from an inverter. Maximum sound levels from the tracking system are anticipated to be 49.7 dBA at the nearest receptor (R105), equivalent to the levels of a refrigerator hum. Maximum sound level from the inverters is anticipated to be 48.0 dBA at the nearest receptor (R109). Sounds will be much quieter at most receptors, and it should be noted that the trackers and the inverters for the panels themselves will not operate at night when residential receptors are most sensitive.

29. According to manufacturer specifications the loudest the substation transformer is expected to be is just over 60 dBA at one meter from the source, or the level of a normal conversation. Since the nearest receptor (R91) is approximately 792 feet from the substation, transformers are not expected to add additional noise above background noise as the noise levels are barely audible (12.2 dBA). Site visits and maintenance activities including single vehicular traffic and mowing will be negligible as they are similar to the background agricultural noise characteristics. All site visits, outside of emergency maintenance, will occur during daylight hours.

30. Construction is not expected to remain in that area beyond a few weeks. At the nearest receptors, besides intermittent and infrequent pile driver activity, no elevated and prolonged noise levels above background levels are expected either during construction or operation of the Project site. There is no specific noise ordinance for unincorporated areas of Fleming County. Ultimately, noise from construction and operation will not cause disturbance or interfere with the enjoyment of dwelling houses in the vicinity of the Project.

V. Effect on Road, Railways and Fugitive Dust

31. Pursuant to KRS 278.708(3)(e), a traffic impact study was completed for the Project by

Stantec Consulting in July 2022 and is enclosed as SAR Exhibit E. The study evaluates the Project's impact on road and rail traffic and transportation.

32. Any transportation impacts will be temporary in nature as they will occur only during the construction phase of the Project. There are no railroads near the Project site. For purposes of conducting a conservative analysis, AM and PM peak hour traffic volumes on roadways were increased 50 percent, which is far greater than is anticipated for the Project's construction. All study segments are projected to operate at acceptable level of service (LOS) during construction for both peak hours; therefore, the Project is not expected to cause a significant impact with respect to traffic. Any other roadway segments used for Project-related travel will have acceptable operations. The Project would not substantially increase hazards nor alter any roadways or create any traffic conditions, thus, the Project would not result in significant impacts to transportation and emergency access.

33. Construction and associated land disturbance in connection with the proposed Project may temporarily contribute airborne materials. The Project will utilize Best Management Practices (BMPs) such as: dewatering procedures, stormwater runoff quality control measures, concrete waste management, watering for dust control, and construction of perimeter silt fences, as needed. Water for dust control and operations will be obtained from several potential sources, including an on or off-site groundwater well, or trucked from an offsite water purveyor. During construction, water will be used for dust suppression and other purposes. Additionally, open-bodied trucks transporting dirt will be covered during transport. The Project will comply with dust control regulations and all other applicable requirements to manage erosion, sedimentation, and stormwater runoff that will include submitting a stormwater pollution prevention plan and notice of intent for use of the Kentucky stormwater construction permit KYR10 to the Kentucky

Department for Environmental Protection, Division of Water for review and approval.

VI. Mitigation Measures

34. Pursuant to KRS 278.708(4), the Applicant has implemented or intends to implement the following mitigation measures for the Project:

35. The Project will be compatible with the existing land uses in the area. Construction methods will be implemented to minimize potential impacts on noise, dust, and traffic. Project design also incorporates avoidance and mitigation measures for sensitive resources such as wetlands, listed plant and animal species, and sensitive cultural resources. Vegetative screening will be implemented to mitigate any visual impacts of the Facility. Once the Project enters the operational phase, there will be no hazardous materials, pollutant emissions, or discernible sound outside of the facility.

36. *Viewscape*: Adjoining property values are not affected by the general rolling terrain with some distant solar panel views. The Project will utilize construction methods that minimize large-scale grading and removal of native soil. Clearing and grubbing will occur where necessary. The Applicant prepared a glare hazard analysis as part of a Visual Resource Assessment (VRA) to study the Project's potential impacts on the surrounding viewshed. The VRA is enclosed as Exhibit F. Glare is not predicted for 168 of the 172 structures, primarily residences, that were analyzed within proximity to the Project area. The remaining four structures are predicted to see green glare for up to 20-25 minutes per day, mid-day late November to early January. This glare should be considered negligible both due to severity (green category) and length of time predicted. Glint analyses were also conducted for drivers of vehicles at five feet above ground level (AGL) for cars and small trucks and nine feet for semi-truck viewing highs on 16 road segments adjacent to the PV panels. The results of the ForgeSolar analysis determined that glare from the Project is not predicted to occur for drivers of vehicles on 12 of 16 road segments analyzed adjacent to the

Project, and one of the four roads predicted to see glare appears to be outside the viewshed of the array. The remaining three roads predicted to see green glare in limited areas include Breeze Road, Foxport Road, and Maddox Road. Of the road segments included in the analysis, these roads are expected to see up to 150, 120 and two minutes per day of green glare, respectively. It should be noted that vehicles will quickly pass through any areas of green glare, which is the least likely to affect drivers. The analysis was completed at two viewing heights for roadways: five feet for cars and small trucks and nine feet for semi-trucks. Hummingbird Energy LLC will provide landscape buffers of double row evergreen trees spaced on 15-feet centers, between panel arrays and residential areas and along the public roadways where the arrays could be visible.

37. The Fleming Mason Airstrip has two available approach paths located five miles northwest of the Project area. The VRA's glint and glare analysis was performed for the approaches to determine any potential impacts to approaching pilots. The analysis indicates the Project is not predicted to impact pilots landing on two runways at Fleming Mason Airstrip. Project layout data, including panels and proposed substation, were submitted to the Federal Aviation Administration (FAA) for potential Project impacts upon the existing runway. The FAA conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, Part 77 and found that the project would have no effect on navigable airspace or air navigation. Final approval will be secured from the Kentucky Airport Zoning Commission prior to commencing construction.

38. *Vegetation*. The Project has been designed to minimize the amount of tree clearing required. The landscaping plan focuses on preservation of existing vegetation, augmented by supplemental vegetation to provide an effective screen, and enhance the biological habitat of the area. Pre-existing vegetation will remain preserved to the extent practical to retain visual consistency for adjacent properties and to achieve screening for adjacent properties and right of

way. Where pre-existing vegetation was removed or considered insufficient, supplemental landscaping will be installed as depicted in the landscape plan (SAR Exhibit G) and on the site plan. Supplemental screening will consist of two rows of a combination of locally adapted evergreen species on 15-foot centers to mitigate the Project's visual impact. Supplemental plantings, where necessary, will be a minimum of six feet at the time of planting, no more than 15 feet apart, and consisting of double rows. Proposed vegetation will be eight feet high at maturity.

39. The interior of the Project will be reseeded with a native seed mixture of grasses and interior vegetation will be maintained at 12 inches in height to prevent shading effects and protect from safety hazards.

40. *Impacts to cultural resources.* A search for sensitive site receptors (adjacent historic residences, churches, schools, cemeteries, hospitals, etc.) within 2,000 feet of the Project boundary was performed. Seven historic structures and two churches were identified within this search area and would not be affected due to vegetation screening as implemented in the landscape plan. The Project has been designed to avoid impacts to historic homes.

41. *Setbacks*. Buffers and setbacks are proposed along the boundaries of the Project and from sensitive resources such as homes, businesses, and wetlands or streams. Proposed setbacks and buffers are included on the Project layout (SAR Exhibit A).

42. *Stormwater*. The Project will comply with all applicable requirements to manage erosion, sedimentation, and stormwater runoff. This will include submitting a stormwater pollution prevention plan (SWPPP) and a notice of intent (NOI) for use of the Kentucky stormwater construction permit KYR10 to the KY department for Environmental Projection, Division of Water for review and approval. The SWPPP prepared by a qualified engineer or erosion control specialist and will be implemented before and during construction. The SWPPP will be designed to reduce potential impacts related to erosion and surface water quality during construction

activities and will include Project information and BMPs. BMPs will include dewatering procedures, stormwater runoff quality control measures, concrete waste management, stormwater detention, watering for dust control, and construction of perimeter silt fences, as needed.

43. *WOTUS*. The Project has been designed to avoid impacts to Waters of the U.S. (WOTUS) delineated on site. If impact to such features becomes necessary, then the impact will be minimized to the extent practicable, and the appropriate Clean Water Act (CWA) Section 404/401 permit will be obtained from the U.S. Army Corps of Engineers (USACE) and the Kentucky Energy & Environment Cabinet – Department for Environmental Protection – Division of Water ("Kentucky DOW").

44. The regulation and permitting of utility-scale solar impacts to stormwater and WOTUS will be addressed separately to this Siting Board application. Stormwater discharge is addressed in paragraph 42.

45. *Regulatory Agency.* Kentucky DOW: The Project will obtain a Kentucky Department of Environmental Protection Stormwater Construction General Permit from the Kentucky DOW in compliance with the CWA.

46. *Regulatory Agency.* USACE – Louisville District: The Project has been designed to avoid impacts to WOTUS. However, if impact becomes necessary then Hummingbird Solar will coordinate with the USACE – Louisville District and the appropriate CWA Section 404 permit will be obtained. If necessary, a CWA Section 401 Water Quality Certification will be obtained from the Kentucky DOW. As required, the applicant will obtain permit coverage for crossings from the USACE-Louisville District.

Dated this 30th day of September 2022.

Respectfully submitted,

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Exhibit H