1. Refer to the Application to Construct Merchant Electric Generating Facility, paragraph 2. State how much power is being contracted to the Kentucky Municipal Energy Association and explain what will be done with the remaining power generated by the proposed solar facility.

Response: 53.75MW of the 86MW is currently contracted with KYMEA. The remaining power of the project may be fully procured by KYMEA under their election rights in their contract on the 53.75MW. In the event KYMEA decides not to procure the remaining balance of the project's generating capacity, the project will either 1) find another buyer within the LGE-KU territory; 2) sell the remaining capacity via merchant hedge contracts settled in LGE-KU transmission system; or 3) wheel the remaining capacity into MISO and sell the electricity via hedge, merchant in the spot market or via a whole agreement similar to the one in place with KYMEA.

Witness: Joshua McNeely

2. Refer to the Application, Volume 1, Section 6, Public Notice Report, regarding the publication of customer notice incorrectly having two dates for the public information meeting (with the September 13, 2020, being the incorrect date and the September 17, 2020, being the correct date). State whether Ashwood Solar received any comments or feedback from the public regarding any confusion and inability of any members of the public being unable to attend the public meeting as a result of the customer notice.

Response: Ashwood Solar did not receive any comments or feedback from the public regarding any confusion and inability of any members of the public being unable to attend the public meeting as a result of the customer notice. As discussed in the Application, a corrected notice was displayed at the County Courthouse prior to the misstated date. In addition a subsequent notice was filed in the newspaper on September 16, 2020 to provide additional notice to the public of the meeting on September 17, 2020.

Witness: Joshua McNeely

3. Refer to the Application, Volume 1, Attachment J – Economic Report. Provide a copy of the full economic report provided to RWE Renewables Americas, LLC (RWE) by Stantec.

Response: Please see attached.

Witness: Josh Adams

Ashwood Solar Project – Economic Impact Report

Lyon County, Kentucky

February 22, 2021

Prepared for:

Ashwood Solar 1, LLC

Prepared by:

Stantec Consulting Services, Inc.

Table of Contents

1.0 INTRODUCTION

Ashwood Solar 1, LLC (Ashwood Solar) is developing the 86-megawatt alternating current (MW_{AC}) Ashwood Solar Facility in Lyon County, Kentucky (Project). Ashwood Solar 1, LLC is a wholly owned subsidiary of RWE Renewables America. Ashwood Solar proposes to develop, construct, and operate the Project over a 35-year period. The Project Area will encompass approximately 1,520 acres of land. Infrastructure to be constructed within the Project area includes crystalline solar panels, trackers, inverters, substation transformer and wiring.

Construction and operation of a solar energy facility has the potential to create both short- and long-term jobs and economic benefits through the purchase of materials and equipment, as well as employment of construction workers, will create demand for local business during the construction and operational phases of the Project, generating revenue within the regional economy. The objective of this assessment is to quantify the economic impacts from construction and operation of the Project as well as evaluate the socioeconomic impact of the Project on the local community.

2.0 METHODOLOGY

The Jobs and Economic Development Impact Model (JEDI) photovoltaics (PV) model (PV12.23.16), developed by U.S. Department of Energy, National Renewable Energy Laboratory (NREL), was utilized to quantify the number of jobs and overall economic impact from construction and operation of the Project.

JEDI-PV is an input-output model that uses state-specific data to predict employment, income, and economic output of solar facilities based on the anticipated wattage of a project. The model is based on the assumption that expenditures in an industry usually result in demands for goods and services in other industries. The direct expenditures from purchases like aggregate, fencing, etc. can create indirect impacts to the entire supply chain, such as employment created in supplemental industries such as those producing and transporting the solar modules from the manufacturers. Induced impacts result from the increase in construction workers and indirect employees' income and household spending in the region. An example of this induced impact is at local restaurants which need to hire additional staff to accommodate construction laborers spending their wages on meals.

The model parameters were updated to reflect recent publicly available labor costs from the U.S. Bureau of Labor Statistics, and industry-wide information on PV solar equipment, construction, and operational costs U.S. Energy Information Administration (2020). The Project has a nameplate capacity of 86 MWac, but for comparison to some cost metrics, a 60 MW direct current (MWdc) Project size was used.

3.0 ECONOMIC IMPACT

The purchase of materials and equipment, as well as employment of construction workers, will create demand for local business through the duration of construction, generating revenue within the regional economy. The JEDI model estimates that for the 86 MW facility, the Project will have an estimated construction cost of approximately $100 million. According to the JEDI-PV model and the Applicant's experience constructing solar energy projects, the Project will result in approximately 264 full-time jobs associated with construction of the Project, as measured by full time equivalent jobs (2,080 hrs per year). This includes onsite laborers and supporting construction management, engineering design, etc. jobs. An additional approximately 150 jobs will be supported by supply chain impacts. Supply chain jobs are the result of jobs created by equipment and material suppliers to the project, such as truck drivers hired by local suppliers to deliver materials to the site, or jobs added at the factories producing the modules or trackers. The approximately 90 jobs created through induced effects are attributed to spending in other industries from income related to the project. This could include jobs created at local restaurants, gas stations, or the grocery store as a result of income received from onsite or supply chain jobs spending money in the local community. Estimating the portion of projected employment that would come directly from the region is difficult. While many positions can be filled utilizing local labor, such as equipment operators, truck drivers, laborers, and electricians, there will also be some specialized skilled positions required for construction of the Project.

JEDI estimates that construction of the Project will have a total economic output to the community of more than $57 million with more than approximately $20 million of that output coming from onsite labor and services, approximately $20 million coming from supply chain impacts, and an additional approximately $13 million in induced impacts.

During the operational stage of the Project, JEDI estimates that direct expenses for operations and maintenance related labor and contracted services will be approximately $6.2 million annually. Three full time jobs are expected on-site while supply chain and induced job impacts will add an additional two jobs during the life of the Project as a result of contracted services, purchase of maintenance materials, etc. The total economic output to the community from operation of the Project is estimated at more than $575,000 annually for the life of the project.

The economic output and jobs should be considered estimates for the economic benefit as final labor, equipment, and site design will affect costs and cannot be determined until an engineering, procurement, and construction contractor (EPC) is selected for the project. Additionally, the economic benefits are not limited to Lyon County; it is assumed that labor, equipment, and materials will be sourced from Lyon County as well as the surrounding region and the exact distribution will be dependent on availability of construction industry labor at the time that the Project starts construction.

This economic output does not include the PILOT or property tax revenue that would be generated and paid to the county annually over the life of the Project.

4.0 REFERENCES

National Renewable Energy Laboratory (NREL). 2018. "U.S. Solar Photovoltaic System Cost Benchmark: Q1 2018." Accessed at: https://www.nrel.gov/docs/fy19osti/72399.pdf

U.S. Department of Labor, Bureau of Labor Statistics. 2020. Employer Costs for Employee Compensation – June 2020. Accessed at: https://www.bls.gov/news.release/pdf/ecec.pdf

U.S. Energy Information Administration (USEIA). 2020. Construction cost data for electric generators installed in 2018. Accessed at: https://www.eia.gov/electricity/generatorcosts/#bot

4. Refer to the Application, Volume 1, Attachment J – Economic Report. Explain how the JEDI model compares to the IMPLAN model regarding modeling the economic effects of solar facility construction and operation.

Response: Both JEDI and IMPLAN are input/output-based models developed to quantify the potential economic output resulting from construction and operation of solar energy projects based on interdependencies across many economic sectors. The model output for both captures the direct, indirect, and induced output from construction and operation of a facility to provide a comprehensive view of the economic output. JEDI was developed by the U.S. Department of Energy's National Renewables Laboratory (NREL) and reflects average costs and spending patterns developed from public data sources as well as long-term research and analysis of renewable resources. The JEDI model allows for more specific information to be included as it relates to solar energy facilities and allows for standardization by generation capacity among other solar projects. The multipliers and personal consumption patterns within JEDI incorporate the IMPLAN state data files but has the potential for more industry averaged, user defined inputs on project costs.

Witness: Josh Adams

5. Refer to the Application, Volume 1, Attachment J – Economic Report. Provide and describe the information given to Stantec by RWE.

Response: Stantec was provided all relevant project information and the nameplate capacity of the project, which is the key input into JEDI model.

Witness: Josh Adams

6. Refer to the Application, Volume 1, Attachment J – Economic Report.

a. Explain whether the JEDI model was calibrated to just Lyon County, or calibrated to include a wider area such as contiguous counties or beyond.

b. If just Lyon County, explain the rationale for limiting the geographic area, since labor and material could easily come from surrounding counties.

c. Explain how the JEDI model was calibrated to Lyon County.

Response:

a. The JEDI model was not calibrated to Lyon County and is intended to represent the output for a larger region.

b. As stated above, the analysis was not limited to Lyon County for the reasons specified, i.e. labor and materials could be sourced from other adjacent counties and the project equipment is likely to be sourced from other parts of the country.

c. The model was not calibrated to Lyon County as there are many unknowns as to the labor pool and sourcing of materials and equipment that can only be determined once the EPC contractor is selected.

Witness: Josh Adams

7. Refer to the Application, Volume 1, Attachment J – Economic Report. There are three job figures listed on page 2 of the report: 264 jobs, 150 jobs, and 90 jobs. Provide a more detailed explanation of these created jobs and how long these jobs are estimated to last.

Response: Based on the JEDI model, the Project will result in approximately 264 full-time jobs associated with construction of the Project, as measured by full time equivalent jobs (2,080 hrs per year). This includes onsite laborers and other supporting positions both on and off site; including construction management, engineering design, etc. jobs. An additional approximately 150 jobs will be supported by supply chain impacts. Supply chain jobs are the result of jobs created by equipment and material suppliers to the project, such as truck drivers hired by local suppliers to deliver materials to the site, or jobs added at the factories producing the modules or trackers. The approximately 90 jobs created through induced effects are attributed to spending in other industries from income related to the project. This could include jobs created at local restaurants, gas stations, or the grocery store as a result of income received from onsite or supply chain jobs spending money in the local community.

Witness: Josh Adams

8. Refer to the Application, Volume 1, Attachment J – Economic Report.

a. Explain the total PILOT or property tax revenue that would be generated and paid to the county.

b. Explain whether there are county level income tax revenues that would be generated by the project and collected by Lyon County or any other county.

Response:

a. Ashwood Solar has not yet finalized a PILOT. These must still be approved at the county and state level.

b. In analyzing the taxes which would apply for the project we are not aware of any county level income taxes imposed by Lyon County. We have researched the issue and found that Lyon County does not impose corporate income tax or license and occupational tax on businesses. Therefore, while the project will pay state-level corporate income tax, property and sales tax to various jurisdictions, our current expectation is that we would not pay any income taxes to Lyon County.

Witness: Joshua McNeely

9. Refer to the Application, Volume 1, Attachment J – Economic Report. Explain whether PILOT agreements are supportive of or create any jobs.

Response: PILOT payments do not create jobs; they provide a consistent revenue stream for schools, townships, and county entities. These entities can use this money for capital improvement, existing expenses, position funding, etc.

Witness: Josh Adams

10. Refer to the Application, Volume 2, Site Assessment Report, Exhibit E: Preliminary Site Layout, and Volume 3, Ashwood Solar Phase I Environmental Site Assessment, page 4.5. There is an interstate natural gas transmission pipeline that crosses the project site. See the pipeline on the web by following these instructions: Go to the National Pipeline Mapping System (https://www.npms.phmsa.dot.gov/). Click on "Use Public Map Viewer" and then choose Kentucky and Lyon County. Use the identify (blue i) button to click on the pipeline to find the following information: the owner is Texas Gas Transmission, the system name is the Main Line System with four pipelines [30-1], [26-1], [26-2], [36-1], and all are active as of 3/11/2020. The general contact is Thomas Porter, DOT Compliance Specialist, (710) 569-5730, Thomas.Porter@bwpipelines.com, 9 Greenway Plaza Suite 2800, Houston, TX 77046.

a. State whether Ashwood Solar has contacted Texas Gas Transmission regarding this pipeline. Describe all contacts with this company. State the width of the right of way and provide a copy of the easement for the four pipelines through the Ashwood site.

b. Exhibit E shows that the only potential point of access to part of the Ashwood site northwest of the pipelines is on Coleman Doles Road east of the pipelines. This would require an internal road to cross the pipelines. State whether the point of access will need to be revised to avoid crossing the pipeline on internal roads.

c. Provide any construction guidelines for the internal access road that will cross the pipeline. Also, state whether there is a vehicular weight or frequency limit either from Texas Gas Transmission or the U.S. Department of Transportation's Pipeline and Hazardous Materials Administration regarding building or using any gravel or internal roads that will cross the pipeline.

d. Revise the Preliminary Site Layout, if necessary, to show any changes regarding the Texas Gas Transmission pipelines that involve changes in the location of solar panels and points of access.

Response:

a. Ashwood Solar has had initial discussions with Texas Gas Transmission LLC regarding their easement on the project and has initiated a dialogue to begin the process of obtaining rights to cross their existing easement, primarily with medium voltage collection lines. Ashwood initially contacted the offices of Jamie Buskill Senior Vice President, CFO, Treasurer and Administrative Officer for BW Pipelines out of Owensboro, KY. Ashwood was then contacted by Amanda Isom, Land Representative for BW Pipelines, who instructed Ashwood that they would need to put in place an encroachment agreement with Texas Gas Transmission. It is the understanding of Ashwood that once our ALTA was complete and we had the known locations for crossing locations that Ashwood would need to formally begin the process at the regional level by contacting Mark Davidson and his secretary Jeanie Atherten out of the Calvert City, KY office. Based on a review of publicly available data, the easement is believed by Ashwood to be 250 feet in width, but since an ALTA survey has yet to be completed to determine accurate locations and width of the easement, this has yet to be fully confirmed. Ashwood has also not obtained a physical copy of the easement from BW Pipelines or its affiliate Texas Gas Transmission LLC.

b. Entrances shown to the project are provided as a representation. Further development of the project is needed to identify exact locations of the project entrances and also internal roads. Based on the initial conversations with Texas Gas Transmission, it is anticipated that an encroachment agreement and crossing agreements will be entered into prior to the start of

construction that will allow for the placement of internal roads that bisect the easement and allow for internal traffic within the project boundary. If the project is unable to obtain rights to have internal roads cross the easement, Ashwood will look to relocate the proposed entrance to ensure access for areas of the site northwest of the pipelines.

c. Engineering has not yet been completed for the Ashwood project, which will provide specific construction guidelines for internal roads. Ashwood Solar will ensure that the project will be engineered and designed in a manner that meets all vehicular weight, frequency limits, or other applicable crossing requirements of the pipeline company and also the U.S. Department of Transportation's Pipeline and Hazardous Materials Administration.

d. An ALTA survey has yet to be completed to determine accurate locations of all natural gas pipeline easements on the property. The access road will need to be revised or be made subject to the encroachment and crossing agreement, which will be entered into with the pipeline company. Ashwood Solar will work with the company to ensure that the project is engineered and designed in a manner that meets all vehicular weight, frequency limits, or other applicable crossing requirements of the U.S. Department of Transportation's Pipeline and Hazardous Materials Administration. Ashwood will revise the map if as a result of discussions described above, changes in the location of solar panels, points of access, or internal roads are required.

Witness: Joshua McNeely

11. Refer to the Application, Volume 2, Site Assessment Report, Exhibit E: Preliminary Site Layout, and Volume 3, Ashwood Solar Phase I Environmental Site Assessment, page 5.3. There are two natural gas distribution service areas that cut through the site. These can be seen on a map or downloaded as a GIS layer from the Kentucky Geography Network (https://kygeoportal.ky.gov/). Both the city of Kuttawa and Atmos Energy Corporation, which are natural gas distribution utilities, appear to have pipelines that traverse the Ashwood site to the Texas Gas Transmission pipelines, which is probably their source of natural gas. The natural gas pipeline referred to in Volume 3 probably belongs to the city of Kuttawa.

a. State whether Ashwood Solar has contacted the city of Kuttawa regarding their pipeline(s). Describe all contacts with this utility.

b. Describe how the location of the city of Kuttawa's pipeline(s) affect or do not affect the location of solar panels or internal roadways.

c. State whether Ashwood Solar has contacted Atmos Energy regarding their pipeline(s). Describe all contacts with this company.

d. Describe how the location of the Atmos Energy's pipeline(s) affect or do not affect the location of solar panels or internal roadways.

e. Revise the site map, if necessary, to show any changes for the gas distribution pipelines that involve changes in the location of solar panels, points of access, or internal roads.

Response:

a. No formal communications has been made to the City of Kuttawa because an ALTA survey has yet to be completed to determine accurate locations of all natural gas pipeline

easements on the property. Once an ALTA has been completed and the specific location of the City of Kuttawa's distribution pipelines has been confirmed, Ashwood will initiate communication to obtain any crossing or encroachment agreements required to construct the project.

b. The location of the pipelines may affect the location of solar panels and internal roads. An ALTA survey has yet to be completed to determine accurate locations of all natural gas pipeline easements on the property. Ashwood Solar will work with Kuttawa and Atmos and enter into an encroachment and crossing agreement to ensure that the project is engineered and designed in a manner that meets all vehicular weight, frequency limits, or other applicable requirements of the U.S. Department of Transportation's Pipeline and Hazardous Materials Administration.

c. No formal communications have been made to Atmos Energy since an ALTA survey has yet to be completed to determine accurate locations of all natural gas pipeline easements on the property. Once an ALTA has been completed and the specific location of the Atmos's distribution pipelines has been confirmed, Ashwood will initiate communication to formally obtain any crossing or encroachment agreements required to construct the project.

d. See response to Item 11(b) above.

e. Ashwood will revise the map, if as a result of discussions described above, changes in the location of solar panels, points of access, or internal roads are required..

Witness: Joshua McNeely

12. State where the entrances and exits to the construction site are expected to be located on KY-1943, KY-3169, Coleman-Doles Road, and US 641.

Response: Entrances shown to the project are provided as representations. Further development of the project is needed to identify exact location of project entrances. The locations currently depicted are based on existing entrances to the properties.

Witness: Joshua McNeely

13. Identify the signage or traffic signals that will be present near those entrances and exits.

Response: Ashwood Solar will comply with all signage and traffic lights required by the Kentucky Department of Transportation and any other governmental agencies.

Witness: Joshua McNeely

14. State how many worker commuter vehicles are expected to drive to the project site each day during construction both on average and during the peak.

Response: Ashwood Solar anticipates there will be 80-100 workers on average on site with 150 workers at peak on site.

Witness: Joshua McNeely

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

Response: It is not possible at this stage of project development to identify where the construction workers will commute from each day.

Witness: Joshua McNeely

16. State how many workers are expected to utilize ride-share to the construction site on a daily basis.

Response: It is not possible at this stage of project development to identify how many workers will utilize ride-share to the construction site.

Witness: Joshua McNeely

17. Identify the types of trucks and other equipment by weight class that are expected to access the site on a daily basis.

Response: Generally, trucks and equipment arriving on a daily basis at the Project site will weigh no more than 46 tons (including fully loaded concrete trucks, loaders, and equipment delivery trucks). If required for civil work, an oversized excavator or articulated dump truck might weigh as much as 90 tons. At this stage of the project, we do not know if the oversized equipment will be needed.

Witness: Joshua McNeely

18. Please provide a breakdown of the traffic volume by truck category above both on an average day and on a peak day.

Response: Delivery trucks Average: 10 per day for 6 months of construction. Peak: 20 per day for 1 month of construction.

Witness: Joshua McNeely

19. State the expected maximum weight of the largest vehicles (including any materials or equipment that the truck is hauling).

Response: The heaviest piece of equipment delivered to the Project site will be the substation transformer. This piece of equipment for a project of this size can weigh in the range of 70-80 tons, and the transportation vehicle for the transformer weighs an estimated 20 tons. An estimate of the total weight of the substation transformer and its delivery vehicle is therefore 100 tons. There will be one substation transformer delivery for the Project.

Witness: Joshua McNeely

20. Identify an approximate breakdown by point of origin of the construction truck traffic.

Response: It is not possible at this stage of project development to identify the point of origin of the construction truck traffic.

Witness: Joshua McNeely

21. Identify where the construction crew, supervisors, and others will park on site.

Response: It is anticipated that the construction crewmembers, supervisors, and others will park on-site in designated laydown yards which have not been determined at this time. Commuting construction workers will be encouraged to carpool to reduce parking needs. Offsite parking will be arranged nearby and a shuttle used if there is not enough space for parking onsite.

Witness: Joshua McNeely

22. Identify the type of roads that will be constructed on-site associated with the project. State whether there are there any plans for paving (or putting down gravel) for roads or whether there will be dirt roads.

Response: There are no plans for paving or graveling internal roads. The road design is expected to be compact native material but may temporarily substitute gravel roads when necessary to improve drivability during construction when absolutely necessary.

Witness: Joshua McNeely

23. State whether any studies have been done to indicate how much dust will be created during the construction process. Please characterize the level of dust impacts expected during construction.

Response: No studies have been or will be conducted to indicate how much dust will be created. Water would be used to reduce fugitive dust based on an as-needed basis. Should construction take place during very dry summer months so that dust may leave the site, a water truck would be deployed to spray down roads and construction areas. This would be continued until fugitive dust is sufficiently mitigated.

Witness: Joshua McNeely

24. The project area is in two electric service territories: Kenergy and Kentucky Utilities Company. State how you propose to construct and operate the proposed solar utility with any electric service in each territory. Discuss any need to have the electric service territory boundaries revised by the Public Service Commission.

Response: During the construction phase there is potential for power to be delivered from either utility. Depending on where the temporary construction laydown yard will be, the power will need to be delivered to that general area for a construction trailer. The construction trailer will be temporary and should be considered to be the same load as a standard small office space. During the operational phase distribution power may be needed from the local retail supplier for the project substation and Operations facility (storage shed or similar). The supplier used will be based on the territory boundary where the laydown yard and project substation will be located. Ashwood does not anticipate asking the chosen utility(ies) to file an electric territory boundary change with the PSC.

Witness: Joshua McNeely

25. Identify the number of property owners that has executed lease agreements with Ashwood Solar for the proposed solar facility site and provide a copy of each of those lease agreements.

Response: There are seven property owner entities that have executed lease agreements. A copy of the leases is being submitted along with a Petition for Confidential Treatment.

Witness: Joshua McNeely

26. Refer to the questions propounded by BBC Consulting, which are attached as an Appendix to this information request, and provide responses to those questions.

Response: See responses filed separately.