TETRA TECH

September 25, 2023

Brian K. Fatch, PE
Senior Engineer, Project Management
East Kentucky Power Cooperative
4775 Lexington Rd
Winchester, KY 40391

Re: *Solar Facility – Site Assessment Report*
Engineering Scope of Work and Fee Estimate
Fayette County, Kentucky

Dear Mr. Fatch,

Tetra Tech is pleased to submit this proposal for engineering services related to the preparation of a Site Assessment Report for the proposed Avon Solar Farm in Fayette County, KY.

Background

East Kentucky Power Cooperative (EKPC) proposes to construct a 40-megawatt alternating current solar energy facility in Fayette County, KY between Winchester Road and Interstate 64 (I-64). To construct the facility in accordance with KRS 278.216, EKPC must obtain a Site Compatibility Certificate from the Public Service Commission (PSC), which requires EKPC to file a Site Assessment Report (SAR) with the Kentucky State Board on Electric Generation and Transmission Siting as outlined in KRS 278.708.

Proposed Services

Tetra Tech will provide the following services in accordance with the statutory requirements outlined in KRS 278.708.

Task 1: Data Collection

Tetra Tech will coordinate with EKPC to collect general data required for the Site Assessment Report (SAR), including but not limited to:

- Recorded deed(s) and associated plat(s) of the property on which EKPC proposes to construction the facility.
- Land use of the proposed site location and surrounding properties
- Optimal access to the proposed site including use of roadways and railways
- Location of existing utilities, including electric, gas, water, and sanitary sewers that would potentially serve the facility
- Sightline photographs of the surrounding areas to document the scenic surroundings
- Local and state setback requirements
- Location of existing sources of noise, e.g., power substations, industrial activities, commercial farming facilities.

Task 2: Preliminary Site Design

Tetra Tech will develop a preliminary site plan showing the proposed location of the following:

- Legal site boundaries
- Project boundaries
- Applicable setbacks
- Facility entrances, access roads, and internal roads
- Solar array
- Substation and switchyard
- Transmission lines
- Fences
- Known wetland features
- Vegetative screening.

Tetra Tech will submit the preliminary site plan to EKPC for review and incorporate any recommendations or changes proposed by EKPC.

Task 3: Complete Site Assessment Report (SAR)

Tetra Tech will complete the SAR, which will include the following:

- A description of the proposed facility, including:
    - Surrounding land uses for residential, commercial, agricultural, and recreational purposes
    - The legal boundaries of the proposed site
    - Proposed access control to the site
    - The location of facility buildings, transmission lines, and other structures
    - Location and use of access ways, internal roads, and railways
    - Existing or proposed utilities to service the facility
    - Compliance with applicable setback requirements as provided under KRS 278.704(2), (3), (4), or (5); and 8.
- An evaluation of the compatibility of the facility with scenic surroundings
- Any mitigating measures to be implemented by EKPC to minimize or avoid adverse effects identified in the site assessment report. Mitigating measures will be discussed with input from EKPC personnel.

Property Value Study

As part of the SAR, Tetra Tech will contract with a Certified General Appraiser to evaluate the potential changes in property values and land use resulting from the siting, construction, and operation of the proposed facility for property owners adjacent to the facility. The appraiser will research the effects of other similar-sized solar facilities on surrounding property values in markets comparable to that of Fayette County. The appraiser will perform a Matched Pair Analysis to calculate statistical difference to determine whether, in their professional opinion, the proposed project will affect property values in the surrounding area.

The Property Value Study will be submitted electronically and include one round of consolidated comments from EKPC.

Acoustic Study

Tetra Tech will perform an acoustic modeling analysis to determine the peak and average noise levels produced by the proposed facility during operation and construction. The modeling software program will use manufacturer sound specifications for the equipment used to calculate noise impacts to the surrounding area.

Tetra Tech will produce a standalone Acoustic Assessment Report, which will summarize background information, acoustic modeling approach and results, and overall conclusions. The results of the acoustic modeling analyses will be tabulated at all noise sensitive receptors (NSRs) and presented in color-coded broadband dBA isopleths projected onto scaled aerial photographs or USGS topographical mapping. This information will be summarized in a draft technical report for the client's review and comment. The report will be finalized pending one round of comment and feedback from EKPC on the draft report.

Acoustic modeling cannot commence until the following data is provided by EKPC:

- **NSRs**: NSRs (i.e., residences, outdoor public facilities and areas, hospitals, schools, and other noise sensitive receptors) identified by name or address, unique number descriptor, and UTM coordinates.
- **Local Ordinances or other Noise Restrictions**: Based on Tetra Tech's preliminary review of local regulations, it does not appear that there are any numerical decibel limits directly applicable to the Project. EKPC will provide any additional information on local ordinances or anticipated Lease Agreements with or without numerical decibel limits that may be applicable to this Project, which may not be publicly available.
- **Construction:**
    - Proposed construction schedule including total length of time anticipated and daily schedule.
    - Narrative describing construction methods and sequences.
    - Listing of expected construction equipment/vehicles by phase to use in calculations including the expected number of units.
    - Sound specifications and/or sound pressure level data for all construction equipment, if available.
    - Any specialized equipment/activities (e.g., pile driving, blasting, etc.) and the location of these activities.
    - Location of any planned construction laydown areas including locations of pile driving, if known.
    - Any information on planned construction noise mitigation measures or best management practices that are typically employed will be incorporated into the analysis. Please note that the results of the Project acoustic analysis may lead to further noise mitigation recommendations beyond those typically employed.
- **Solar Facility**
    - Operational details pertaining to the solar facility (e.g., inverter operation hours/time of day).
    - Quantity, dimensions, MVA/NEMA rating, and sound power or sound pressure level in octave band frequencies and overall dBA sound levels at a fixed distance (if available) for the following solar facility equipment:
        - Step-up Transformers
        - Inverters
        - Substation Transformers
        - Battery Energy Storage
        - Tracking Motors

It is assumed that EKPC will provide the information listed above. Tetra Tech will not conduct field measurements to document ambient sound, nor consider cumulative acoustic assessments with adjacent energy facilities. Two iterations of acoustic modeling will be performed.

The Acoustic Assessment Report will be submitted electronically and include one round of consolidated comments from EKPC.

Traffic and Dust Study

Tetra Tech will evaluate the impact of the facility's operation on road and rail traffic to and within the facility, including anticipated levels of fugitive dust created by the traffic and any anticipated degradation of roads and lands in the vicinity of the facility.

To support this task, Tetra Tech will document the potential traffic increases associated with the Project and develop forecasts of trip generation associated with peak construction activity of the proposed Project based on anticipated construction operations. Tetra Tech will also determine the required sight distance at each proposed site driveway where they intersect the public roadway system based on Kentucky Transportation Cabinet (KYTC) and American Association of State Highway and Transportation Officials (AASHTO) standards and procedures (this proposal assumes up to 2 driveways). Tetra Tech will then prepare a brief technical memorandum for the project site documenting the findings. Tetra Tech will address one round of EKPC comments on the traffic assessment.

The traffic and dust study assumes that there is no existing traffic activity at the proposed site, and that there are no planned roadway improvements by others that would require substantial site access design or assisting regulatory agencies in redesigning off-site infrastructure.

The following are excluded from the traffic and dust study:

- Preparation of a detailed traffic impact and access study (i.e., crash analyses, intersection capacity analyses, traffic mitigation evaluation, etc.)
- Temporary construction management plans
- Pavement thickness testing
- Preparation of KYTC permit applications.

Tetra Tech will submit the Traffic and Dust Study electronically and include one round of consolidated comments from EKPC.

Assumptions

In addition to the assumptions listed previously in this proposal, the following assumptions were used for the development of the proposed fee:

- Estimated fees associated with the PSC application are not included in this proposal.
- Fees associated with appearance of Tetra Tech personnel at PSC or KSB hearings are not included in this proposal.
- It is anticipated that the project will commence immediately after receipt of purchase order (PO) from EKPC.
- Delivery of the draft SAR is anticipated within 60 days after receipt of all requested information from EKPC.
- Tetra Tech will organize and lead the following meetings:
    - Kick-off meeting with key EKPC and Tetra Tech personnel to discuss project scope and proposed schedule, as well as data/information needed from EKPC.
    - Progress meetings every two (2) weeks for the duration of the project; the frequency of which can be increased or decreased based on feedback from EKPC.

Proposed Fee

Tetra Tech's total estimated fee to complete this scope of services in accordance with the assumptions as presented herein is $63,500. This proposal is based upon the performance of the work on a Time and Materials (T&M), Not to Exceed (NTE) basis under the terms and conditions of our existing General Services Agreement (GSA) with EKPC (EKPC Procurement Contract No. 1087). This fee is conservative and reflects the number of unknowns about the project at this early stage. As the project progresses and more information is received from EKPC, actual costs may be lower than anticipated. Tetra Tech understands this work will proceed once a Purchase Order in accordance with the GSA is provided by EKPC.

We appreciate the opportunity to submit this proposal. Please call me at 859.223.8000 should you have any questions or comments regarding this proposal.

Sincerely,

Herbert R. Lemaster, P.E.
Senior Project Manager

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East Kentucky Power Cooperative
Fee Estimate for Site Assessment Report - Avon Solar Farm, Fayette Co, KY
Prepared by
Tetra Tech
9/25/2023

	Fee Estimate
Facility Description - Land Use	$1,500
Facility Description - Legal Boundaries	$3,860
Facility Description - Access	$1,580
Facility Description - Site Plan	$15,320
Facility Description - Utilities	$1,930
Facility Description - Setbacks	$3,050
Compatibility with Scenic Surroundings Study	$2,200
Acoustic Assessement Report	$15,100
Property Value Study	$7,780
Traffic and Dust Study	$8,480
Mitigation Measures	$2,700
Grand Total	**$63,500**