

# Westside Solar Array at the Kansas City International Airport (MCI)

Project Status Briefing

Date: 9/13/23

**Transportation, Infrastructure, and Operations Committee**

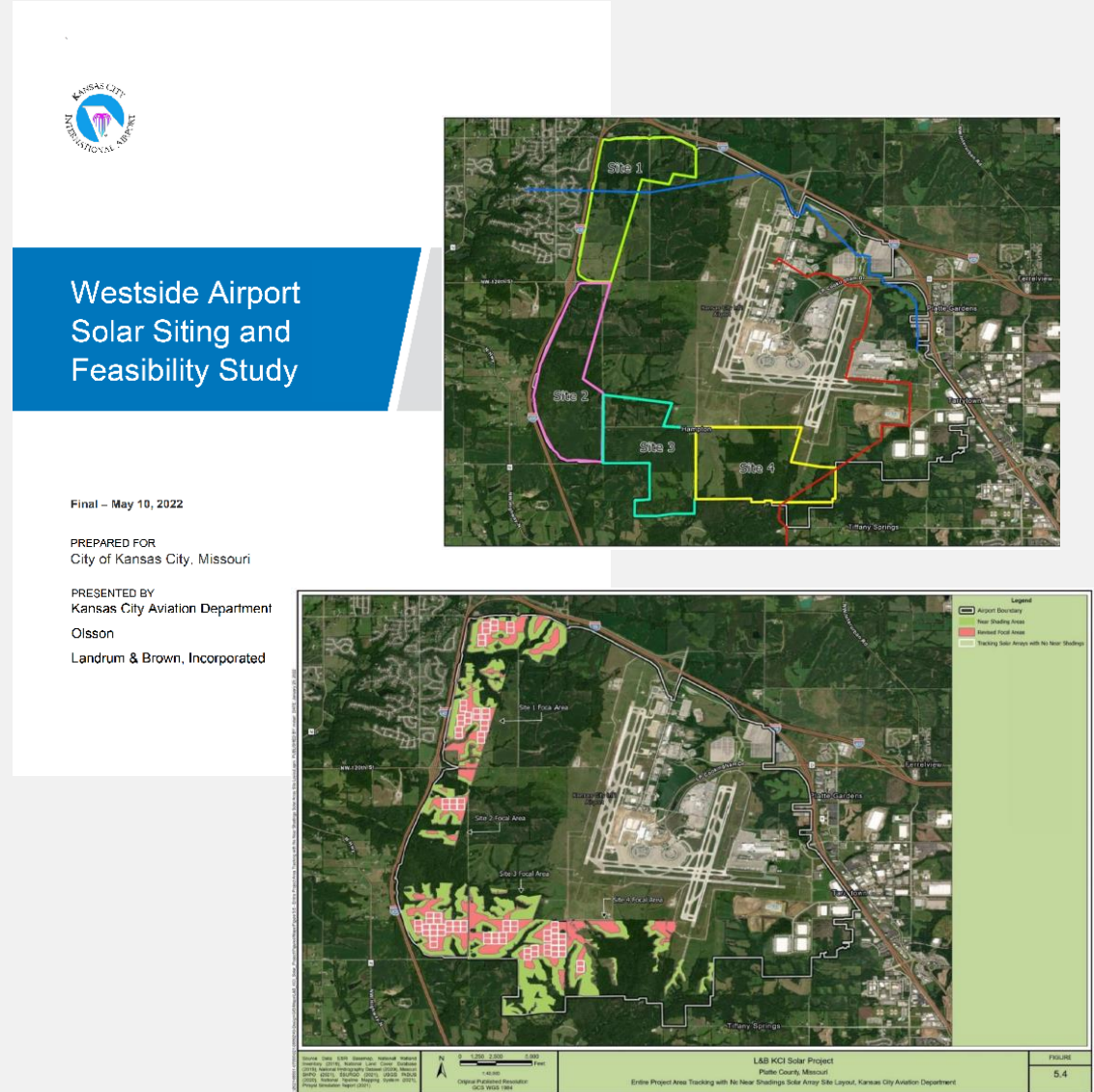


# Project Goals

- Increase energy redundancy and resiliency
- Utilize solar on airport property, as non-aeronautical uses
- Position Kansas City as a national leader in sustainability measures
- Generate workforce development and job opportunities

# Feasibility Study

- Conducted in 2021-2022 by Landrum & Brown, Inc. and Olsson Associates
- Identified initial sites (4) on airport property (3,100 acres) for their potential opportunities to develop solar arrays
- Key considerations were: 1) airport solar case studies, 2) land availability, 3) preliminary energy output, 4) path to market and 5) next steps for implementation
- Based on the study findings, the City elected to move forward with a solar development Request for Proposal (RFP)



**Westside Airport  
Solar Siting and  
Feasibility Study**

Final - May 10, 2022

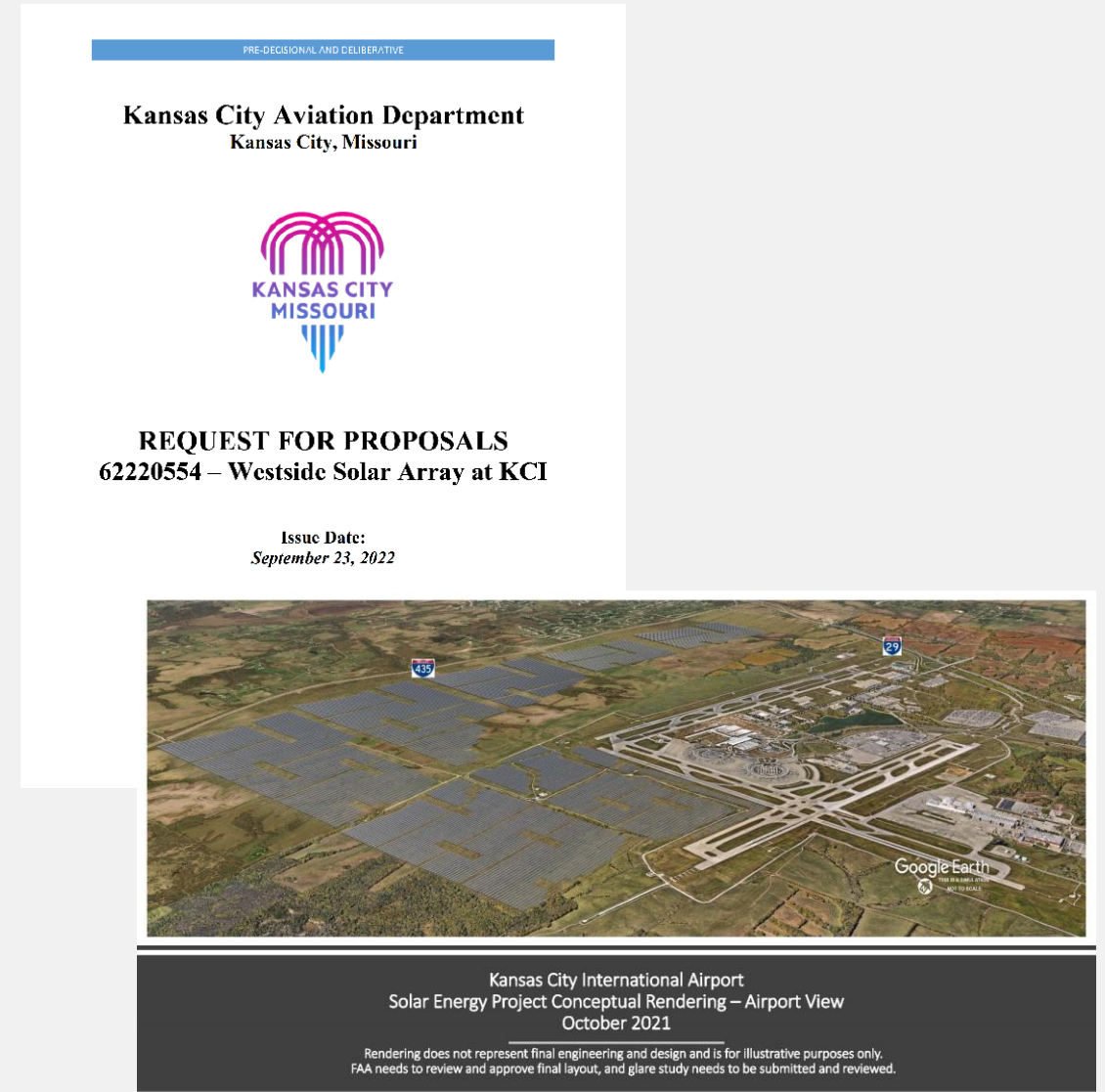
PREPARED FOR  
City of Kansas City, Missouri

PRESENTED BY  
Kansas City Aviation Department  
Olsson  
Landrum & Brown, Incorporated

LAB KCI Solar Project  
Platte County, Missouri  
FIGURE 5.4  
Entire Project Area Tracking with No Near Shadings Solar Array Site Layout, Kansas City Aviation Department

# Request for Proposals

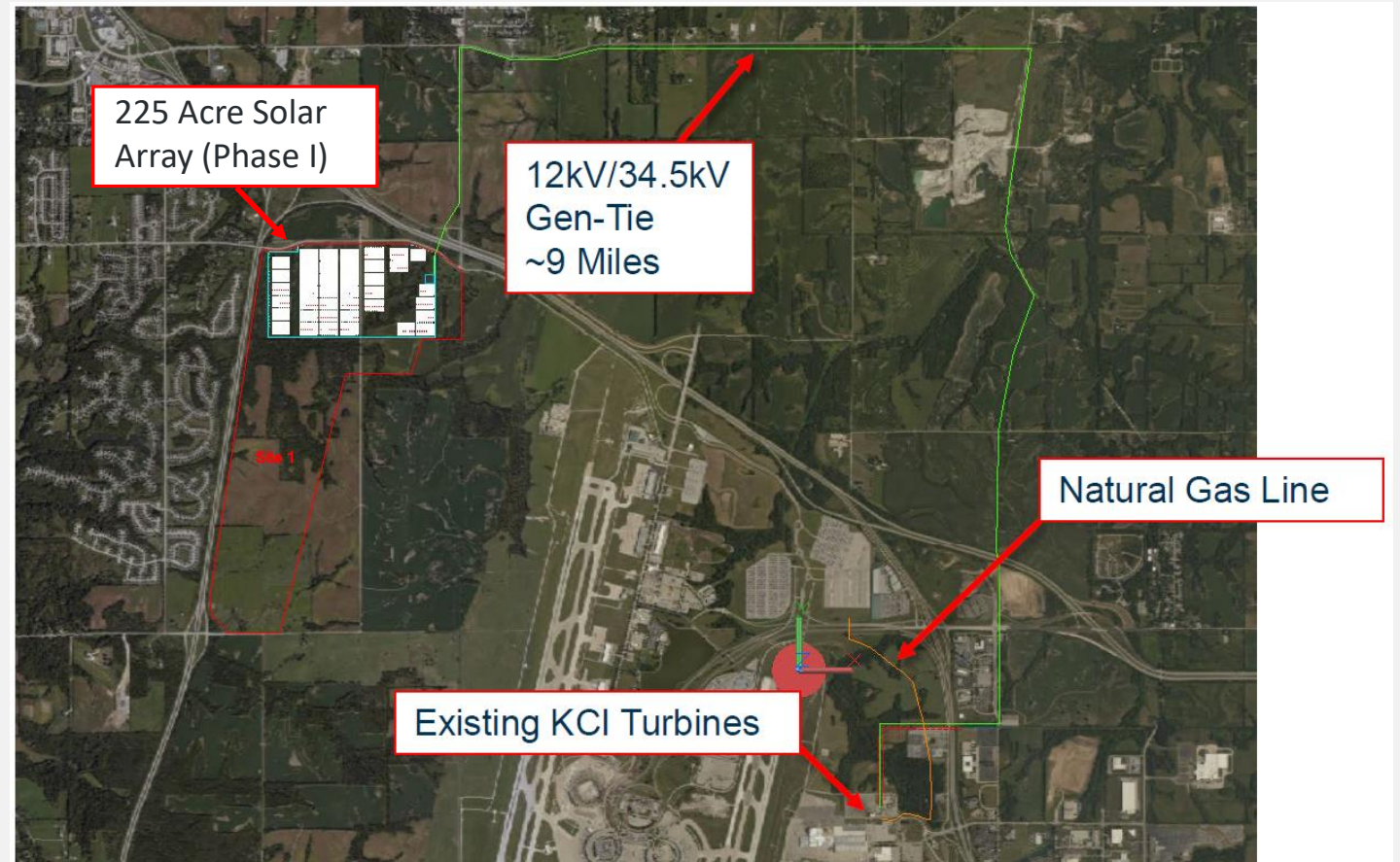
- City retained National Renewable Energy Laboratory (NREL) in March 2022 to assist with the development of an RFP
- A solar RFP was issued in September 2022 and five (5) proposals were received on February 8, 2023
- Interviews were held on April 24, 2023 of each of the five proposers
- The Selection Committee selected three finalists
  - Evergy, Inc. (816 Solar Consortium)
  - NextEra Energy Resources Development, LLC
  - Pedal Steel Solar
- The Committee requested revised proposals for a Phase I option capable of being implemented before summer 2026
- The Committee recommended negotiations with **816 Solar Consortium** for utility-scale solar system development at MCI





# Phase I - Solar Array Implementation

Metric	Phase I
Capacity	~30 MWac
Interconnection	<24 months
Ground Acres	~225 acres
Lease Payment	\$1,000/ac + 2% esc.
Net Capacity Factor	25.5%
Construction Timeline	18 months
Panel Needs	~75,000 – 550 W Panels
Earliest COD	December 2025



# 816 Solar Consortium – basis for selection

## (Evergy, Burns & McDonnell, Savion, LLC and Herzog Contracting Corporation)

- Utilizing Evergy's electrical transmission and solar infra-structure allows delivery of **Phase I** project on an accelerated schedule sending electricity direct to the grid before 2026
- Under the **Phase I** proposal, the City would be the primary consumer of up to 30 Megawatts (MW) of electricity from the MCI solar array, plus up to 4 MW from the Hawthorn Energy Station array
- The **Phase II** development proposal envisions generation of nearly 246 MW on approximately 1,800 acres of land at MCI
- The City will own Solar Renewable Energy Credits associated with the project and may claim the environmental benefits further contributing to the City's goal of attaining carbon neutrality
- The Kansas City Aviation Department will potentially benefit from a land lease totaling nearly \$9.3 million for a **Phase I** solar array over a proposed 30-year lease term
- The 816 Solar Consortium partners the region's electrical utility with locally-based engineering and contracting firms that are invested in the community and possess renewable energy project development experience
- Negotiate with 816 Consortium to develop and investigate maximum coverage of solar facilities at MCI, understanding constraints and opportunities

# Permitting Requirements - Next Steps

- Coordinate with the FAA regarding National Environmental Policy Act (NEPA) documentation – *In Progress*
- Conduct a detailed market evaluation to determine the Fair Market Value (FMV) of the airport property to be leased – *In Progress*
- Conduct Environmental Assessment (EA) to determine any significant environmental impacts associated with solar array development – Scope of Work Development - *In Progress*
- Complete study to minimize impacts to FAA Navigational Aids (NAVAID) and Airport Surveillance Radar (ASR), and study/confirm solar glare will not impact the Airport Traffic Control Tower (ATCT)
- Coordinate and conduct airspace review to evaluate all phases of development and construction of solar facilities and minimize impacts to airspace surfaces

