FILED
November 6, 2026
Missouri Public
Service Commission

Exhibit No. 12

Evergy Missouri Metro – Exhibit 12
Direct Testimony of J Kyle Olson
Case No. EA-2026-0154

Exhibit No.:	
Issue:	Overview; Costs; Fuel
Witness:	J Kyle Olson
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Evergy Missouri Metro
Case No.:	EA-2026-0154
Date Testimony Prepared:	May 14, 2026

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EA-2026-0154

DIRECT TESTIMONY

OF

J KYLE OLSON

ON BEHALF OF

EVERGY MISSOURI METRO

Kansas City, Missouri
May 2026

TABLE OF CONTENTS

I. INTRODUCTION 1
II. PROJECT OVERVIEW 4
III. OWNER'S ENGINEER 9
IV. SITE SELECTION 10
V. POWER ISLAND EQUIPMENT 12
VI. ENGINEER, PROCURE, AND CONSTRUCT CONTRACTOR 16
VII. COST ESTIMATES 19
VIII. RISK MITIGATION 22
IX. FUEL GAS SUPPLY PLAN 24
X. IN-SERVICE DATES AND STATUS REPORTS 26

DIRECT TESTIMONY

OF

J KYLE OLSON

CASE NO. EA-2026-0154

I. INTRODUCTION

Q: Please state your name and business address.

A: J Kyle Olson. My business address is 1200 Main, Kansas City, Missouri 64105.

Q: By whom and in what capacity are you employed?

A: I am employed by Evergy Metro, Inc. as Director of Conventional Generation Development and Construction for Evergy Metro, Inc. d/b/a Evergy Kansas Metro ("Evergy Kansas Metro"), Evergy Kansas Central, Inc. and Evergy South, Inc., collectively d/b/a as Evergy Kansas Central ("Evergy Kansas Central"), Evergy Metro, Inc. ("Evergy Metro") d/b/a as Evergy Missouri Metro ("Evergy Missouri Metro", "EMM", "Applicant", or the "Company"), and Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West"). These are the operating utilities of Evergy, Inc. ("Evergy").

Q: On whose behalf are you testifying?

A: I am testifying on behalf of Evergy Missouri Metro.

Q: What are your responsibilities as Director of Conventional Generation Development and Construction for the Evergy utilities?

A: From a high level, my responsibilities include end-to-end development, contracting, construction, and start-up of new conventional generation assets for Evergy.

Q: Please describe your education, experience and employment history.

A: I graduated from Georgia Tech with a Bachelor of Science degree in Electrical Engineering in 2012. Upon graduation, I was employed by El Paso Electric ("EPE") as a Power Plant Engineer at the Newman Power Station. In May 2014 I was laterally moved to EPE's Generation Projects Team to help oversee the design, construction, and commissioning of the Montana Power Station. During that time, I completed my Master of Business Administration degree at the University of Texas at El Paso. In late June 2016, I was promoted to Assistant Manager at EPE's Newman Power Station. I became a licensed Professional Engineer in New Mexico in March 2017 and in Texas in May 2017. In April 2019 I was promoted to Manager of Power Generation Engineering at EPE. In that position I managed the team responsible for all capital and large maintenance engineering projects to support all EPE's local generation. In December 2021 I was promoted to Director of Power Generation and Asset Management where my duties expanded to oversee the capital additions placed in service at Palo Verde Nuclear Generating Station along with Palo Verde's operations and maintenance expenses. Additionally, I reviewed and approved nuclear fuel contracts and nuclear fuel expenses. In February 2024 I was hired by Evergy Metro as Director of Conventional Generation Development and Construction. I became a licensed Professional Engineer in Kansas in September 2024.

Q: What specific education, training, or industry experience do you have relevant to cost analysis related to power plant construction, particularly in connection with natural gas power plant builds?

A: I have been directly involved with or have provided oversight to eight different natural gas unit construction projects or "builds." Additionally, I sit on the Generation Council of the

Electric Power Research Institute ("EPRI"). The EPRI Generation Council leads and drives sector research and development and advises sector management and staff on the strategic direction, technical content, and results of the research portfolio. Recently, the Generation Council has spent considerable time focusing on new plant construction.

Q: Have you previously testified in proceedings before the Missouri Public Service Commission ("Commission" or "PSC") or before other utility regulatory agencies?

A: Yes, I have previously testified in Case No. EA-2025-0075 where the Commission granted Evergy Missouri West in July 2025 certificates of convenience and necessity ("CCN") for three new natural gas generating units: the Mullin Creek #1 single-cycle unit, and the Viola and McNew combined-cycle units. I have also given testimony in proceedings before the Public Utility Commission of Texas, the New Mexico Public Regulation Commission, and the Kansas Corporation Commission ("KCC").

Q: What topics are addressed in your testimony?

My testimony addresses a wide range of topics, but the primary purpose of my testimony is to: (1) provide an overview of the natural gas generation addition under review in this case; (2) explain how the site of the Mullin Creek #2 simple-cycle gas generating unit project ("Mullin Creek #2" or "Project") was selected; (3) explain the OE-EPC contractor approach and describe the respective roles of each contractor in connection with the Project; (4) summarize the project procurement process; (5) provide project cost estimates; (6) describe project risk mitigation; (7) describe the plan for supplying fuel gas to the project; and (8) outline the costs of the transmission Interconnection Facilities and Network Upgrades assigned to the Mullin Creek #2 project through the Expedited Resource Adequacy Study (ERAS) by Southwest Power Pool, Inc. ("SPP").

Q: Please identify and describe the Schedules you are sponsoring through this testimony.

A: I am sponsoring the following Schedules:

Schedule JKO-1: Mullin Creek #2 location map

Schedule JKO-2: Mullin Creek #2 Preliminary Plot Plan

Confidential Schedule JKO-3: Mullin Creek #2 Cost Breakdown

Schedule JKO-4: J Kyle Olson Direct Testimony for CCN Case No. EA-2025-0075

II. PROJECT OVERVIEW

Q: What project is proposed in this proceeding?

A: The project that the Company proposes to construct and operate is an advanced class 440 MW simple-cycle gas turbine ("SCGT") generating facility known as the Mullin Creek #2, consisting of an advanced J-Class gas turbine, an electrical generator, and a hot selective catalytic reduction ("SCR") system. This unit will be located on the same site and will be functionally identical to the Mullin Creek #1 unit which the Commission granted a CCN in Case No. EA-2025-0075.

Q: Where will the new facility be built?

A: Mullin Creek #2 will be built on a site in Nodaway County, Missouri, approximately eight miles south of Maryville, accessible by road near 40° 13'20.51" N and 94° 52'5.11" W. A map of the site is attached as Schedule JKO-1. It will be located proximate to the Mullin Creek #1 facility, noted above.

Q: What is the target date of commercial operation for the Project?

A: Commercial operation for Mullin Creek #2 is targeted in October 2030.

Q: What is Evergy's approach to developing the Project?

A: Evergy is developing the Project consistent with the approach and with the same partners as was recently approved in the Evergy Missouri West's most recent natural gas CCN filing, No. EA-2025-0075. As such, Evergy Missouri Metro has procured an Owner's Engineer ("OE"), Power Island Equipment ("PIE"), and an Engineer, Procure and Construct ("EPC") Contractor. Evergy's approach also reflects a "design once, build many" philosophy. By carrying forward design strategies, procurement processes, and project-management practices already developed for Mullin Creek #1, the Company can promote schedule discipline, cost efficiency, risk reduction and more predictable execution for Mullin Creek #2.

Q: In general terms what are the benefits of using an OE contractor?

A: An OE contractor provides augmented technical and managerial support to the owner, including assisting the owner with engineering, procurement, and construction oversight. The OE contractor also serves as the owner's representative in connection with the EPC contractor's procurement activities.

Q: What equipment is included in the PIE for Mullin Creek #2?

A: PIE is made up of the major equipment for Mullin Creek #2, including the advanced J-Class gas turbine, an electrical generator, and a hot selective catalytic reduction ("SCR") system. Evergy's approach is to procure this equipment from one manufacturer. This allows Evergy to minimize risk as the PIE vendor will warrant equipment delivery schedule, performance (both output and heat rate), ammonia consumption, noise, and other items. The Company is procuring the PIE equipment from Mitsubishi Power Americas

(MPWA), which is also the supplier for Mullin Creek #1. This approach allows for efficiencies in procurement, engineering, and construction.

Q: Other than the PIE, what other owner furnished equipment is Evergy Missouri Metro procuring?

A: In addition to the PIE, EMM also is procuring the Generator Step-Up Transformer ("GSU"), Auxiliary Transformer and the 345kV breakers required for the interconnection to the grid. Because these items have extremely long lead times, EMM is procuring them ahead of time in an effort to reduce project risk. EMM is procuring this equipment from Siemens, which is already the supplier for Mullin Creek #1. This approach allows for efficiencies in procurement, engineering, construction, and commissioning.

Q: In general terms what is the EPC contractor approach?

A: Under this approach the EPC contractor designs and constructs a complete power plant that complies with the commercial and technical specifications provided and agreed upon during the request for proposal ("RFP") process. The EPC contractor coordinates all engineering design, procurement, and construction work, and ensures that the whole project is completed on schedule.

Q: Why did Evergy decide to utilize the EPC contractor approach for the Project?

A: Using the EPC contractor approach will help Evergy Missouri Metro complete the project on schedule with minimized project risk. This approach is typically more efficient than other approaches because the EPC contractor can overlap project stages and optimize sequencing. Additionally, because the EPC contractor provides a turnkey-style approach, Evergy can better manage risk, as there is a single major contractor and known costs with schedule and performance guarantees. Furthermore, Evergy's use of an OE with direct

experience in EPC work allows Evergy to provide prudent oversight of the EPC contractor, thereby reducing risk.

Q: Are there benefits to using the same OE and EPC contractors and common technology as Mullin Creek #1?

A: Yes. Mullin Creek #2 utilizes the same OE and EPC contractor structure, common generation technology, and the same original equipment manufacturer as Mullin Creek #1. This continuity materially reduces development and execution risk by relying on proven contractors, technology, and contractual arrangements that have already been evaluated and approved by the Commission.

Using a repeatable project design enables economies of scale and supports more reliable and cost-effective project delivery for customers. Efficiencies and cost savings are achieved through standardized engineering, incorporation of lessons learned, procurement leverage, and coordinated long-term service planning, spare parts management, and maintenance across substantially similar units.

In addition, this continuity improves cost predictability and schedule certainty by allowing Evergy Missouri Metro and its contractors to build upon an established technical, commercial, and project-management framework rather than developing new designs and execution plans. These factors collectively reduce the risk of cost overruns and delays, resulting in tangible benefits for customers and supporting the prudence of the proposed Project.

Q: Has Evergy Missouri Metro submitted an interconnection request for this project?

A: Yes, the Company submitted an interconnection request for Mullin Creek #2 in the ERAS 2024 process as request ERAS-2025-007.

Q: What is the status of the Project's development at this time?

A: The Project is currently in the procurement and preliminary engineering phase:

- EMM has executed a reservation agreement with Mitsubishi Power Americas ("MPWA") for a 501 J-Series Air Cooled ("JAC") PIE for Mullin Creek #2.
- EMM has secured site control for Mullin Creek #2.
- EMM has submitted an air permit application for Mullin Creek #2 and expects to receive the permit by the end of 2026 or early 2027.
- EMM has issued a Limited Notice to Proceed to Kiewit Power Constructors (Kiewit), the same EPC as Mullin Creek #1, for engineering and long lead procurement activities and expects to issue a full notice to proceed ("FNTP") to the PIE vendor and the EPC contractor in early 2027, following a successful outcome in this case. The critical path is currently based on the timing of issuing FNTP to the PIE vendor and EPC contractor, expected in early 2027.

A high-level project schedule for Mullin Creek #2 is set out in Table 1 below.

Table 1: Mullin Creek #2 High Level Project Schedule	
Milestone Description	**Expected Completion**
Site Control Complete	October 2024
SPP Large Generator Interconnection Application	October 2024
Environmental and Land Permitting Complete	Q4 2026
Design Spec & Engineering, Procurement, and Construction Award	First Half 2026
State Utility Regulatory Approvals	Q4 2026
Detailed Design and Engineering	Second Half 2026
Construction Begins	2027
Major Equipment Delivery	2028
Construction Complete	2030
Testing and Commissioning Complete	2030
Target Commercial Operation	October 2030

III. OWNER'S ENGINEER

Q: Will Evergy use the same OE contract for both Mullin Creek #1 and Mullin Creek #2?

A: Yes. To maximize efficiencies through a repeated-design approach, as described in my direct testimony in Case No. EA-2025-0075 and attached as Schedule JKO-4—in which the Commission granted a CCN for Mullin Creek #1—Evergy has engaged Burns & McDonnell Inc. (B&M) as the OE contractor for both units. .

Q: What is B&M's role after EPC commissioning?

A: B&M will continue providing OE support throughout the Project. This will include assisting with technical oversight of the EPC contractor, participating in engineering design reviews and submittal reviews, responding to further requests for information ("RFIs") or change orders, and coordinating with Evergy Missouri Metro on schedule and project controls. As the project moves forward, B&M will monitor project progress against the approved contractual baseline through variance tracking, both on an activity and resource

basis. Additionally, B&M will provide EPC field support, such as monitoring the EPC contractor's adherence to project schedule, budget, and material management, and will coordinate and monitor punch-list development and execution. B&M also will provide warranty support for the EPC and major equipment suppliers, including identifying warranty issues and assisting with coordinating claims with suppliers.

IV. SITE SELECTION

Q: Was the Mullin Creek site initially planned for two units?

A: Yes. As I stated in my direct testimony in the 2025 CCN case, Case No. EA-2025-0075, Evergy originally planned the Mullin Creek site to accommodate two generating units.

Q: What process did Evergy use to select the Mullin Creek #2 construction site?

A: In 2023, Evergy engaged Power Engineers to conduct a comprehensive study to identify and evaluate potential sites for construction of electrical generation facilities in Kansas and Missouri. The study area encompassed counties in Kansas and Missouri that included portions of the Evergy service territory.

Q: Are there any benefits to the local community driven by construction of Mullin Creek #2?

A: Yes. Construction of Mullin Creek #2 is expected to provide meaningful local economic benefits. These benefits include temporary construction employment opportunities, increased demand for local goods and services, and associated economic activity in the surrounding community.

During the construction period, Evergy and its contractors anticipate utilizing local labor to the extent practicable, as well as local lodging, materials, and support services, which will contribute to the regional economy. In addition, the Project will expand the local

tax, providing ongoing financial benefits to local jurisdictions once the facility is placed in service.

Taken together, these impacts support local economic development while delivering a needed energy resource for Evergy's customers.

Q: Will Evergy make any local infrastructure improvements in connection with Mullin Creek #2?

A: Yes. Evergy will work with the local community to make necessary infrastructure improvements including highway and road upgrades to accommodate construction and full-time plant traffic to the site.

Q: What is the current status of the Mullin Creek #2 site?

A: Evergy currently owns the Mullin Creek site and is preparing for construction to begin on Mullin Creek #1. Schedule JKO-1, attached, shows the Mullin Creek site location, as well as Schedule JKO-2 which shows the planned site improvements and equipment layout.

Q: What common equipment will the Mullin Creek #1 and Mullin Creek #2 units share?

A: Because the two units are close to each other, Mullin Creek #1 and Mullin Creek #2 will share an Operations and Maintenance ("O&M") building, as well as a shared service and fire water tank consistent with Evergy's "design once, build many" philosophy. This shared infrastructure avoids duplicative capital investment and supports more efficient long-term operations at the Mullin Creek site. Company witness Klote describes the accounting for these shared facilities.

Q: Has Evergy taken steps to address the concerns of nearby landowners associated with the siting of Mullin Creek #2?

A: Yes. Evergy proactively engaged with nearby landowners and entered into a Good Neighbor Agreement with an adjacent property owner prior to construction of the Project. The purpose of the Agreement is to address and resolve potential concerns related to the siting, construction, and operation of the facility and to help ensure compatibility with surrounding properties and land uses.

Through this Agreement, Evergy implemented mitigation measures intended to address potential impacts and provided assurances regarding Project design and operation. In return, the neighboring landowner acknowledged that the agreed-upon measures fully and satisfactorily address their concerns related to the Project and affirmed that the Project represents a reasonable and appropriate use of the site. The Agreement further confirms that the Project is compatible with surrounding properties and consistent with the public health, safety, and welfare.

By working directly with nearby landowners and resolving concerns in advance of construction, Evergy reduced the risk of future disputes, enhanced community acceptance, and improved overall project certainty. This approach supports efficient project development while demonstrating Evergy's commitment to being a responsible neighbor and minimizing potential impacts to the local community.

V. POWER ISLAND EQUIPMENT

Q: How did Evergy select the Power Island Equipment ("PIE") for Mullin Creek #2?

A: Prior to acquiring the Mullin Creek site, Evergy conducted a competitive solicitation for the Power Island Equipment, which comprises the major generating plant components,

including the combustion turbine, generator, emissions control equipment, and related auxiliary systems. The selected technology demonstrated strong performance across key evaluation criteria, including fast-start capability, deep turndown, and low-emissions operation, consistent with Evergy's system reliability and environmental objectives.

Based on the results of the Mullin Creek #1 request for proposals and to maintain commonality in PIE across units, Evergy Missouri Metro reserved the same PIE configuration for Mullin Creek #2 with Mitsubishi Power Americas ("MPWA"). This approach supports standardization, reduces execution risk, and enhances cost and schedule predictability for customers.

Q: Is Evergy using the same Power Island Equipment contract terms for Mullin Creek #2 as were used for Mullin Creek #1, and are there benefits to doing so?

A: Yes. Evergy is utilizing the same Power Island Equipment contract framework and materially the same commercial terms for Mullin Creek #2 as were negotiated and executed for Mullin Creek #1. Using the same contract terms allows Evergy to preserve provisions that were competitively secured prior to further market escalation and that are favorable relative to current market conditions for large gas-fired generation equipment.

The existing contract terms provide Evergy with significant protections and benefits, including fixed pricing provisions for equipment, detailed delivery and milestone commitments, performance guarantees supported by liquidated damages, robust warranty protections, and clear allocation of risk between Evergy and the supplier. These terms reduce cost uncertainty, limit exposure to further escalation, and improve schedule certainty compared to what is typically being offered in the current market.

In addition, the contract includes strong owner-favorable provisions related to payment structure, change management, inspection rights, defect correction, and termination for convenience, which provide Evergy with flexibility and leverage throughout execution. The agreement also incorporates comprehensive performance guarantees, extended warranty periods, and clearly defined remedies, which enhance operational reliability and protect customers over the life of the facility.

Given current market conditions—where original equipment manufacturers face significant demand, constrained production capacity, and increased bargaining power—Evergy believes it would be unlikely to obtain terms of similar strength, pricing certainty, and risk allocation if the equipment were re-bid today. By maintaining the same contract terms for Mullin Creek #2, Evergy is able to lock in these favorable provisions, mitigate execution risk, and deliver tangible benefits to customers.

Q: Is the MPWA J-Series Air Cooled ("JAC") combustion turbine both proven and advanced?

A: Yes. The Mitsubishi J technology, which was introduced in 2011, featured steam for cooling certain combustion hardware. In 2015 the MPWA JAC was introduced, providing the latest air-cooled design and eliminating the need for steam. The MPWA JAC series represents an important advancement in large capacity combustion turbine technology. As a result, the Project will utilize these proven frame gas turbine technologies. The JAGC series also offers values comparable to other similarly sized gas turbines, dispatch reliability, turndown and load following capabilities, and low mass emissions.

Q: When was the Reservation Agreement executed?

A: It was executed on July 21, 2025.

Q: What obligations did the Reservation Agreement impose on MPWA?

A: MPWA must convey to Evergy Missouri Metro assurance that the necessary manufacturing slot space has been irrevocably reserved and that the subject Long Lead Equipment for the project can be delivered on or before scheduled dates.

Q: What are Evergy Missouri Metro's payment obligations under the Reservation Agreement?

A: The company is required to make the reservation payments set out in the applicable Mullin Creek #2 Reservation Agreement.

Q: How will the Reservation Agreement payments be allocated to Mullin Creek #2?

A: The Reservation Agreement establishes specific pricing for Mullin Creek #2. Accordingly, only costs directly associated with the Mullin Creek #2 unit are included in the Project's cost estimates and allocated to Evergy Missouri Metro.

Q: What is the expected output of Mullin Creek #2 with the Mitsubishi PIE?

A: Mullin Creek #2 is designed with a nominal output of 440 MW. The actual maximum output of the unit will depend on the following variable factors and conditions: ambient temperature, relative humidity, Btu content of fuel delivered at the unit, and number of operating hours since the last maintenance interval. By way of illustration, in a new and clean condition, the Project would be expected to generate approximately 440 MW, based on ISO ambient conditions of 55.8 degrees Fahrenheit and 68.8% relative humidity. Under summer conditions of 77.7 degrees Fahrenheit and 66.7% relative humidity, the Project would be expected to generate approximately 430 MW.

Q: Is the selected MPWA 501 JAC gas turbine hydrogen capable?

A: Yes. By design, the gas turbine is capable of approximately 30% hydrogen firing, with the capability of supporting 100% hydrogen firing in the future with upgrades.

Q: How does the Company intend to manage long-term major maintenance associated with Mullin Creek #2?

A: Because having EMM perform major long-term maintenance would not be a practical or effective option in the near future due to the complexity and lack of alternate part suppliers for advanced class gas turbines, the Company is negotiating and currently planning to enter into a long-term service agreement ("LTSA") for maintenance with Mitsubishi. The LTSA is expected to provide a defined scope of major maintenance activities and a variable-fee mechanism based on the number of accumulated operational hours. Outside of the LTSA, EMM will manage other balance-of-plant items as part of an ongoing O&M program, similar to the programs at other Evergy plants. Because Mullin Creek #2 uses the same original equipment manufacturer and substantially similar turbine technology as Mullin Creek #1, Evergy can coordinate LTSA planning, spare-parts strategy, and maintenance practices across substantially similar units, which improves cost predictability and reduces execution risk because of parts commonality.

VI. ENGINEER, PROCURE, AND CONSTRUCT CONTRACTOR

Q: How is Evergy Missouri Metro selecting the EPC contractor for Mullin Creek #2?

A: As discussed in Docket No. EA-2025-0075, Evergy anticipated using the same EPC contractor for both Mullin Creek #1 and Mullin Creek #2. To maintain consistency between the two units and to leverage a repeatable design and execution approach, Evergy Missouri

Metro has selected Kiewit as the EPC contractor for Mullin Creek #2, consistent with Mullin Creek #1.

Under this arrangement, Kiewit will be responsible for the engineering, procurement, and construction of Mullin Creek #2. Using the same EPC contractor promotes execution efficiency, reduces project risk, and supports cost and schedule predictability for customers.

Q: Is Evergy using the same EPC contract terms for Mullin Creek #2 as were used for Mullin Creek #1, and are there benefits to doing so?

A: Yes. Evergy is using the same EPC contract framework and materially the same commercial and risk-allocation terms for Mullin Creek #2 as were negotiated and executed for Mullin Creek #1. Maintaining these contract terms allows Evergy to preserve a set of provisions that were competitively secured under earlier market conditions and that compare favorably to those typically available in the current EPC marketplace.

The EPC contract establishes a single point of responsibility for engineering, procurement, and construction, includes a defined scope of work, and provides robust project controls, including detailed scheduling requirements, earned-value management, and comprehensive cost and progress reporting. These provisions enhance transparency, improve schedule certainty, and support disciplined project execution.

The contract also contains strong owner-favorable protections that are increasingly difficult to obtain in today's market, including meaningful liquidated damages for schedule and performance outcomes, comprehensive quality assurance and warranty obligations, clearly defined change-management processes, and well-established rights for Evergy to inspect work, require correction of defects, and enforce performance standards. In addition,

the contract includes defined limits on reimbursable costs, detailed milestone-based payment structures, and financial assurance provisions that reduce credit and execution risk.

Given current industry conditions—characterized by high demand for experienced EPC contractors, constrained labor availability, and increased contractor leverage—Evergy believes it would be challenging to newly negotiate EPC terms that provide a comparable level of cost predictability, risk allocation, and owner protections. By using the same EPC contract terms for Mullin Creek #2, Evergy is able to leverage a proven and Commission-reviewed contractual framework, reduce execution risk, and deliver tangible benefits to customers through greater cost and schedule certainty.

Q: Why use an EPC contractor in the first place?

A: Large construction projects such as Mullin Creek #2 are substantial undertakings, and Evergy does not have the in-house capability necessary to execute the EPC for such a project. The use of an EPC contractor that can perform all these functions under a single contract is cost-effective and common within the power generation industry for such projects.

Q: Is there a single common form of EPC contract?

A: No. There are several types of EPC contracting approaches, and the suitability or desirability of each depends largely on the type of project. From an owner's perspective, fixed-price contracts are preferred because of the certainty they provide regarding a project's overall cost. When a project's scope of work is uncertain and likely to vary, however, EPC providers will either refuse to contract on a fixed-price basis or perhaps agree to do so in exchange for a significant risk premium added to the fixed price. In

contrast, when a project entails a well-defined scope of work and presents an acceptable risk of material changes in scope, EPC providers are more willing to contract on a fixed-price basis without charging a significant risk premium.

Q: What EPC contracting strategy will be utilized for the Project?

A: Evergy Missouri Metro intends to negotiate a fixed-price (with certain exceptions), fixed schedule form of EPC contract with the selected EPC contractor that reflects a detailed scope of work. For Mullin Creek #2, Evergy will require the contractor to complete construction by the contracted completion date or pay daily liquidated damages as defined in the commercial specifications.

Q: Why did Evergy elect to use this form of EPC contract?

A: The EPC strategy used by Evergy is expected to yield the lowest reasonable cost with an adequate level of risk mitigation.

VII. COST ESTIMATES

Q: How did the Company develop the overall cost estimate for Mullin Creek #2?

A: The Company developed the overall cost estimate for Mullin Creek #2 using a combination of executed agreements, actual contractor pricing, and internally developed estimates for the Project's major cost components.

The two primary cost components were developed based on:

- An actual EPC price proposal from Kiewit for engineering, procurement, and construction services; and
- Pricing set forth in the Power Island Equipment reservation agreement with Mitsubishi Power Americas ("MPWA"), which reflects the costs for the

major generating equipment, including the combustion turbine, generator, emissions control equipment, and related auxiliary systems.

In addition, the total Project cost includes estimates for other necessary project elements, including owner-furnished equipment, balance-of-plant costs not included in the EPC scope, permitting and regulatory compliance, construction management, startup and commissioning support, and contingency. These costs were developed using Evergy's internal cost-estimating practices, prior project experience, and vendor-provided information. Collectively, these inputs result in a comprehensive and reasonable estimate of the cost to construct and place Mullin Creek #2 into service.

Q: What is the current estimate of the capital costs to complete the Mullin Creek #2 project?

A: The current capital cost estimate for the Mullin Creek #2 project is approximately **[redacted]**. This amount includes **[redacted]** associated with the generation portion of the project, or roughly **[redacted]** per kW. It also includes $13,069,532 in estimated Interconnection Facilities costs, as well as the cost for required transmission Network Upgrades which is currently estimated at $6,200,960. The itemized capital cost estimate for the Mullin Creek #2 project is attached as **Confidential Schedule JKO-3.** The total estimate of capital costs for the Mullin Creek #2 project includes the EPC estimate developed by B&M and the identification of expected costs for all items outside of the EPC contract.

CONFIDENTIAL

Q: Why have costs escalated for Mullin Creek #2, compared to the cost estimates provided for Mullin Creek #1 in No. EA-2025-0075?

A: As discussed in detail in the direct testimony of Company witness Jason Humphrey in this proceeding, the increase in estimated costs for Mullin Creek #2 reflects changes in market conditions since the estimates for Mullin Creek #1 were developed, including inflationary pressures, equipment and construction cost escalation, and broader supply-chain and capacity constraints affecting the power-generation industry. Mr. Humphrey addresses these drivers and their consideration in Evergy Missouri Metro's planning and cost evaluation.

Q: What information will Evergy Missouri Metro review to assess the reasonableness of the EPC definitive cost estimate?

A: The Company is continuously monitoring and reviewing other electric utilities' regulatory filings, including CCN requests and published Integrated Resource Plans ("IRPs"). These filings include similar plants with similar equipment and configurations and provide a good benchmark for assessing the reasonableness of the B&M EPC cost estimates.

Q: Based on your extensive professional experience in the power plant construction industry, what have you observed in the marketplace in recent years regarding natural gas-fired electric plant construction cost trends?

A: I have observed a significant upward trend in construction costs for natural gas-fired electric generating facilities in recent years. Prior to the three projects addressed in Case No. EA-2025-0075, the most recent project for which I provided oversight achieved commercial operation in 2023, and that project experienced substantial cost increases as it neared completion.

These cost pressures began during the COVID-19 pandemic and were further exacerbated by Russia's invasion of Ukraine, which disrupted global supply chains and contributed to material and labor inflation. Since that time, costs have continued to increase as electric utilities across the country have announced plans to construct new natural gas-fired generating units.

This elevated level of industry-wide demand has further driven cost escalation, as both Power Island Equipment suppliers and EPC contractors face capacity constraints and are operating at or near full utilization to meet current demand.

VIII. RISK MITIGATION

Q: How has Evergy Missouri Metro mitigated the risks affecting the project schedules and projected costs?

A: The fixed-price structure and well-defined scope of work that will be part of the Mullin Creek #2 EPC contract are the principal mitigation tools to minimize the effect that risks might have on the Project's costs. Delays in receiving regulatory approvals or required permits beyond the dates assumed in the Project schedules will increase total costs and result in delayed in-service dates. These schedules have been developed by optimizing the sequence of activities to produce the shortest practical schedules at the lowest reasonable cost. The schedules have built-in contingencies for critical path activities that will help mitigate short delays. In parallel, siting and interconnection strategies have been selected to limit exposure to costly transmission upgrades and to support service to nearby large loads.

Q: Are the contingencies reflected in the Project's cost estimates designed to cover all risks that could increase cost?

A: No. That is not the purpose of contingency funds in project management. Contingency funding is used to reasonably mitigate unplanned increases in project cost, whether caused by known risks or unforeseen risks. It recognizes that large construction projects spanning several years can be adversely affected by events beyond EMM's control. The Company has proposed a contingency fund that would provide a reasonable level of mitigation of known and unknown risks for the Project, but it is possible some of these risks, if realized, could cause cost increases beyond the contingencies included in the cost estimates. Evergy Missouri Metro will not seek recovery of any unused project contingency.

Q: What are some of the potential risk mitigations expected to be contained in the EPC contract?

A: While the EPC contract with the selected EPC contractor is not yet executed, Evergy Missouri Metro's RFP requests a fixed price and a fixed schedule. While any fixed-price contract presents a risk of price increases through change orders and extra work claims, this risk has been mitigated to the extent possible by broadly defining the scope of work assigned to the EPC contractor. This scope includes everything necessary to ensure that the completed Project meets the technical specification and performance requirements, except for items expressly stated in the scope document to be Evergy Missouri Metro's responsibility.

Q: Does the design of Mullin Creek #2 reflect storm resilience and hardening considerations?

A: Yes. EMM has considered extreme weather conditions such as temperature, wind, and flooding in the design of the Project. Mullin Creek #2's current design allows the facility to continue conducting normal operations in temperatures as low as approximately -20 degrees Fahrenheit.

Q: What risks are associated with delaying this filing until a definitive EPC cost estimate is available?

A: Delays in receiving the regulatory approvals provided in the project schedules will increase total costs and result in delayed in-service dates. Additionally, Evergy Missouri Metro expects EPC pricing to be valid for 30-90 days only. This time frame does not allow the Company to prepare, file and complete this case during the validity period and will result in the definitive cost estimate being invalid before this proceeding has concluded.

IX. NATURAL GAS FUEL SUPPLY PLAN

Q: Please provide an overview of Evergy's plan to supply natural gas fuel to Mullin Creek #2.

A: Evergy has engaged interstate, intrastate, and mid-stream natural gas pipelines to discuss infrastructure upgrades necessary to connect Mullin Creek #2 to the natural gas system. The Company has asked for increasingly more detailed and thorough studies from the pipelines to estimate the costs of these infrastructure upgrades. Evergy would prefer that these suppliers recover their investments via rates over a relatively short period of time (20 years) when compared to the life expectancy of the new generation. Mullin Creek #2's

ability to run on liquid fuel provides further flexibility in the discussions with the natural gas pipelines since it allows for options that don't involve firm transportation contracts.

As discussed further by Company witness JP Meitner, Evergy plans to employ a disciplined natural gas procurement and laddering strategy, including layering term commitments over time, to promote price stability and reduce exposure to short-term volatility.

Q: What further what work has been done and what work remains to be done regarding gas fuel supply to prepare for the construction of Mullin Creek #2?

A: The Company is in late stages of precedent agreement negotiations with a pipeline company regarding infrastructure development necessary to support the needs of Mullin Creek #2. The Company will be relying on the same infrastructure planned for Mullin Creek #1 to support Mullin Creek #2, as stated above. Conversations and analysis have already begun with the pipelines regarding the infrastructure needs of Mullin Creek #2. Once the precedent agreement is executed, the pipeline company will begin the process to develop the infrastructure to be in place ideally 3-6 months ahead of the anticipated commercial operation date of the Project.

Q: Will Mullin Creek #2 also have the option to run on liquid fuel?

A: Yes, as stated above. The Project will include a liquid fuel tank sized for 48 hours at full load and fuel unloading stations. This fuel capability provides an additional safeguard in case of natural gas supply disruptions that will allow Mullin Creek #2 to provide service to its customers.

X. IN-SERVICE DATES AND STATUS REPORTS

Q: Is the proposed in-service criteria for the Project the same used for Mullin Creek #1 in EA-2025-0075?

A: Yes. Akin to Mullin Creek #1 in-service criteria ordered in EA-2025-0075, the Company proposes that Mullin Creek #2 will be considered in service when:

1. All major construction work is complete.
2. All pre-operational tests have been successfully completed.
3. Unit is in compliance with air permit requirements for operation.
4. Unit successfully demonstrates its ability to initiate the proper start sequence resulting in the unit operating from zero (0) rpm (or turning gear) to full load when prompted at a location (or locations) from which it is normally operated.
5. Unit successfully demonstrates its ability to initiate the proper shutdown sequence from full load resulting in zero (0) rpm (or turning gear) when prompted at a location (or locations) from which it is normally operated.
6. Unit successfully demonstrates its ability to operate at minimum load for one (1) hour.
7. Unit successfully demonstrates its ability to operate at or above 95% of nominal capacity for four (4) continuous hours.
8. Unit successfully demonstrates its ability to produce an amount of energy (MWh) within a 72-hour period that results in a capacity factor of at least 30% during the period when calculated by the formula: capacity factor = (MWh generated in 72 hours) / (nominal capacity x 72 hours).

9. Sufficient transmission interconnection facilities shall exist for the total plant design net electrical capacity at the time the Unit is declared fully operational and used for service per the SPP Interconnection Agreement.

10. Unit successfully demonstrates its ability to start on the back up/secondary fuel, as described in item 4.

11. Unit successfully demonstrates its ability to transfer between the two fuels while online.

Q: Will the Company provide periodic reports over the course of construction in order to keep the Commission and stakeholders appraised of project status?

A: Yes. Similar to Mullin Creek #1, Evergy Missouri Metro plans to submit quarterly project status updates. These updates will address schedule, cost, and key risk items to maintain transparency and support oversight of rate impacts and benefits.

XI. SOUTHWEST POWER POOL GENERATOR INTERCONNECTION COSTS

Q: What transmission costs have been identified for interconnection of the Mullin Creek #2 project through the SPP generator interconnection process?

A: As a part of the ERAS process as described in Attachment AW of the SPP Open Access Transmission Tariff (OATT), SPP identified two categories of transmission costs for the Mullin Creek #2 project: (a) Interconnection Facilities, which are comprised of the equipment necessary to physically and electrically interconnect the new generation asset to the transmission system, as well as (b) Network Upgrades, which include transmission upgrades required to maintain reliability on the interconnected system as a result of the injection of power from the interconnection of new generation assets. The costs for

Interconnection Facilities are $13,069,532 and the costs for Network Upgrades are $6,200,960 for Mullin Creek #2.

Q: What are the estimated Network Upgrade costs on non-SPP Transmission Providers' systems?

A: At this time, the Affected System Impact Study for the Associated Electric Cooperative, Inc. system has not yet been completed, and final Network Upgrade cost estimates are therefore not available. Evergy expects the results of these studies to be received later this summer.

For purposes of this filing, Evergy Missouri Metro has included an estimated $17 million for potential Network Upgrade costs on non-SPP systems based on preliminary assessments and experience with similar projects. The Company will ensure that only costs appropriately attributable to Mullin Creek #2 are included.

Q: Will the Project be responsible for paying the Joint Targeted Interconnection Queue (JTIQ) Generator Charge?

A: Yes, the Mullin Creek #2 project met the criteria to pay a JTIQ Generator Charge. The Monthly Indicative JTIQ Generator Charge for the Project is currently estimated at $274,285. This charge is the result of FERC's approval of the JTIQ Study conducted by SPP and Midcontinent Independent System Operator, Inc. ("MISO"). This study identified key projects to enable generator interconnections at SPP-MISO seams that will provide economic and reliability benefits to customers in both SPP and MISO.[1] No additional Network Upgrades were identified on the MISO system.

[1] The JTIQ Study and its costs were discussed in the direct testimony of Evergy witness Katy Onnen at pages 6-7 in No. EA-2025-0075 (filed Nov. 15, 2024).

XII. CONCLUSION

Q: Please summarize your testimony.

A: In summary, Mullin Creek #2 is a straightforward, low-risk extension of a previously approved and already-developed project. By using the same site, technology, contractors, and contractual frameworks as Mullin Creek #1, Evergy Missouri Metro is minimizing execution risk, improving cost and schedule predictability, and delivering needed capacity to customers in a prudent and efficient manner.

Q: Does this conclude your testimony?

A: Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Metro, Inc., d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Manage, Maintain, and Control a Natural Gas Electrical Production Facility	)))))))	Case No. EA-2026-0154

AFFIDAVIT OF J KYLE OLSON

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

J Kyle Olson, being first duly sworn on his oath, states:

1. My name is J Kyle Olson. I work in Kansas City, Missouri and I am employed by Evergy Metro, Inc. as Director of Conventional Generation Development and Construction.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Evergy Missouri Metro consisting of twenty-nine (29) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

J Kyle Olson

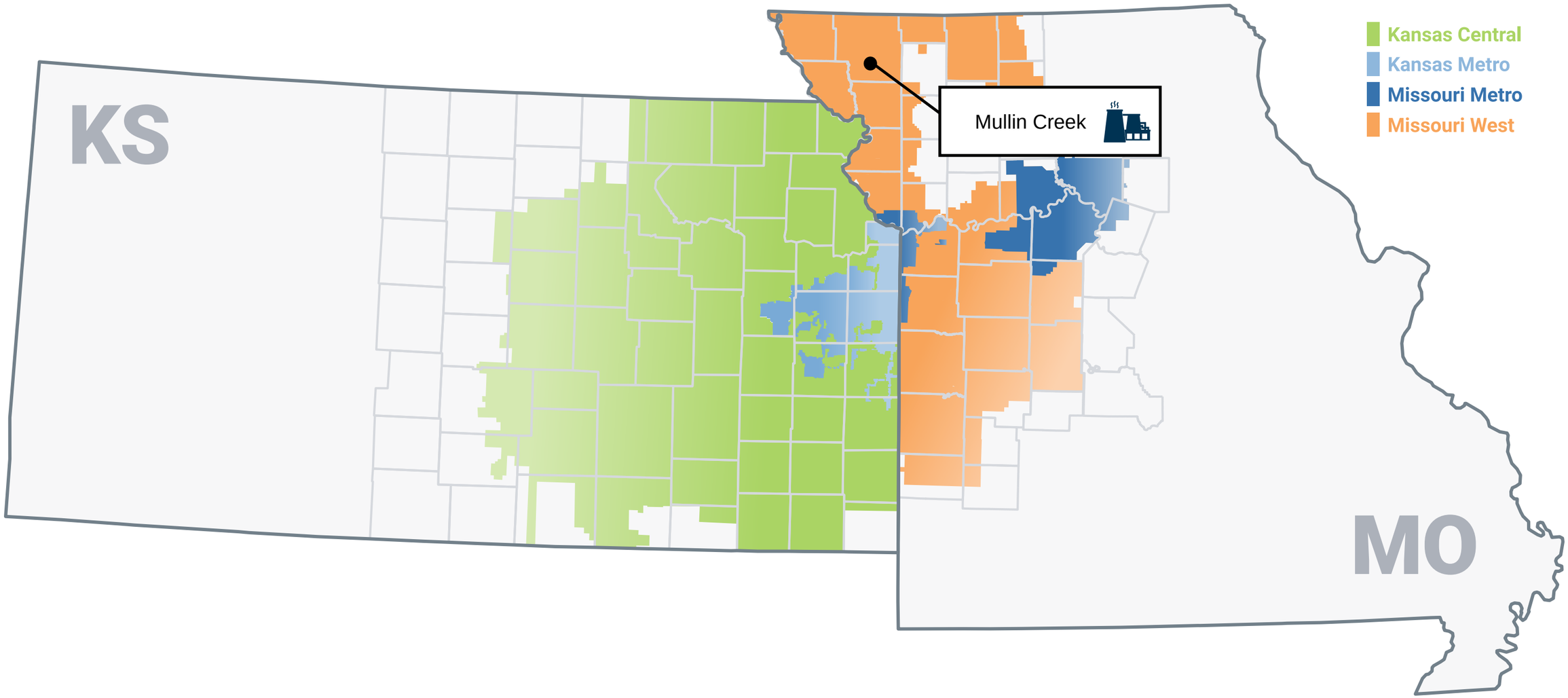
Subscribed and sworn before me this 14th day of May 2026.

Notary Public

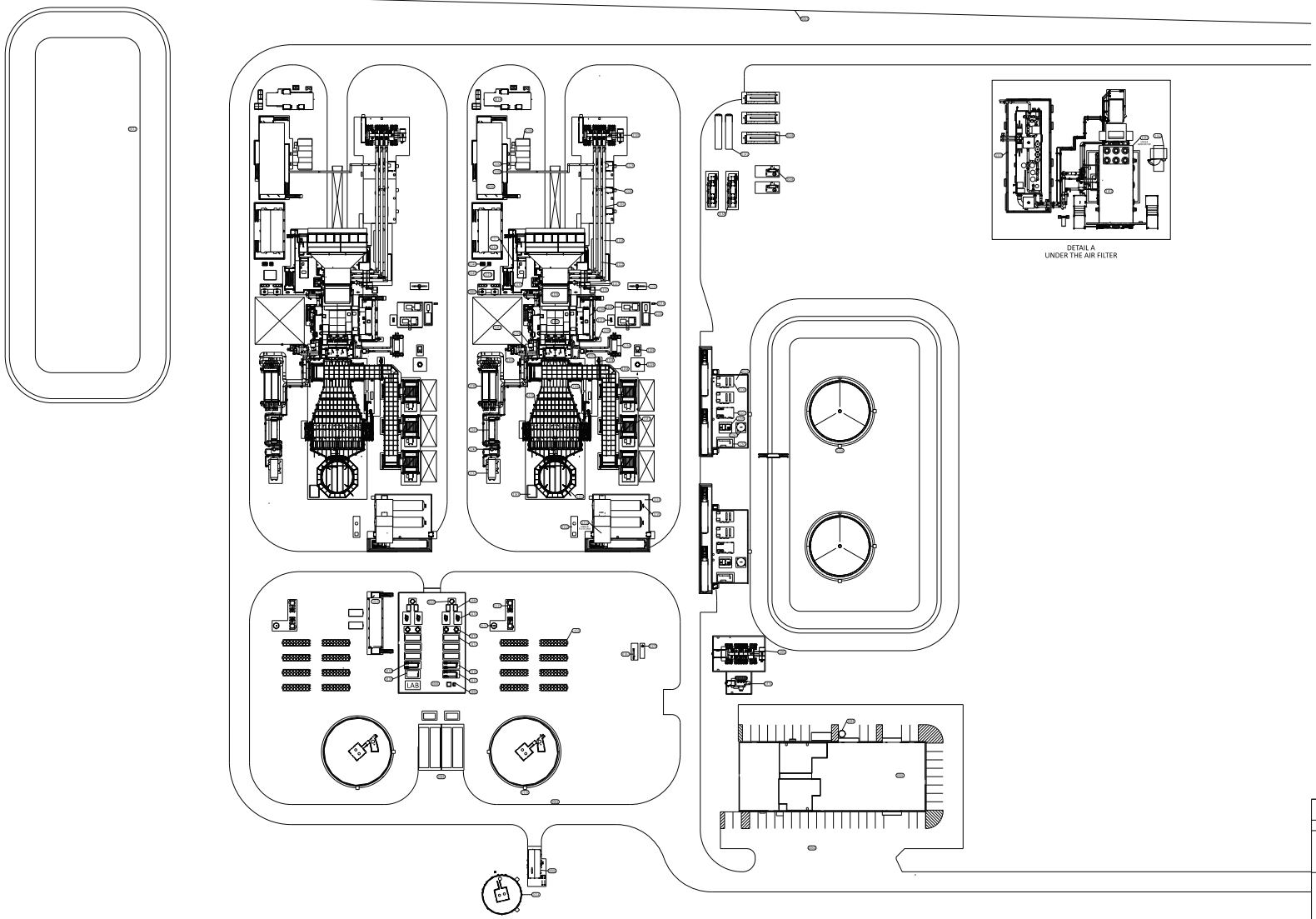
My commission expires: April 26, 2029.

ANTHONY R WESTENKIRCHNER
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 26, 2029
PLATTE COUNTY
COMMISSION #17279952

evergy



Schedule JKO-1
Page 1 of 1



LEGEND

0001	ADMINISTRATION / CONTROL / MAINTENANCE
0003	UTILITY BUILDING
0036	FIREWATER PUMP ENCLOSURE
0060	PARKING AREA
0062	ROADWAY
0063	SITE FENCE
0072	STORMWATER POND
0085	DEMIN TRUCK PARKING
0095	SEPTIC TANK
0112	OIL/WATER SEPARATOR
0114	EMERGENCY DIESEL GENERATOR
0118	DEMIN WATER PUMP SKID
0119	DEMIN WATER STORAGE TANK
0124	FIRE/SERVICE WATER STORAGE TANK
0125	SERVICE WATER PUMP SKID
0127	FUEL OIL FORWARDING PUMPS
0128	FUEL OIL STORAGE TANK
0129	FUEL OIL CONTAINMENT AREA
0130	FUEL OIL UNLOADING PUMPS
0135	CLOSED COOLING WATER PUMPS
0137	CLOSED COOLING WATER HEAD TANK
0138	POTABLE WATER TEMPERING SKID
0141	HYDROGEN BULK STORAGE
0144	CO2 VAPORIZER SKID
0145	CO2 BULK STORAGE
0168	FUEL GAS REGULATING STATION
0169	FUEL GAS DEW POINT HEATER
0173	AIR COMPRESSORS
0174	DESICCANT AIR DRYER
0175	DRY AIR RECEIVERS
0179	FUEL GAS ODORIZER
0180	COMPRESSED AIR TRIM COOLERS
0182	LP GAS HEATER
0195	FUEL GAS COALESCING FILTER/SEPARATOR
0200	PAD MOUNTED TRANSFORMER
0206	SODIUM HYPOCHLORITE PUMP SKID
0214	GT FUEL GAS CALORIE METER
0319	WET AIR RECEIVER
0774	SPARE AUXILIARY TRANSFORMER (BY OWNER)
1007	EVAP COOLER CALCITE FILTERS
1019	GT PURGE AIR RECEIVER
1029	ACHE ELECTRICAL ENCLOSURE
1030	AIR COOLED HEAT EXCHANGER
1036	SFC TRANSFORMER
1091	SPARE STEP-UP TRANSFORMER (BY OWNER)
1100	GAS TURBINE (GT)
1101	GT GENERATOR (GTG)
1102	TURBINE ROTOR REMOVAL AREA
1105	GT INLET AIR FILTER
1113	LUBE OIL MODULE
1114	GT CONTROL PACKAGE
1115	WATER MIST FIRE-FIGHTINGS SYSTEMS FOR GT
1121	FUEL OIL DRAIN TANK AND PIT
1122	GTG EXC & SFC PACKAGE
1126	GTG EXCITATION TRANSFORMER
1127	GTG GMCB
1128	ISO PHASE BUS DUCT
1129	UNIT TRANSFORMER
1130	GTG TRANSFORMER
1132	CABLE BUS DUCT
1133	WATER WASH DRAINS TANK
1134	GT WATER INJECTION SKID
1135	GT BLADE WASH SKID
1138	GT FUEL GAS INLET FILTER
1140	CABLE BUS
1142	NEUTRAL GROUNDING ENCLOUSURE
1151	GT EXHAUST STACK
1163	CONTINUOUS EMISSIONS MONITORING SYSTEMS BUILDING (CEMS)
1168	AFCU SKID
1170	HOT SCR
1174	EVAPORATIVE COOLER SKID
1181	TEMPERING AIR FAN
1192	GTG SEAL OIL SUPPLY UNIT
1194	GT FUEL OIL UNIT
1209	GT PURGE AIR COMPRESSOR
1210	AMMONIA STORAGE TANK
1212	AMMONIA FORWARDING PUMPS
1213	AMMONIA CONTAINMENT AREA
1230	GT COOLING AIR COOLER WITH FUEL GAS HEATER
1232	GT ENHANCED COOLING AIR COMPRESSOR
1234	GT 2C COOLER
1236	GT 4S COOLER
1237	GT 4S COOLING AIR SEPARATOR
1238	GT COOLING AIR FILTER
1239	GT CASING COOLING AIR FAN
1240	GT ECA DRAIN MIST SEPARATOR
1241	GT ENHANCED COOLING AIR COOLER
1253	GT MAIN FUEL OIL PUMP
1258	TEMPERING AIR INJECTION DUCT
1259	FUEL OIL TREATMENT SKID
1263	SLUDGE STORAGE TANK
1265	FUEL OIL HEATING SKID

– PRELIMINARY –
NOT FOR CONSTRUCTION

REV	DESIGN BY	CHECKED BY	DATE
A	ISSUED FOR REVIEW		
	L. CASTILLO	P. OLGUIN	03-02-26

EVERGY

MULLIN CREEK GENERATING STATION

Kiewit

KIEWIT CONFIDENTIAL & PROPRIETARY INFORMATION. ALL RIGHTS RESERVED.

PLOT PLAN

ENGINEER/DESIGN ORIGINATOR	L. CASTILLO
LEAD ENG	A. BISHOP
ENG MGR	M. WARWICK
PROJ MGR	D. DIECKMANN

DRAWING NUMBER

20056517–PP–001

Mullin Creek #2 SCGT COD 10/1/2030 440MW

Total Price Breakdown

Item		Price
PIE		
EPC		
GSU/UAT		
Water Supply		
Interconnection Costs	$	13,500,000
SPP Network Upgrades	$	6,500,000
Affected Systens Upgrades		
OE		
Owner's Cost		
Contingency		
Total		
$/kW		

Owner's Cost Break Down
Builders Risks
Salary (internal)
Mileage & Vehicles
Taxes
Land Purchases
Environmental
Plant Staff (2 years)
Furniture/Facilities
Tools & Lab
Security and IT
SPP Fees
Legal
PILOT/RMA
Development Expenses
Capital Spares
Total Owner's Costs

Exhibit No.:	
Issue:	RFP Process; CCN Requirements
Witness:	J Kyle Olson
Type of Exhibit:	Direct Testimony
Sponsoring Party:	Evergy Missouri West
Case No.:	EA-2025-0075
Date Testimony Prepared:	November 15, 2024

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: EA-2025-0075

DIRECT TESTIMONY

OF

J KYLE OLSON

ON BEHALF OF

EVERGY MISSOURI METRO AND EVERGY MISSOURI WEST

Kansas City, Missouri
November 2024

TABLE OF CONTENTS

I. INTRODUCTION 1
II. PROJECT OVERVIEW 4
III. OWNER'S ENGINEER 10
IV. SITE SELECTION 12
V. POWER ISLAND EQUIPMENT 17
VI. ENGINEER, PROCURE, AND CONSTRUCT CONTRACTOR 24
VII. COST ESTIMATES 27
VIII. RISK MITIGATION 32
IX. FUEL GAS SUPPLY PLAN 34
X. IN-SERVICE DATES AND STATUS REPORTS 35

DIRECT TESTIMONY

OF

J KYLE OLSON

CASE NO. EA-2025-0075

I. INTRODUCTION

Q: Please state your name and business address.

A: J Kyle Olson. My business address is 1200 Main, Kansas City, Missouri 64105.

Q: By whom and in what capacity are you employed?

A: I am employed by Evergy Metro, Inc. as Director of Conventional Generation Development and Construction for Evergy Metro, Inc. d/b/a Evergy Kansas Metro ("Evergy Kansas Metro") and Evergy Kansas Central, Inc. and Evergy South, Inc., collectively d/b/a as Evergy Kansas Central ("Evergy Kansas Central"), Evergy Metro, Inc. d/b/a as Evergy Missouri Metro ("Evergy Missouri Metro"), Evergy Missouri West, Inc. d/b/a Evergy Missouri West ("Evergy Missouri West"), the operating utilities of Evergy, Inc.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of Evergy Missouri West ("EMW") and Evergy Missouri Metro ("EMM").

Q: What are your responsibilities as Director of Conventional Generation Development and Construction for the Evergy utilities?

A: From a high level, my responsibilities include the end-to-end development, contracting, construction, and start-up of new conventional generation assets for Evergy.

Q: Please describe your education, experience and employment history.

A: I graduated from Georgia Tech with a Bachelor of Science degree in Electrical Engineering in 2012. Upon graduation, I was employed by El Paso Electric ("EPE") as a Power Plant Engineer at the Newman Power Station. In May 2014, I was laterally moved to EPE's Generation Projects Team to help oversee the design, construction, and commissioning of the Montana Power Station. During that time, I completed my Master of Business Administration degree at The University of Texas at El Paso. In late June 2016, I was promoted to Assistant Manager at EPE's Newman Power Station. I became a licensed Professional Engineer in New Mexico in March 2017 and in Texas in May 2017. In April 2019, I was promoted to Manager of Power Generation Engineering at EPE. In that position, I managed the team responsible for all capital and large maintenance engineering projects to support all EPE's local generation. In December 2021, I was promoted to Director of Power Generation and Asset Management, where my duties expanded to overseeing the capital additions placed in service at Palo Verde Nuclear Generating Station along with Palo Verde's operations and maintenance expenses. Additionally, I reviewed and approved nuclear fuel contracts and nuclear fuel expenses. In February 2024, I was hired by Evergy Metro as Director of Conventional Generation Development and Construction. I became a licensed Professional Engineer in Kansas in September 2024.

Q: Please describe any specific education, training, or industry experience you have relevant to cost analysis related to power plant construction, particularly in connection with natural gas power plant builds.

A: I have been directly involved with or have provided oversight to five different natural gas unit construction builds. Additionally, I sit on the Generation Council of the Electric Power

Research Institute ("EPRI"). The EPRI Generation Council leads and drives sector research and development, and advises sector management and staff on the strategic direction, technical content, and results of the research portfolio. Recently, the Generation Council has spent considerable time focusing on new plant construction.

Q: Have you previously testified in proceedings before the Missouri Public Service Commission ("Commission" or "PSC") or before other utility regulatory agencies?

A: I have not previously testified before the PSC, but I have given testimony in proceedings before the Public Utility Commission of Texas ("PUCT") and the New Mexico Public Regulation Commission ("NMPRC"). I have also submitted testimony in support of the Company's request for predetermination, related to this docket, before the Kansas Corporation Commission ("KCC").

Q: What topics are addressed in your testimony?

My testimony addresses a range of topics, but the primary purpose of my testimony is to: (1) provide an overview of the natural gas generation additions under review in this docket; (2) explain how the project locations were selected; (3) explain the OE-EPC contractor approach and describe the respective roles of each contractor in connection with the projects; (4) summarize the project procurement process; (5) provide project cost estimates; (6) describe project risk mitigation; and (7) describe the plan for supplying fuel gas to the projects.

Q: Please identify and describe the Schedules you are sponsoring through this testimony?

A: I am sponsoring the following Schedules:

Schedule JKO-1: Project site maps
Schedule JKO-2: High-level schedule for Viola project
Schedule JKO-3: High-level schedule for McNew project

Schedule JKO-4: High-level schedule for Mullin Creek #1 project

Schedule JKO-5: Viola site improvements and equipment layout

Schedule JKO-6: McNew site improvements and equipment layout

Schedule JKO-7: Mullin Creek #1 site improvements and equipment layout

Schedule JKO-8 (Confidential): Owner's engineer AACE Class-4 EPC cost estimate for Viola project

Schedule JKO-9 (Confidential): Owner's engineer AACE Class-4 EPC cost estimate for McNew project

Schedule JKO-10 (Confidential): Owner's engineer AACE Class-4 EPC cost estimate for Mullin Creek #1 project

Schedule JKO-11 (Confidential): All-in cost estimate for Viola project inclusive of owner's engineer EPC estimate and known costs for the other items

Schedule JKO-12 (Confidential): All-in cost estimate for McNew project inclusive of owner's engineer EPC estimate and known costs for the other items

Schedule JKO-13 (Confidential): All-in cost estimate for Mullin Creek #1 project inclusive of owner's engineer EPC estimate and known costs for the other items

II. PROJECT OVERVIEW

Q: Please describe the projects that are under review in the proceeding.

A: The projects under review in this proceeding are:

- Two advanced class 710 MW combined cycle gas turbine ("CCGT") generating facilities known as the Viola Generating Station ("Viola") and the McNew Generating Station ("McNew"), each consisting of a 1x1 single-shaft advanced J-Class gas turbine, an electrical generator, a heat recovery steam generator ("HRSG"), and a steam turbine with exhaust cooled by an air-cooled condenser. The configuration and equipment for the two CCGT facilities will be substantially the same.
- One advanced class 440 MW simple cycle gas turbine ("SCGT") generating facility known as the Mullin Creek #1 Generating Station (Mullin Creek #1), consisting of an advanced J-Class gas turbine, an electrical generator and hot SCR.

Q: Where will the new facilities be built?

A: The Viola facility will be built on a greenfield site in Sumner County, Kansas, accessible by road near 37°20'00.5" N and 97°40'28.3" W. The McNew facility will be built on a greenfield site in Reno County, Kansas, accessible by road near 38° 0'10.23" N and 97°55'11.10" W. The Mullin Creek #1 facility will be built on a greenfield site in Nodaway County, Missouri, accessible by road near 40° 13'20.51" N and 94° 52'5.11" W. Maps of these sites are attached as **Schedule JKO-1**.

Q: What is the expected date of commercial operation for the two new facilities?

A: Commercial operation for the Viola project is expected in 2029, and commercial operation for the McNew and Mullin Creek #1 projects is expected in 2030.

Q: What is a 1x1 single-shaft CCGT and why was a single-shaft unit selected?

A: In a 1x1 single-shaft configuration both prime movers (gas and steam turbines) are on a single shaft line driving a single generator. Aside from having a common generator, the balance of plant systems in a single-shaft configuration are harmonized, resulting in fewer individual components. Using one large generator, instead of two or more smaller units, can increase generator efficiency and reduce equipment maintenance expenses. A single-shaft configuration also has redundancy and reliability benefits, and the potential for quicker start-ups.

Q: Describe Evergy's approach to developing these projects?

A: Evergy is developing these projects. Evergy has procured an Owner's Engineer ("OE") and is in the process of procuring Power Island Equipment ("PIE") and an Engineer, Procure and Construct ("EPC") Contractor.

Q: Describe in general terms the benefits of using an OE contractor?

A: An OE contractor provides augmented technical and managerial support to the owner, including assisting the owner with engineering, procurement, and construction oversight. The OE contractor also serves as the owner's representative in connection with the EPC contractor's procurement activities.

Q: Describe the equipment included in the PIE for a CCGT?

A: PIE is made up of the major equipment including the advanced J-Class gas turbine, an electrical generator, a heat recovery steam generator, and a steam turbine. Evergy's approach is to procure all this equipment from one manufacturer. This allows Evergy to minimize risk as the PIE vendor will warrant equipment delivery schedule, performance (both output and heat rate), ammonia consumption, noise, and other items.

Q: Describe the equipment included in the PIE for a SCGT?

A: PIE is made up of the major equipment including the advanced J-Class gas turbine, an electrical generator, and a hot selective catalytic reduction (SCR) system. Evergy's approach is to procure all this equipment from one manufacturer. This allows Evergy to minimize risk as the PIE vendor will warrant equipment delivery schedule, performance (both output and heat rate), ammonia consumption, noise, and other items.

Q: Other than the PIE, what other owner furnished equipment ("OFE") is Evergy procuring?

A: In addition to the PIE, Evergy also is procuring the Generator Step-Up Transformer ("GSU") and the 345kV breakers required for the interconnection. Because these items have extremely long lead times, Evergy is procuring these items ahead of time in an effort to reduce project risk.

Q: Describe in general terms the EPC contractor approach?

A: Under this approach, the EPC contractor designs and constructs a complete power plant that complies with the commercial and technical specifications provided and agreed upon during the request for proposal ("RFP") process. The EPC contractor coordinates all engineering design, procurement, and construction work, and ensures the whole project is completed on schedule.

Q: Why did Evergy decide to utilize the EPC contractor approach for these projects?

A: Using the EPC contractor approach will help Evergy complete the projects on schedule with minimized project risk. The EPC contractor approach is typically more efficient than other approaches because the EPC contractor can overlap project stages and optimize sequencing. Additionally, because the EPC contractor provides a "Turnkey" style approach, Evergy can better manage risks, as there is a single major contractor and known costs with schedule and performance guarantees. What is more, Evergy's use of an OE with direct experience in EPC work allows Evergy to provide prudent oversight of the EPC contractor, further reducing risk.

Q: Are there benefits to using the same OE and EPC contractors on multiple projects?

A: First, I would note that not only are these projects utilizing the same OE and EPC contractors, they also are utilizing common generation technology and the same original equipment manufacturers. And, yes, consolidating and integrating these core functions leads to more efficient, reliable, and cost-effective project delivery through economies of scale. Developing and building these two CCGT units together, essentially as a single project, will undoubtedly lead to efficiencies and cost savings, which will be passed on to customers. These efficiencies and cost savings derive from having long-term service

agreements covering program management, parts, and maintenance. And, when multiple projects are substantially similar, efficiencies and savings may derive from similar long-term service agreements; common crews; repeatable designs, deliverable reviews, and lessons learned; and procurement leverage from scaled purchases.

Q: Has Evergy submitted an interconnection request for these projects?

A: Yes. On October 28, 2024 and October 31, 2024.

Q: What is the status of project development at this time?

A: The projects are currently in the procure and preliminary engineering phase:

- Every has completed the PIE RFP and has selected the Mitsubishi Power Americas ("MPWA") 501 J-Series Air Cooled ("JAC") PIE proposal.
- Evergy has executed a reservation agreement for the manufacturing slots and is finalizing the PIE purchase contract. Additionally, with the PIE technology selected, Evergy released the RFP for the EPC contractor. Bids are currently due back on January 31, 2025.
- On October 21, 2024, Evergy made public announcements about the CCGT site locations.
- Evergy currently owns the land for the Viola project and owns options for the land for the McNew and Mullin Creek #1 projects.
- Evergy is working on submitting air permit applications to the Kansas Department of Health and Environment and expects to submit the Viola application in November and the McNew application by the end of the year.

- Evergy is working on submitting air permit applications to the Missouri Department of Health and Environment and expects to submit the Mullin Creek #1 application in January.
- Evergy expects to issue a full notice to proceed ("FNTP") to both the PIE vendor and the EPC contractor in August 2025, following a successful outcome in this docket. Critical path is currently comprised of two major items: (1) FNTP to the PIE vendor and EPC contractor, expected in August 2025, and (2) receipt of an air permit, expected in February 2026.

High-level project schedules for both projects are set out in Tables 1, 2 and 3 below.[1]

Table 1: Viola High-Level Project Schedule

Milestone Description	Expected Completion
Site Control Complete	December 2023
SPP Large Generator Interconnection Application	October 2024
Environmental and Land Permitting Complete	2026
Design Spec & Engineering, Procurement, and Construction ("EPC") Award	First Half 2026
State Utility Regulatory Approvals	Mid 2025
Detailed Design and Engineering	Second Half 2025
Construction Begins	2026
Major Equipment Delivery	2027
Construction Complete	2028
Testing and Commissioning Complete	2028
Commercial Operation	Jan 1, 2029

[1] *See, also,* Schedule JKO-2, Schedule JKO-3, and Schedule JKO-4.

Table 2: McNew High-Level Project Schedule

Milestone Description	Expected Completion
Site Control Complete	October 2024
SPP Large Generator Interconnection Application	October 2024
Environmental and Land Permitting Complete	2026
Design Spec & Engineering, Procurement, and Construction ("EPC") Award	First Half 2026
State Utility Regulatory Approvals	Mid 2025
Detailed Design and Engineering	Second Half 2026
Construction Begins	2027
Major Equipment Delivery	2028
Construction Complete	2029
Testing and Commissioning Complete	2029
Commercial Operation	Jan 1, 2030

Table 3: Mullin Creek #1 High Level Project Schedule

Milestone Description	Expected Completion
Site Control Complete	October 2024
SPP Large Generator Interconnection Application	October 2024
Environmental and Land Permitting Complete	2026
Design Spec & Engineering, Procurement, and Construction Award	First Half 2026
State Utility Regulatory Approvals	First Half 2026
Detailed Design and Engineering	Second Half 2026
Construction Begins	2027
Major Equipment Delivery	2028
Construction Complete	2029
Testing and Commissioning Complete	2029
Commercial Operation	Jan 1, 2030

III. OWNER'S ENGINEER

Q: What company was selected as the OE contractor for these projects?

A: The OE contractor selected for these projects is Burns & McDonnell ("BMcD").

Q: Summarize the process Evergy used to solicit and evaluate OE contractor bids?

A: Evergy solicited bids under an owner's engineer request for proposal ("OE RFP"). The OE RFP was prepared by a team with considerable experience in natural gas plant configurations and construction. In preparing the solicitation documents, Evergy's project team emphasized the long-term nature of the projects and insisted that bidders submitting proposals put forward their best effort to commit to Evergy their most experienced resources over the next several years.

Q: Identify the critical evaluation criteria for the OE contract solicitation.

The critical criteria were: (1) past experience with Evergy; (2) key resources and staff résumés; (3) experience with advanced class turbines; (4) completeness of bid proposal; (5) OE proximity; and (6) project rate sheet/hourly rate. Based on those criteria, the Evergy project team determined five firms were qualified for the projects and solicited bids from those five firms. Evergy received bid proposals from three of those firms. The final result was a unanimous decision to award the OE services contract to Burns & McDonnell.

Q: Summarize the rationale for Evergy's selection of BMcD as the OE contractor.

A: BMcD submitted the strongest overall proposal and has extensive experience working with Evergy, having completed more than 2,000 Evergy projects in the past 20 years. BMcD also offered a project team that has considerable experience with advanced class combustion turbines, including the three turbine models that were under consideration for the Viola, McNew and Mullin Creek #1 facilities. Additionally, BMcD offered direct experience as a stand-alone EPC contractor, a significant benefit the other bidders could not provide. The proximity of BMcD's local offices, operations, and staff support to the projects was an important consideration as well.

Q: Describe BMcD's role after EPC commissioning.

A: BMcD will continue providing OE support throughout the project, including assisting with technical oversight of the EPC contractor; participating in engineering design reviews and submittal reviews; responding to further requests for information ("RFIs") or change orders; and coordinating with Evergy on schedule and project controls. As the projects move forward, BMcD will monitor project progress against the approved contractual baseline through variance tracking, both on an activity and resource basis. Additionally, BMcD will provide EPC field support, such as monitoring the EPC contractor's adherence to project schedule, budget and material management, and will coordinate and monitor punch-list development and execution. BMcD also will provide warranty support for the EPC and major equipment suppliers, including identifying warranty issues and assisting with coordinating claims with suppliers.

IV. SITE SELECTION

Q: Please describe the process used to select the Viola, McNew, and Mullin Creek #1 construction sites.

A: In 2023, Evergy engaged Power Engineers to conduct a comprehensive study to identify and evaluate potential sites for construction of electrical generation facilities in Kansas and Missouri. The study area encompassed counties in Kansas and Missouri that included portions of the Evergy service territory. The map below depicts how the study area was delineated.

Figure 1: Siting Study Area Map



Steps involved in selecting the Viola, McNew, and Mullin Creek #1 sites included:

- Identifying electrical bus locations within the study area that could transfer the most power in steady state before being limited by the ratings of Evergy transmission facilities. This analysis produced a list of 15 bus locations having a generator capacity of 588 MW or greater;
- Reviewing a 15-mile area around each of the preferred bus locations to prioritize potential sites that were relatively close to the preferred bus locations and to natural gas and electrical interconnections. This review was directed toward minimizing interconnection costs;
- Removing from consideration bus locations that would likely create environmental permitting and environmental justice concerns because of proximity to densely populated areas; and

- Identifying Candidate Site areas, which are general regions that typically are larger than the amount of land required for plant development.

Q: After the Candidate Site areas were identified, what were the next steps?

A: The study next evaluated potential locations within the Candidate Site areas. Criteria considered in this step of the process included: (a) the position of the remaining bus locations initially used to develop the Candidate Site areas; (b) Evergy's interest in the property (owned, leased, or proposed to be developed); and (c) intersections of natural gas pipelines and electric transmission facilities. This screening produced a listing of 62 Potential Site Locations which were then subjected to more refined analysis to create a listing of 21 Preliminary Site Locations.

Q: How then were the final or preferred site locations determined?

A: The study employed a quantitative analysis matrix that rated six specific criteria: (1) property ownership, (2) bus generator capacity, (3) distance to bus, (4) distance to natural gas pipeline, (5) natural gas pipeline size, and (6) natural gas availability. This analysis ultimately resulted in the identification of six Preferred Site Locations – three in Kansas and three in Missouri. The Viola site, the Hutchinson Energy Center and Nodaway site were included among the Preferred Site Locations. The site evaluation criteria matrix, including the scoring associated with each factor, is shown in Table 3 below.

Table 4: Site Evaluation Criteria Matrix

CRITERIA	ATTRIBUTE	SCORE
Property ownership	Evergy owned	5
	Privately owned or Evergy leased	3
Bus generator capacity	>1000 MW	5
	600-1000 MW	3
	<600 MW	1
Distance to bus	0-3 mi	5
	3-6 mi	3
	>6 mi	1
Distance to natural gas pipeline	0-1 mi	5
	1-5 mi	3
	>5 mi	1
Natural gas pipeline size	>20 in	5
	10-20 in	3
	<10 in	1
Natural gas availability	High	5
	Moderate	3
	Low	1

Q: Is the McNew site within the Hutchinson Energy Center property?

A: No. The McNew site is not within the Hutchinson Energy Center property. As Evergy began exploring adding a CCGT to the Hutchinson Energy Center, it became apparent that gas supply to the site would be an issue. So, Evergy engaged the Hutchinson/Reno County Chamber of Commerce ("Chamber") to begin looking for an alternate site with better gas availability, similar transmission, and water availability. The Chamber presented several options to Evergy, including the McNew site. The McNew site has several high-pressure natural gas lines located on site, existing water rights and wells, and is roughly 12 miles from the Reno 345kV substation. After reviewing the property with BMcD, Evergy began moving forward with the McNew site instead of the Hutchinson Energy Center.

Q: Will Evergy make any local infrastructure improvements in connection with these projects?

A: Yes, Evergy will work with the local communities and make necessary infrastructure improvements. This typically includes road improvements made pursuant to a Road Use and Maintenance Agreement.

Q: What is the current status of the Viola site?

A: The Viola site is located directly across the street from Evergy's Viola 345kV substation. The site is currently owned by Evergy and is a mixture of natural land, substation laydown and leased farming land. **Schedule JKO-5**, attached, shows the Viola site location as well as the planned site improvements and equipment layout.

Q: Does Evergy have the rights to the land for the Viola site?

A: Yes. Evergy owns that land.

Q: What is the current status of the McNew site?

A: The McNew site is located directly on McNew and Morgan Street in Reno County, approximately 12 miles from the Reno 345kV Substation. The site is currently farmland. **Schedule JKO-6**, attached, shows the McNew site location as well as the planned site improvements and equipment layout.

Q: Does Evergy have the rights to the land for the McNew site?

A: Yes. Evergy has a purchase option for the proposed project site and is currently in the due diligence period. The due diligence process is progressing well, and Evergy expects to close on the purchase of the property by March 2026.

Q: What is the current status of the Mullin Creek #1 site?

A: The Mullin Creek site is located directly south of the Mullin Creek substation in Nodaway County. The site is currently farmland. **Schedule JKO-7**, attached, shows the Mullin Creek #1 site location as well as the planned site improvements and equipment layout.

Q: Does Evergy have the rights to the land for the Mullin Creek #1 site?

A: Yes. Evergy has a purchase option for the proposed project site and is currently in the due diligence period. The due diligence process is progressing well, and Evergy expects to close on the purchase of the property by May 2026.

Q: Does Evergy plan a Mullin Creek #2 project? What common equipment would these units share?

A: Yes. Evergy's 2024 Triennial IRP calls for an addition SCGT for Evergy Metro. This unit is expected to go into service in 2032 and is not included in this docket. Mullin Creek #1 and Mullin Creek #2 would share an Operations and Maintenance ("O&M") building and a shared service and fire water tank.

V. POWER ISLAND EQUIPMENT

Q: How did Evergy select the Power Island Equipment ("PIE") for the Viola, McNew, and Mullin Creek #1 projects?

A: Evergy conducted a competitive solicitation for the PIE, which constitutes the major plant components – *i.e.*, the combustion turbines, generators, heat recovery steam generator ("HRSG"), emissions control equipment, and steam turbines.

Q: Please describe the process by which Evergy developed the RFP for the PIE.

A: Evergy, along with BMcD and an outside law firm, developed the RFP. The RFP consisted of commercial and technical specifications that were consistent with Evergy's specific

needs. It was determined that a competitive bid process for the PIE would provide a viable process to ensure cost competitiveness in development of the projects. Evergy began developing the RFP in the Spring of 2024 and released it on July 10, 2024. Bids were due back on September 18, 2024.

Q: What turbine providers were invited to make bids under the PIE RFP?

A: Evergy invited bids from General Electric Vernova ("GEV"), Siemens Energy ("Siemens"), and Mitsubishi Power Americas ("MPWA"). These three bidders are the only companies in the market that have offerings which will meet Evergy's need for an advanced class GT of sufficient capacity. It was decided that all three would be included in the process as both Evergy and BMcD believed all three would be interested in participating and were capable of submitting a competitive offering.

Q: What products and services did the PIE RFP solicit from bidders?

A: Bidders were asked to propose design, engineering, firm pricing, and scheduling for the provision of the PIE for the Viola project, the McNew project, and the Mullin Creek #1 project, along with option pricing for an additional CCGT with a commercial operations date ("COD") of 2031 and an additional simple-cycle unit with a COD of 2032. The CCGT PIE included an advanced class natural gas-fired combustion turbine generator ("CTG"), a HRSG with duct firing and a selective catalytic reduction system ("SCR"), a steam turbine generator ("STG"), and a GT inlet air evaporative cooling system. The SCGT PIE included an advanced class natural gas-fired CTG, a GT inlet air evaporative cooling system and a hot SCR. Bidders were asked to submit a technical package summarizing the equipment offered under their proposals along with completed proposal pricing, proposal data pages, and Clarifications and Exceptions ("C&E") to the technical specification and commercial

terms. The RFP requested firm pricing for the stated scope of work as identified in the Technical Specification. Pricing for the identified options was requested as separate firm prices.

Q: How did the RFP process proceed once it was open for bids?

A: Potential bidders had three days from the July 10, 2024, RFP launch date to email Evergy their "Intent to Bid" form indicating their formal intention to submit a proposal for the work covered in the RFP. Responses from each bidder confirming their intent to bid were received within the required deadline. As part of the RFP package, there was a "Bid Period Question Log" form made available to the bidders to submit questions to the Evergy Project Team regarding the RFP. All bidders had until September 4, 2024 to submit their questions. As questions were received from bidders, Evergy's responses to the submitted questions were uniformly issued to all three bidders. Four responses from Evergy to address all bidder questions were provided on August 5, 2024, August 13, 2024, August 20, 2024, and September 9, 2024. All bids for the PIE base scope were required to be submitted in final form by September 18, 2024.

Q: Briefly describe the bids submitted in response to the RFP.

A: There were three proposal packages submitted into the RFP by the September 18, 2024, deadline: one from GEV, one from MPWA, and one from Siemens. Each of the three bids included proposals to provide the base PIE items that were requested in the RFP, those being the CTG, the HRSG, and the STG. Both GEV and MPWA provided firm pricing as requested. Siemens provided budgetary pricing only. Table 4, below, shows the proposal breakdown.

**

Table 5: Power Island Equipment RFP Bids

Metric	Mitsubishi	GE	Siemens
Plant Output	710 MW	[redacted]	[redacted]
Price	[redacted]	[redacted]	[redacted]
Price/kW	[redacted]	[redacted]	[redacted]
Heat Rate (HHV)	[redacted]	[redacted]	[redacted]
Reliability Guarantee	[redacted]	[redacted]	[redacted]
LTSA Cost/Hour	[redacted]	[redacted]	[redacted]
Commercial Exceptions (L/M/H)	Low	Medium	Very High Budgetary Only

**

**

**

Table 6: SCGT Power Island RFP Bids

Metric	Mitsubishi	GE	Siemens
Plant Output	**440 MW**	[redacted]	[redacted]
Price	[redacted]	[redacted]	[redacted]
Price/kW	[redacted]	[redacted]	[redacted]
Heat Rate (HHV)	[redacted]	[redacted]	[redacted]
Reliability Guarantee	[redacted]	[redacted]	[redacted]
LTSA Cost/Start	[redacted]	[redacted]	[redacted]
Commercial Exceptions (L/M/H)	Low	Medium	Very High Budgetary Only

**

CONFIDENTIAL

Q: Please provide an overview of Evergy's evaluation of the PIE bid proposals and the methodology used to evaluate the bids.

A: Before issuing the PIE solicitation, Evergy developed an evaluation matrix by which all bids would be comparatively scored in order to document the scoring and selection process. This evaluation matrix considered the main evaluation points identified to the bidders and was developed with weighted percentages for main categories. BMcD initially evaluated the bids for their technical compliance with the specifications and instructions included in the RFP. While the GE and MPWA bids were generally complete and complied with the intent of the solicitation, the Siemens proposal included budgetary pricing, and thus failed to meet the requirements set forth in the RFP. The proposals were then evaluated and scored using the aforementioned evaluation matrix, which focused on the following primary criteria: (1) revenue requirement; (2) commercial and technical RFP compliance; (3) project risk; and (4) Schedule Compliance. Upon completion of the scoring efforts, MPWA ranked highest, GEV second, and Siemens third. Given the large pricing discrepancy between MPWA and GEV, Evergy began moving forward with commercial and technical negotiations with MPWA only.

Q: Is the MPWA JAC combustion turbine both proven and advanced?

A: Yes. The MPWA J technology, which was introduced in 2011, featured steam for cooling certain combustion hardware. In 2015, the MPWA JAC was introduced, providing the latest air-cooled design and eliminating the need for steam. The MPWA JAC series represents a technological advancement in large capacity combustion turbine technology. This facility captures the combination of proven frame gas turbine technologies. This facility offers

values comparable to other similarly sized gas turbines, dispatch reliability, turndown and load following capabilities, and low mass emissions.

Q: What is the status of the supply agreement with MPWA?

A: Evergy and MPWA are currently negotiating the terms of a fixed-price PIE Supply Agreement for the Viola, McNew and Mullin Creek #1 projects. To support the construction schedules for these projects and lock in the negotiated pricing from the RFP, Evergy has entered into Reservation Agreements with MPWA to reserve manufacturing capacity before finalizing the PIE Supply Agreement, which is expected to occur on or before December 20, 2024. The purpose of the Reservation Agreements is to maintain equipment manufacturing, pricing, and delivery dates necessary to support the planned commercial operation dates for each project.

Q: When were the Reservation Agreements executed?

A: They were executed on October 31, 2024.

Q: What obligations do the Reservation Agreements impose on MPWA?

A: MPWA must convey to Evergy assurance that the necessary manufacturing slot space has been irrevocably reserved and that the subject Long Lead Equipment for the projects can be delivered on or before scheduled dates.

Q: What are Evergy's payment obligations under the Reservation Agreements?

A: Evergy is required to pay a total of **[redacted]** of the estimated contract price for the three projects in three separate **[redacted]** payments commencing no later than November 6, 2024. The final **[redacted]** payment is to be made no later than April 17, 2025.

Q: How will the payments be allocated to the separate projects?

A: Each project has its own dedicated Reservation Agreement which includes a payment schedule for each unit based on the specific unit price. Each project will be allocated only those costs attributable to its particular units.

Q: What is the expected output of the CCGT projects with the Mitsubishi PIE?

A: Both projects are designed with a nominal output of 710 MW each. The actual maximum output of the unit will depend on the following variable factors and conditions: ambient temperature, relative humidity, Btu content of fuel delivered at the unit, and number of operating hours since the last maintenance interval. By way of illustration, in a new and clean condition, both projects would be expected to generate approximately 710 MW each, based on ISO ambient conditions of 58.3 degrees Fahrenheit and 63.4% relative humidity. Under summer conditions of 81.2 degrees Fahrenheit and 58.7% relative humidity, both projects would be expected to generate approximately 705 MW each.

Q: What is the expected output of the SCGT projects with the Mitsubishi PIE?

A: Mullin Creek #1 is designed with a nominal output of 440 MW. The actual maximum output of the unit will depend on the following variable factors and conditions: ambient temperature, relative humidity, Btu content of fuel delivered at the unit, and number of operating hours since the last maintenance interval. By way of illustration, in a new and clean condition, the project would be expected to generate approximately 440 MW each, based on ISO ambient conditions of 55.8 degrees Fahrenheit and 68.8% relative humidity. Under summer conditions of 77.7 degrees Fahrenheit and 66.7% relative humidity, the project would be expected to generate approximately 430 MW each.

Q: Is the selected MPWA 501 JAC gas turbine hydrogen capable?

A: By design, the gas turbine is capable of approximately 30% hydrogen firing, with the capability of supporting 100% hydrogen firing in the future with upgrades.

Q: What HRSG manufacturer is MPWA providing as part of their offer?

A: MPWA is providing a Nooter Eriksen HRSG as part of their offer.

Q: How does Evergy intend to manage long-term major maintenance associated with the Viola, McNew, and Mullin Creek #1 projects?

A: Given that self-performance of major long-term maintenance would not be a practical or effective option in the near future due to the complexity and lack of alternate part suppliers for advanced class gas turbines, Evergy is negotiating and currently planning to enter into a long-term service agreement ("LTSA") for maintenance with MPWA. The LTSA is expected to provide a defined scope of major maintenance activities and a variable-fee mechanism based on the number of accumulated operational hours. Outside of the LTSA, Evergy will manage major maintenance of the HRSG (if applicable) and other balance of plant items as part of an ongoing O&M program, similar to the programs at other Evergy plants.

VI. ENGINEER, PROCURE, AND CONSTRUCT CONTRACTOR

Q: How is Evergy selecting the EPC contractor for the Viola, McNew, and Mullin Creek #1 projects?

A: Evergy is conducting a competitive solicitation for the EPC contractor. The EPC contractor will be responsible for the engineering, procurement and construction for the projects.

Q: Please describe the process by which Evergy developed the EPC contract RFP.

A: Evergy, along with BMcD and an outside legal firm, developed the RFP which consisted of commercial and technical specifications that was consistent with Evergy's needs. It was determined that a competitive bid process for the EPC equipment would provide a viable process to ensure cost competitiveness in development of the project. Evergy began developing the RFP in the Summer of 2024 and released the RFP on October 15, 2024. Bids are due on January 31, 2025.

Q: What EPC contractors were invited to bid on the projects?

A: Evergy conducted a search for qualified EPC contractors starting in 2023. Evergy spoke with many EPC contractors and conducted site and office visits. Ultimately, Evergy invited Kiewit, Black & Veatch, and Gemma Power Systems to bid in the RFP process. These three contractors are the only EPC contractors in the market that have advanced-class experience and can offer the labor requirements. It was decided that all three would be included in the process as both Evergy and BMcD believed all three would be interested in participating and capable of submitting a competitive offering.

Q: What did the EPC RFP solicit from the bidders?

A: Bidders were asked to provide pricing for the engineering, procurement, and construction of three new generating stations: the Viola project, the McNew project, and Mullin Creek #1 project. Additionally, bidders were asked for option pricing for an additional CCGT with a COD of 2031 and an additional simple-cycle unit with a COD of 2032. The winning EPC bidder will be responsible for receiving, installing, and commissioning owner furnished equipment as well as interconnecting to site external facilities (gas lines, transmission lines, effluent discharge, etc.). The winning EPC bidder will provide a wrap

agreement to furnish all other equipment, material, coordination, engineering, construction, and commissioning necessary to yield fully functional stations. Bidders were asked to submit a technical package summarizing their offerings, completed proposal pricing and proposal data pages, and Clarifications and Exceptions ("C&E") to the technical specification and commercial terms. The RFP requested firm pricing for the stated scope of work as identified in the Technical Specification. Pricing for the identified options was requested as separate firm prices.

Q: How is the EPC RFP proceeding?

A: The EPC RFP is proceeding as expected. Potential bidders had three days from the October 15, 2024 launch of the EPC RFP to email Evergy their "Intent to Bid" form indicating their formal intentions to submit a proposal for the work covered in the RFP. Responses from all bidders confirming their intent to bid were timely received on October 15, 2024. As part of the RFP package, there was a "Bid Period Question Log" form made available to the bidders to submit questions to the Evergy project team regarding the RFP. Currently, the RFP's Open Question Period is active, so all bidders have until January 16, 2025 to submit their questions. The currently scheduled close date for all bidders to have their proposal submitted is January 31, 2025.

Q: Why use an EPC contractor in the first place?

A: Large construction projects such as the Viola, McNew, and Mullin Creek #1 projects are substantial undertakings, and Evergy does not have the in-house capability necessary to execute the EPC for such projects. The use of an EPC contractor that can perform all these functions under a single contract is cost-effective and common within the power generation industry for such projects.

Q: Is there a single common form of EPC contract?

A: No. There are several types of EPC contracting approaches, and the suitability or desirability of each depends largely on the type of project. From an owner's perspective, fixed-price contracts are preferred because of the certainty they provide regarding a project's overall cost. When a project's scope of work is uncertain and likely to vary, however, EPC providers will either refuse to contract on a fixed-price basis or perhaps agree to do so in exchange for a significant risk premium added to the fixed price. In contrast, when a project entails a well-defined scope of work and presents an acceptable risk of material changes in scope, EPC providers are more willing to contract on a fixed-price basis without charging a significant risk premium.

Q: What EPC contracting strategy will be utilized for the projects?

A: Evergy intends to negotiate a fixed-price (with certain exceptions), fixed schedule form of EPC contract with the selected EPC contractor that reflects a detailed scope of work. For the Viola, McNew, and Mullin Creek #1 projects, Evergy will require the contractor to complete construction by January 1, 2029, and January 1, 2030, respectively, or pay daily liquidated damages as defined in the commercial specifications.

Q: Why did Evergy elect to use this form of EPC contract?

A: The EPC strategy used by Evergy is expected to yield the lowest reasonable cost with an adequate level of risk mitigation.

VII. COST ESTIMATES

Q: How did Evergy develop the overall cost estimate for the projects?

A: The following resources were used to develop the two major cost components for the projects:

- BMcD's Class IV EPC cost estimates ("EPC Costs") - BMcD provided a cost estimate based on preliminary engineering developed with the project-specific information gathered by the project team.
- Costs outside the EPC agreement ("Non-EPC Costs") - The project team developed these costs using internal subject-matter experts.

Q: How were the EPC cost estimates developed?

A: After project scope was defined and key engineering documents were prepared, BMcD's preconstruction team worked with Evergy to develop comprehensive AACE Class-4 cost estimates for both projects.[2] These cost estimates were prepared to support regulatory review and internal budgeting, and relied on historical project quantities for comparison.

Q: Has Evergy benefitted from BMcD's extensive EPC contractor experience?

Yes. Evergy has benefitted significantly from BMcD's direct EPC contractor experience during the cost estimating phase. To ensure a high level of project definition and design development, each discipline lead was responsible for defining materials of construction and obtaining budgetary equipment pricing to support the estimating team in determining quantities of commodities for the facilities.

Q: When were the AACE Class-4 cost estimates received?

A: The AACE Class-4 cost estimates were received on October 21, 2024. The estimates were delivered at a summary level with breakdown of all direct labor hours, direct labor cost, material costs, equipment costs, and indirect costs. A cost-estimate basis also was provided,

[2] An AACE Class-4 cost estimate is a preconstruction cost estimate used primarily for feasibility analysis, concept evaluation, and preliminary budget approval.

including major assumptions and information used. The cost estimates are included here as **Confidential Schedules JKO-8, JKO 9** and **JKO-10**.

Q: What kinds of costs are included in the EPC cost estimates?

A: The EPC cost estimates consist of costs that will be incurred by the EPC and billed to Evergy in the performance of the EPC contract, including the following:

- Engineered equipment, including the air-cooled condenser, boiler feed pumps, and auxiliary transformers;
- Home office engineering and construction management services, including procurement, project controls, scheduling, and progress tracking;
- Supervisory and administrative staffs at the construction site;
- Craft laborers (such as welders, electricians, and pipefitters);
- Construction materials (copper, steel, concrete, etc.) used by both the EPC Consortium and subcontractors;
- Subcontractors;
- The indirect construction costs that support the construction project (such as scaffolding, administrative offices, or safety equipment);
- Sales taxes borne by the EPC Consortium on consumables; and
- Labor and materials associated with the dedicated start-up and commissioning teams.

Q: What is the current estimate of the capital costs to complete the Viola project?

A: The current capital cost estimate for the Viola project is approximately **[redacted]**. This amount includes **[redacted]** associated with the generation portion of the project, or roughly **[redacted]** per kW. It also includes **[redacted]** in estimated

Interconnection Facilities costs and, as Evergy witness Katy Onnen explains in her direct testimony, the cost for required transmission Network Upgrades, which is currently estimated at ** [redacted] **. The itemized capital cost estimate for the Viola project is attached as **Confidential Schedule JKO-11.** The total estimate of capital costs for the Viola project includes the EPC estimate developed by BMcD and the identification of expected costs for all items outside of the EPC contract.

Q: What is the current estimate of the capital costs to complete the McNew project?

A: The current capital cost estimate for the McNew Project is approximately ** [redacted] **. This amount includes ** [redacted] ** associated with the generation portion of the project, or roughly ** [redacted] ** per kW. It also includes ** [redacted] ** in estimated Interconnection Facilities costs and, as Evergy witness Katy Onnen explains in her direct testimony, the cost for required transmission Network Upgrades, which is currently estimated at ** [redacted] **. The itemized capital cost estimate for the McNew Project is attached as **Confidential Schedule JKO-12.** The total estimate of capital costs for the McNew project includes the EPC estimate developed by BMcD and the identification of expected costs for all items outside of the EPC contract.

Q: What is the current estimate of the capital costs to complete the Mullin Creek #1 project?

A: The current capital cost estimate for the Mullin Creek #1 Project is approximately ** [redacted] **. This amount includes ** [redacted] ** associated with the generation portion of the project, or roughly ** [redacted] ** per kW. It also includes ** [redacted] ** in estimated Interconnection Facilities costs and, as Evergy witness Katy Onnen explains in her direct testimony, the cost for required transmission Network Upgrades, which is

currently estimated at ** [redacted] **. The itemized capital cost estimate for the McNew Project is attached as **Confidential Schedule JKO-13.** The total estimate of capital costs for the McNew project includes the EPC estimate developed by BMcD and the identification of expected costs for all items outside of the EPC contract.

Q: For what items does Evergy have definitive cost estimates?

A: Evergy currently has definitive cost estimates for the land, PIE, GSU, OE and 345kV breakers. We are still waiting on definitive cost estimates for the EPC pricing. This EPC pricing, as I previously testified, has been estimated by BMcD.

Q: When do you anticipate the definitive cost estimates for the EPC pricing will be available and filed with the Commission?

A: I anticipate definitive EPC cost estimates to be available in February 2025. By then Evergy will have the complete EPC bids and will be finalizing selection of the EPC contractor. As company witness Kevin Gunn discusses in his direct testimony, Evergy is proposing a schedule in this docket that will allow us to provide the final definitive cost estimates for EPC pricing to the Commission in supplemental testimony in February, in advance of the deadline for other parties to file their testimony.

Q: Does Evergy expect the final EPC definitive cost estimates will vary significantly from the BMcD AACE Class-4 cost estimates?

A: No. We expect there will be no material variations between the definitive cost estimates and the BMcD cost estimates. The BMcD cost estimates are comprehensive and well-documented, and the process, sources and methods used to formulate the estimates are credible and sound.

Q: What information will you review to assess the reasonableness of the EPC definitive cost estimate?

A: Evergy is continuously monitoring and reviewing other regulatory filings, such as CCN filings and published Integrated Resource Plans ("IRPs"). These filings include similar plants with similar equipment selection and configurations and provide a good benchmark for assessing the reasonableness of EPC cost estimates.

Q: As a professional with extensive experience in the power plant construction industry, what have you observed in the marketplace in recent years related to natural gas power plant construction cost trends.

A: I have observed a significant increase in construction cost trends. The most recent project for which I provided oversight went commercial in 2023 and experienced large price increases as the project neared completion. These cost increases began during COVID and continued to increase as a result of Russia's invasion of Ukraine. Costs have further increased as utilities across the country have announced plans for additional builds. This large demand in new builds has further caused pricing to increase as both PIE and EPC contractors have limited capacity and are having to expedite and work overtime to keep up with demand.

VIII. RISK MITIGATION

Q: How has Evergy mitigated the risks affecting the project schedules and projected costs?

A: The fixed-price structure and well-defined scope of work that will be part of the EPC contract are the principal mitigation tools to minimize the effect risks might have on project costs. Delays in receiving regulatory approvals or required permits beyond the dates

assumed in the project schedules will increase total costs and result in delayed in-service dates. The project schedules have been developed by optimizing the sequence of activities to produce the shortest practical schedules at the lowest reasonable cost. The schedules have built-in contingencies for critical path activities that will help mitigate short delays.

Q: Are the contingencies reflected in the project cost estimates designed to cover all risks that could increase cost?

A: No. That is not the purpose of contingency funds in project management. Contingency is used to reasonably mitigate unplanned increases in project cost, whether caused by known risks or unforeseen risks. It recognizes that large construction projects that span several years can be adversely affected by events beyond Evergy's control. Evergy has proposed a contingency fund that would provide a reasonable level of mitigation of known and unknown risks on each project, but it is possible some of these risks, if realized, could cause cost increases beyond the contingencies included in the cost estimates. Evergy does not seek to recover any unused project contingency.

Q: Please discuss some of the potential risk mitigations expected to be contained in the EPC contract.

A: While the EPC contract with the selected EPC contractor is not yet executed, Evergy's RFP requests a fixed price and a fixed schedule. While any fixed-price contract presents a risk of price increases through change orders and extra work claims, this risk has been mitigated to the extent possible by broadly defining the scope of work assigned to the EPC Contractor. This scope includes everything necessary to ensure the completed Viola, McNew, and Mullin Creek #1 projects meet the technical specification and performance

requirements, except for items expressly stated in the scope document to be Evergy's responsibility.

Q: Does the design of the Viola, McNew, and Mullin Creek #1 projects reflect storm resilience and hardening considerations?

A: Yes. Evergy has considered extreme weather conditions such as temperature, wind, and flooding in the design of the projects. The CCGT projects' current design allows each facility to continue conducting normal operations in temperatures as low as approximately -10 degrees Fahrenheit. Mullin Creek #1's current design allows each facility to continue conducting normal operations in temperatures as low as approximately –35 degrees Fahrenheit.

Q: What risks are associated with delaying this filing until a definitive EPC cost estimate is available?

A: Delays in receiving the regulatory approvals provided in the project schedules will increase total costs and result in delayed in-service dates. Additionally, Evergy expects EPC pricing to be valid for 30-90 days only. This timeframe does not allow Evergy to prepare, file and complete this docket during the validity period and would result in the definitive cost estimate being invalid before the docket is finished.

IX. FUEL GAS SUPPLY PLAN

Q: Please provide an overview of Evergy's plan to supply natural gas fuel to the new CCGT and SCGT facilities?

A: Evergy has engaged interstate pipelines to discuss infrastructure upgrades necessary to connect the new CCGT and SCGT facilities to the natural gas system. Evergy has asked for increasingly more detailed and thorough studies to estimate the costs of these

infrastructure upgrades. Evergy would prefer that these companies recover their investments via existing tariff rates over a relatively short period of time (10-15 years) when compared to the life expectancy of the new generation. This will allow the customer to pay for the upgrades over time and would be similar to how firm transport is paid for today at existing sites. This will ensure that Evergy can flow natural gas to the sites via firm natural gas transport contracts.

Q: What work has been done, and what work remains to be done, in this area to prepare for the new simple cycle builds?

A: As stated above, conversations and analysis have already begun with the pipelines regarding the infrastructure needs of the new CCGT and SCGT generation. All desktop level estimates have been secured and Evergy is currently working with the pipelines to perform more detailed studies, sometimes referred to as Class 3 or Class 4 studies. Evergy anticipates most of these studies will be completed in Q1 of 2025. Once a project is determined to be feasible and necessary for the new generation to be built, the parties would then execute a precedent agreement that would allow the pipelines to begin developing the infrastructure to be in place ideally 6-9 months ahead of the anticipated COD of the generation.

Q: Will Mullin Creek #1 also have the option to run on liquid fuel?

A: Yes. Mullin Creek #1 will also have the option to run on liquid fuel. The project will include a liquid fuel tank sized for 48 hours at full load and fuel unloading stations.

X. IN-SERVICE DATES AND STATUS REPORTS

Q: When will the projects be considered in service?

A: The projects will be considered in service when:

1. All major construction work is complete.
2. All preoperational tests have been successfully completed.
3. Unit is in compliance with air permit requirements for operation.
4. Unit successfully demonstrates its ability to initiate the proper start sequence resulting in the unit operating from zero (0) rpm (or turning gear) to full load when prompted at a location (or locations) from which it is normally operated.
5. Unit successfully demonstrates its ability to initiate the proper shutdown sequence from full load resulting in zero (0) rpm (or turning gear) when prompted at a location (or locations) from which it is normally operated.
6. Unit successfully demonstrates its ability to operate at minimum load for one (1) hour.
7. Unit successfully demonstrates its ability to operate at or above 95% of nominal capacity for four (4) continuous hours.
8. Unit successfully demonstrates its ability to produce an amount of energy (MWhr) within a 72-hour period that results in a capacity factor of at least 30% during the period when calculated by the formula: capacity factor = (MWhr generated in 72 hours) / (nominal capacity x 72 hours).
9. Sufficient transmission interconnection facilities shall exist for the total plant design net electrical capacity at the time the unit is declared fully operational and used for service per the SPP Interconnection Agreement.
10. For Mullin Creek #1 only, the unit successfully demonstrates its ability to start on the back up/secondary fuel as described in item 4.

11. For Mullin Creek #1 only, the unit successfully demonstrates its ability to transfer between the two fuels while on line.

Q: Will Evergy provide periodic reports over the course of construction in order to keep the Commission and stakeholders apprised of project status?

A: Yes. Evergy is planning to submit quarterly project status updates.

Q: Does this conclude your testimony?

A: Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West and Evergy Metro, Inc. d/b/a Evergy Missouri Metro for Permission and Approval of a Certificate of Public Convenience and Necessity For Natural Gas Electrical Production Facilities	)	Case No. EA-2025-0075

AFFIDAVIT OF KYLE OLSON

STATE OF MISSOURI)
) ss
COUNTY OF JACKSON)

Kyle Olson, being first duly sworn on his oath, states:

1. My name is Kyle Olson. I work in Kansas City, Missouri and I am employed by Evergy Metro, Inc. as Director of Conventional Generation Development and Construction.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Evergy Missouri Metro and Evergy Missouri West consisting of thirty-seven (37) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Kyle Olson

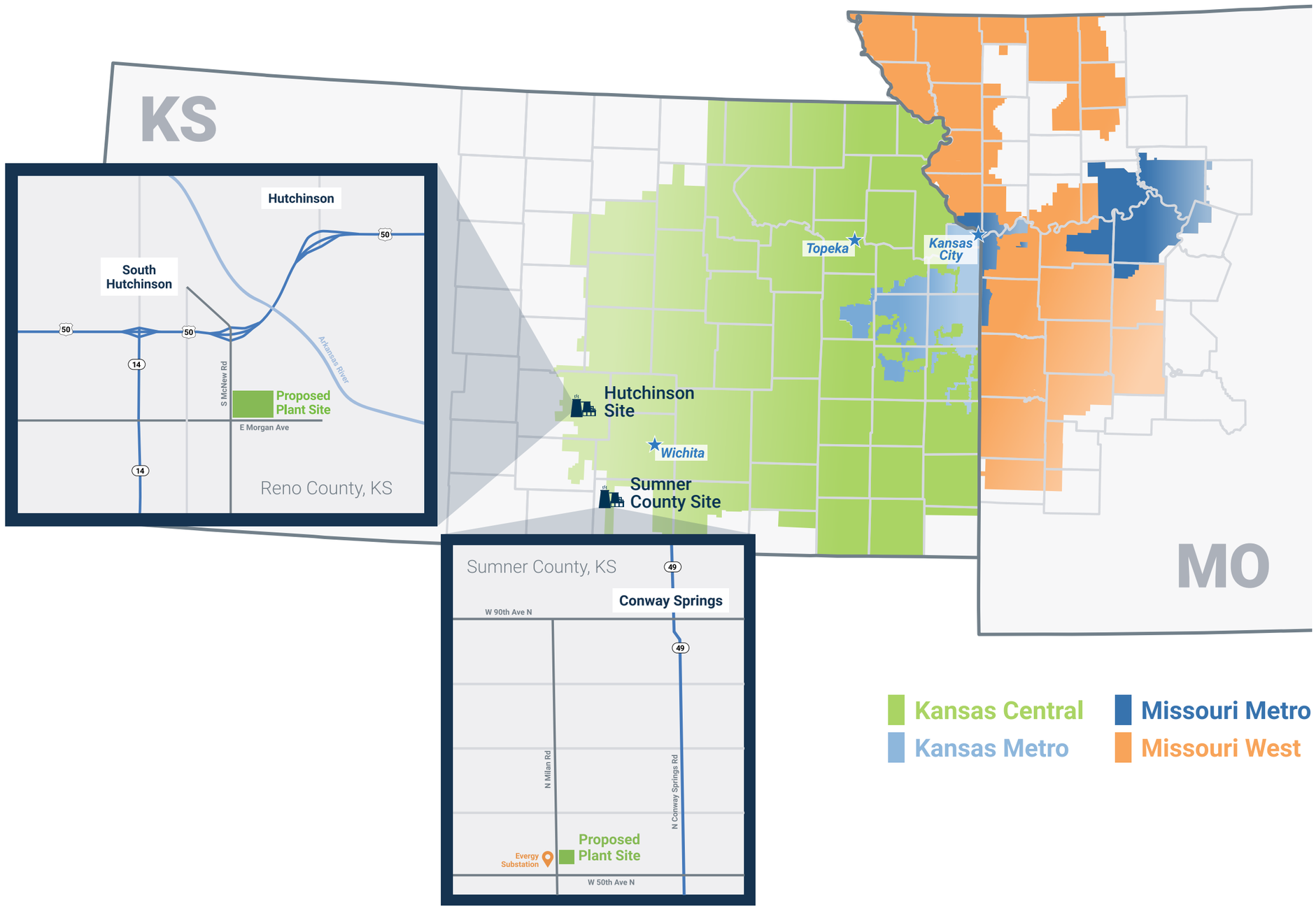
Subscribed and sworn before me this 15th day of November 2024.

Notary Public

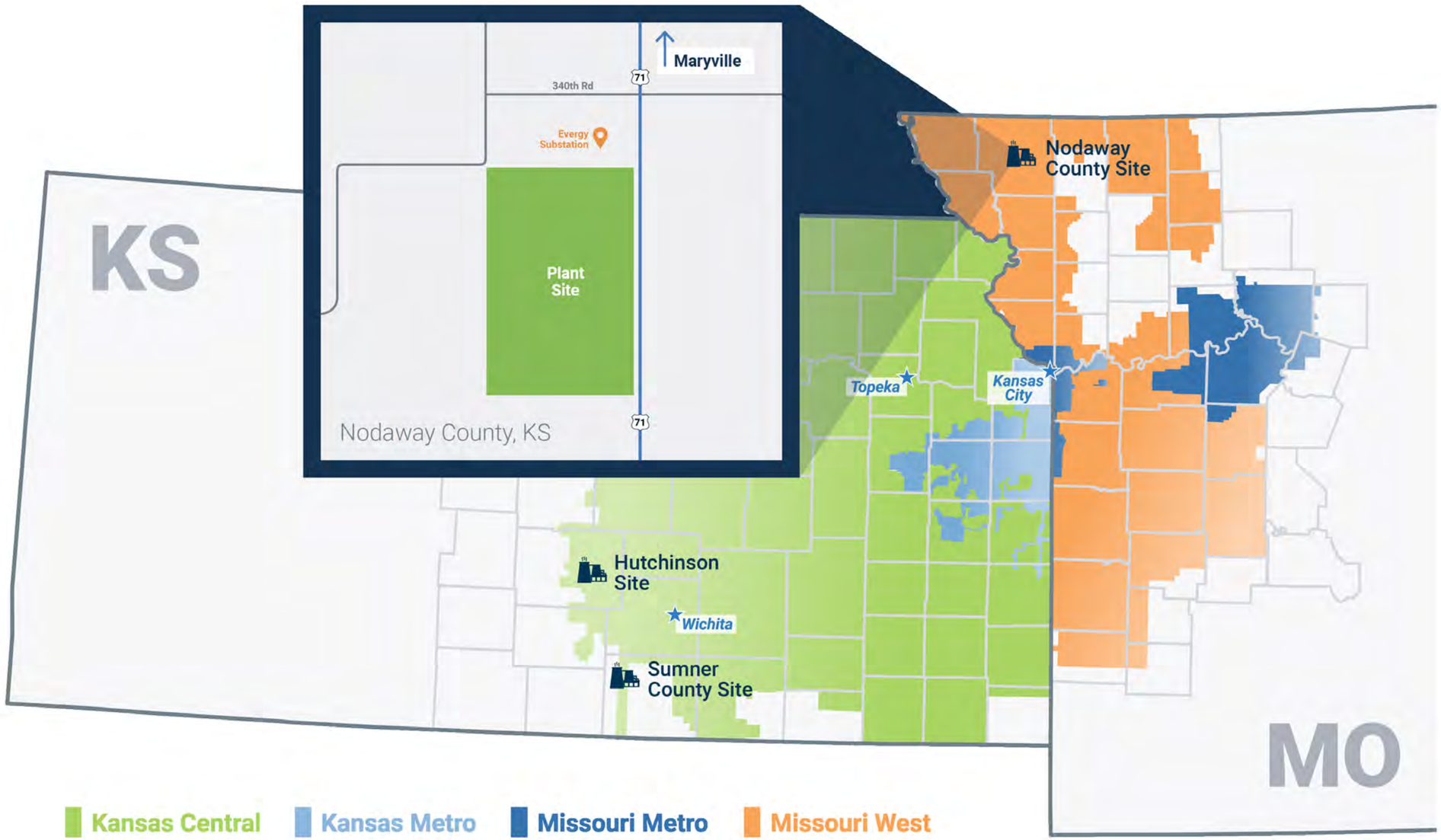
My commission expires: 4/26/2025

ANTHONY R. WESTENKIRCHNER
NOTARY PUBLIC - NOTARY SEAL
STATE OF MISSOURI
MY COMMISSION EXPIRES APRIL 26, 2025
PLATTE COUNTY
COMMISSION #17279952

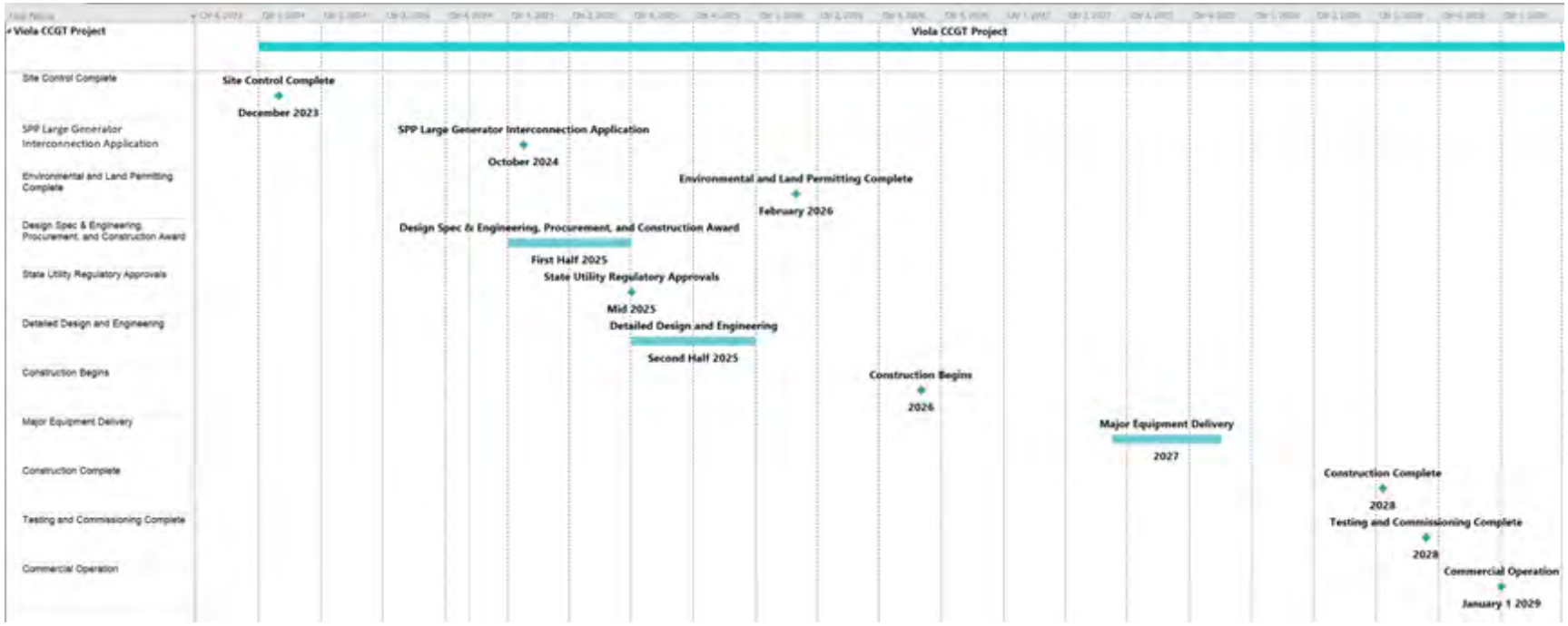
Viola and McNew Project Sites



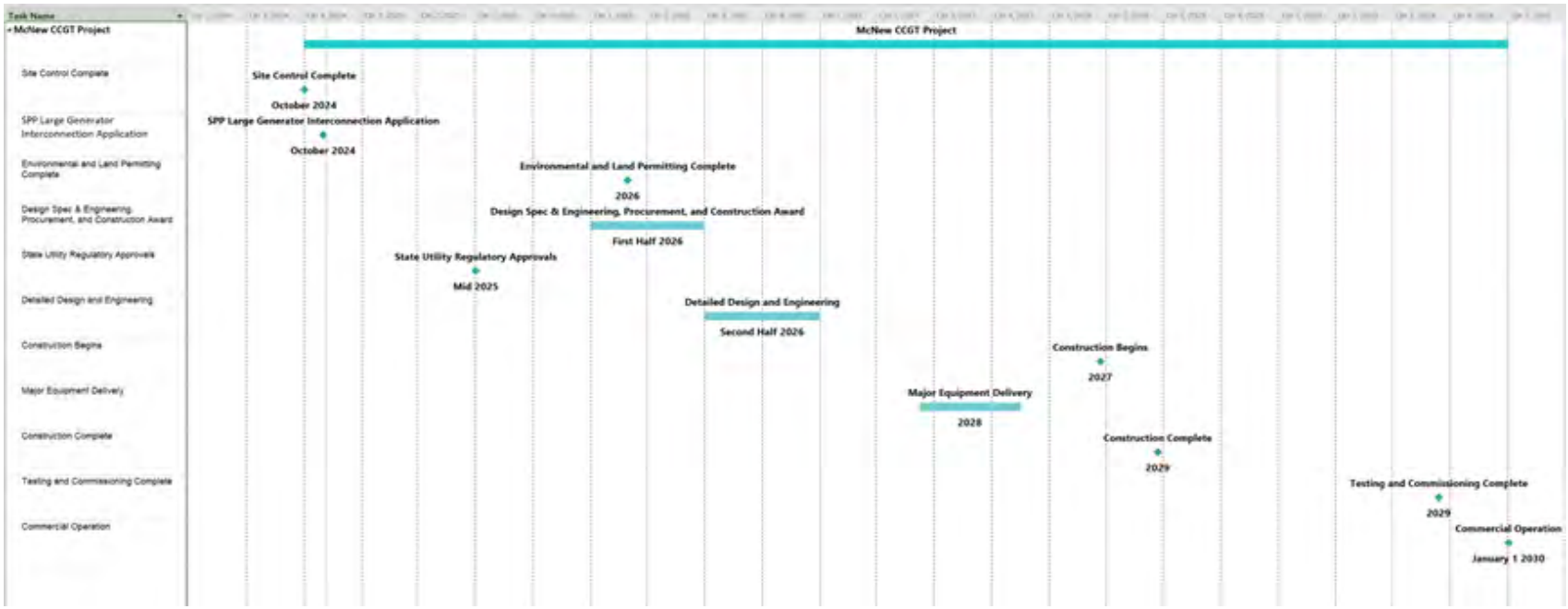
Mullin Creek #1 Project Site



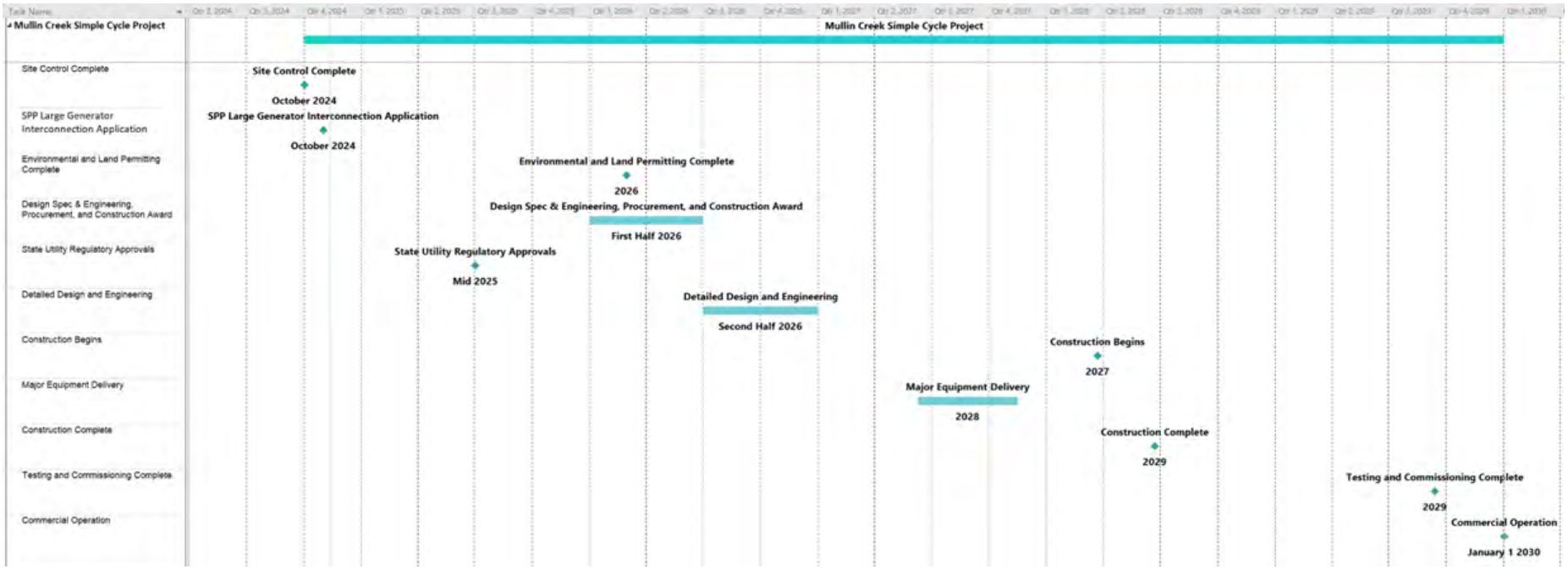
High-level schedule for the Viola Project



High-level schedule for the McNew Project



High-level schedule for the Mullin Creek #1 Project



EQUIPMENT IDENTIFICATION AND LOCATION LIST	
DWG REF	DESCRIPTION
001	UNIT 1 COMBUSTION TURBINE
002	UNIT 1 STEAM TURBINE
003	UNIT 1 HEAT RECOVERY STEAM GENERATOR
004	UNIT 1 AIR COOLED CONDENSER
005	SERVICE / FIREWATER STORAGE TANK
006	DEMINERALIZED WATER STORAGE TANK
007	WATER TREATMENT BUILDING
008	ADMIN BUILDING
009	GAS YARD
010	STORMWATER POND
011	RESERVED FOR LAYDOWN
012	SPACE FOR FUTURE UNIT 2
013	SANITARY LEECH FIELD

STACK COORDINATES		
ITEM	NORTHING	EASTING
UNIT 1	1556093.5409	1553640.1978

EQUIPMENT COORDINATES		
ITEM	NORTHING	EASTING
DIESEL FIRE WATER PUMP	1556356.6478	1553482.5227
UNIT 1 AUX BOILER	1556116.6654	1553650.6334
GAS DEWPOINT HEATER 1	1556955.8601	1552469.3162
GAS DEWPOINT HEATER 2	15569757.5195	1552538.8125
UNIT 1 DIESEL GENERATOR	1556213.0042	1553202.0509

PROPERTY BOUNDARY
OVERHEAD UTILITY EASEMENT
DEWPOINT HEATERS
FENCELINE
009
012
007
006
008
005
UNIT 1 DIESEL EMERGENCY GENERATOR
DIESEL FIRE PUMP
011
UNIT 1 AUX BOILER
UNIT 1 STACK
002
001
003
004
LOCKED GATE
013
010
OVERHEAD UTILITY EASEMENT
OVERHEAD UTILITY EASEMENT
PROPERTY BOUNDARY

Millimeters
Scale For Microfilming
Inches

NOTES:
1. ONLY SELECTED EQUIPMENT ITEMS ARE IDENTIFIED ON DRAWING.
2. EPC SHALL WORK TO KEEP ALL EMISSION POINTS IN LOCATIONS IDENTIFIED.

PRELIMINARY - NOT FOR CONSTRUCTION

no.	date	by	ckd	description
B	09/20/24	TLB	ZLB	ISSUED FOR BID
A	08/15/24	TLB	ZLB	ISSUED FOR REVIEW

NORTH
0 200' 400'
SCALE IN FEET

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.

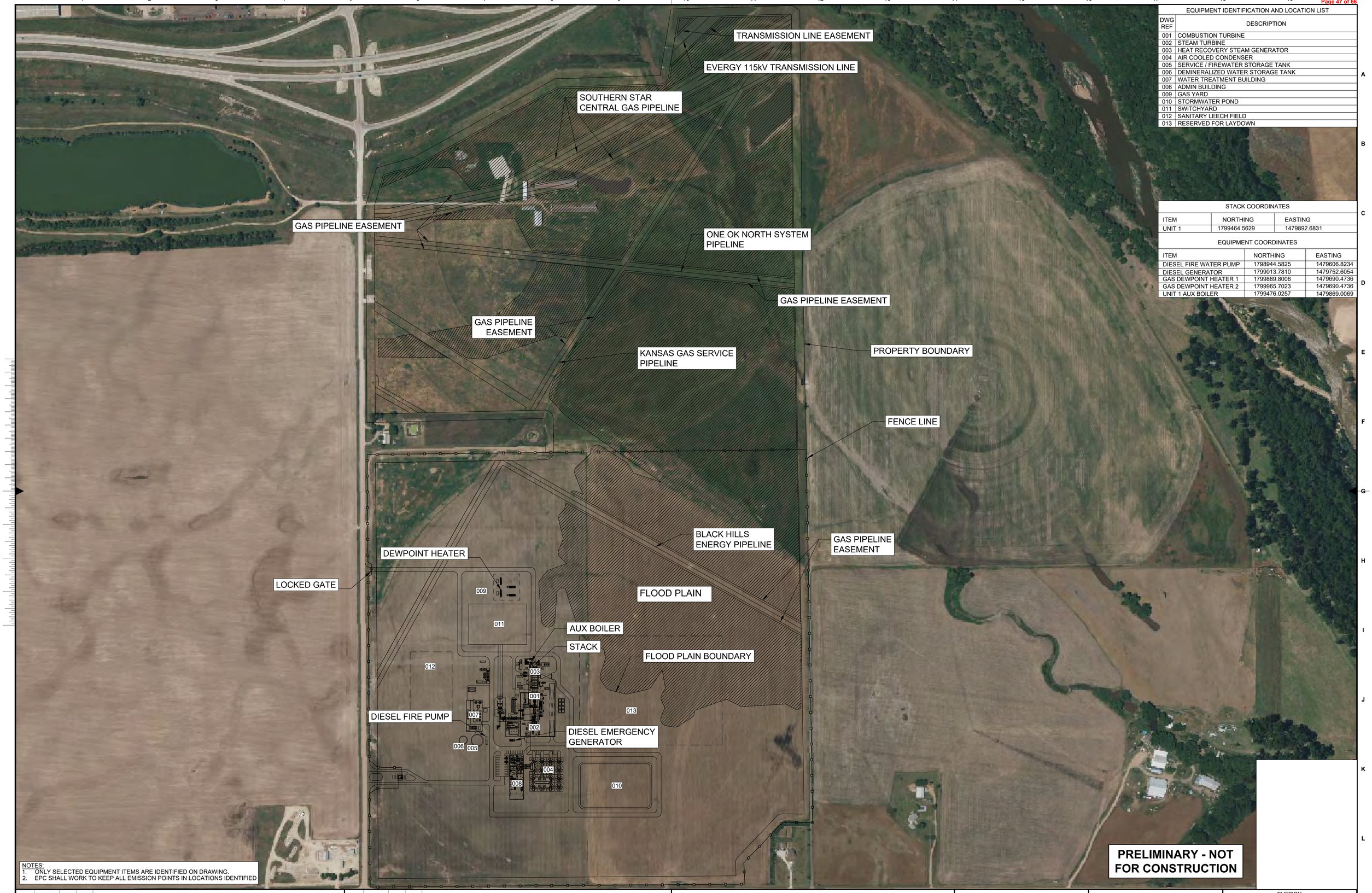
designed A. SCHREINER | detailed T. BROSS

evergy

EVERGY
1X1 SINGLE SHAFT
VIOLA GENERATING STATION
SITE ARRANGEMENT

project 171490 | contract 5.0010
drawing GA2001 – rev. B
sheet 1 of 1 sheets
file 171490_GA2001.dwg

\\BMCD.BURNSMCD.COM\IDFS\CLIENTS\ENR\EVERGY\171490_NEWGENOESPPT\2_DESIGN\MECH\DWGS\GNRL_ARRANGMNT\171490_GA2001_B.DWG 9/26/2024 2:21 PM JROSHAUGHNESSY



EQUIPMENT IDENTIFICATION AND LOCATION LIST	
DWG REF	DESCRIPTION
001	COMBUSTION TURBINE
002	STEAM TURBINE
003	HEAT RECOVERY STEAM GENERATOR
004	AIR COOLED CONDENSER
005	SERVICE / FIREWATER STORAGE TANK
006	DEMINERALIZED WATER STORAGE TANK
007	WATER TREATMENT BUILDING
008	ADMIN BUILDING
009	GAS YARD
010	STORMWATER POND
011	SWITCHYARD
012	SANITARY LEECH FIELD
013	RESERVED FOR LAYDOWN

STACK COORDINATES		
ITEM	NORTHING	EASTING
UNIT 1	1799464.5629	1479892.6831

EQUIPMENT COORDINATES		
ITEM	NORTHING	EASTING
DIESEL FIRE WATER PUMP	1798944.5825	1479606.8234
DIESEL GENERATOR	1799013.7810	1479752.6054
GAS DEWPOINT HEATER 1	1799889.8006	1479690.4736
GAS DEWPOINT HEATER 2	1799965.7023	1479690.4736
UNIT 1 AUX BOILER	1799476.0257	1479869.0069

NOTES:
1. ONLY SELECTED EQUIPMENT ITEMS ARE IDENTIFIED ON DRAWING.
2. EPC SHALL WORK TO KEEP ALL EMISSION POINTS IN LOCATIONS IDENTIFIED

PRELIMINARY - NOT FOR CONSTRUCTION

Scale For Microfilming
Millimeters
Inches

no.	date	by	ckd	description
B	09/20/24	IRH	ZLB	ISSUED FOR BID
A	08/15/24	IRH	ZLB	ISSUED FOR REVIEW

0 200' 400'
SCALE IN FEET

NORTH

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.

designed C.BOYD | detailed I. HENDERSON

evergy

-.-

EVERGY
1X1 SINGLE SHAFT
MCNEW GENERATING STATION
SITE ARRANGEMENT

project 171490 | contract 5.0010
drawing GA3001 – rev. B
sheet 1 of 1 sheets
file 171490_GA3001_B.dwg

EQUIPMENT IDENTIFICATION AND LOCATION LIST	
DWG REF	DESCRIPTION
001	UNIT 1 COMBUSTION TURBINE
002	UNIT 1 SCR
003	FUEL OIL UNLOADING AND STORAGE
004	UNIT 1 AIR COOLED HEAT EXCHANGER
005	SERVICE / FIREWATER STORAGE TANK
006	DEMINERALIZED WATER STORAGE TANK
007	WATER TREATMENT BUILDING
008	ADMIN BUILDING
009	GAS YARD
010	STORMWATER POND
011	NOT USED
012	SANITARY LEECH FIELD
013	SPACE RESERVED FOR FUTURE UNIT

STACK COORDINATES		
ITEM	NORTHING	EASTING
UNIT 1	1477832.7238	2684882.7409

EQUIPMENT COORDINATES		
ITEM	NORTHING	EASTING
DIESEL FIRE WATER PUMP	1477493.3531	2684856.1435
DIESEL GENERATOR	1478239.6553	2684812.1710
GAS DEWPOINT HEATER 1	1478264.7807	2685135.0572
GAS DEWPOINT HEATER 2	1478218.1448	2685135.057



NOTES:
1. ONLY SELECTED EQUIPMENT ITEMS ARE IDENTIFIED ON DRAWING.
2. EPC SHALL WORK TO KEEP ALL EMISSION POINTS IN LOCATIONS IDENTIFIED

PRELIMINARY - NOT FOR CONSTRUCTION

no.	date	by	ckd	description
A	09/20/24	IRH	ZLB	ISSUED FOR BID

NORTH

0 200' 400'
SCALE IN FEET

BURNS McDONNELL
9400 WARD PARKWAY
KANSAS CITY, MO 64114
816-333-9400
Burns & McDonnell Engineering Co, Inc.

designed Z. BAHR | detailed I. HENDERSON

evergy

EVERGY
1X SIMPLE CYCLE
MULLIN CREEK GENERATING STATION
SITE ARRANGEMENT

project 171490 | contract 5.0010
drawing GA5002 | rev. A
sheet 1 of 1 sheets
file 171490_GA5002_A.dwg

Z:\CLIENTS\ENR\EVERGY\171490_NEWGENOESPPT\2_DESIGN\MECH\DWGS\GNRL_ARRANGMNT\171490_GA5002_A.DWG 9/26/2024 3:12 PM JROSHAUGHNESSY

INDICATIVE PRICE BASIS

VIOLA 1X1 CCGT PROJECT (REV1) – OCTOBER 2024

Introduction

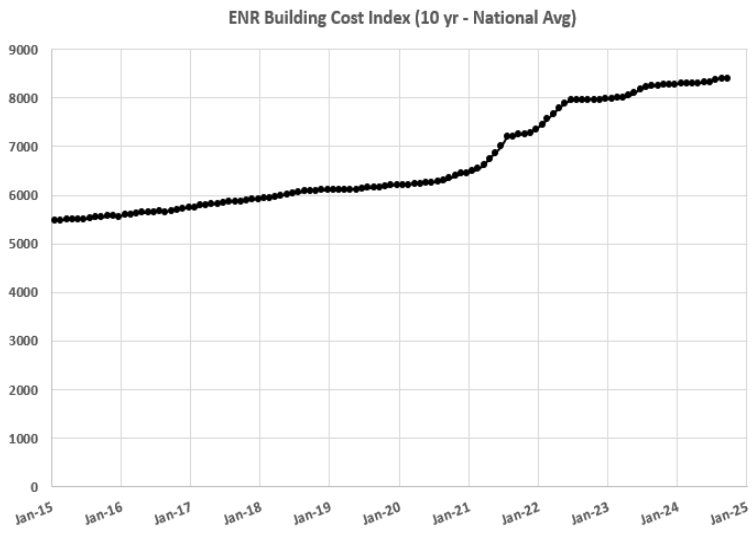
This document describes the general scope and basis for the indicative EPC price estimate for the Viola 1x1 combined cycle project in Sumner County, KS. This estimate was prepared in accordance with AACE Class IV guidelines, and as further clarified herein. Indicative pricing and estimate quantities have been prepared considering costs, quantities and estimates from other projects which are similar in nature to the proposed project, but do not fully reflect the exact project scope, schedule or location. Our understanding is that this cost estimate will be utilized by Evergy (in conjunction with other market data) to develop initial project budgets.

Statement of Limitations

This cost estimate is based on our experience, qualifications, and judgement as a professional consultant. This estimate is non-binding and is not an offer to sell. Information presented is subject to change and may be impacted by changes to scope, schedule, or commercial terms. BMcD has no control over items such as weather, economic or market conditions, force majeure events, availability of labor, productivity of labor, material, equipment, and other factors which affect cost opinions or schedule projections. BMcD does not guarantee that the actual costs, quantities, performance, schedules, schedule completion dates will not vary from estimates and indicative pricing submitted.

Industry Trends

The aftermath of the COVID-19 pandemic introduced unprecedented pricing volatility and supply chain disruption, the effects of which are still being felt throughout the world - including the power industry. Consider the Building Cost Index (BCI) published by ENR Magazine. The BCI is used throughout the construction industry as a gauge for cost trends. The BCI accounts for both labor and materials (such as structural steel, portland cement, and lumber). Prevailing wage rates and local commodity prices are sourced locally from 20 different cities across the Country. The BCI is published each month for these 20 cities, as well as a national average. The figure below shows the BCI national average over the past ten years.



While the BCI rate of increase appears to have steadied in 2023 and 2024, prices remain significantly higher than they were pre-pandemic. Additionally, nationwide competition for skilled labor across all industries means that prices may remain volatile in the coming years as projects will need to pay to incentivize labor.

Increased demand for electricity also means that equipment lead times and prices have continued increasing steadily. Compared to late 2020, BMcD has seen gas turbine engine prices increase as much as 60%. Lead times have climbed to nearly three years for large gas turbines, or even four years for certain high voltage electrical equipment.

INDICATIVE PRICE BASIS
(continued)

Schedule



The indicative price is based on the following anticipated schedule milestones:

- EPC Contractor award – Q3 2025.
- Site mobilization – Q3 2026.
- Commissioning – Q3/Q4 2028.
- Commercial Operation – Q4 2028.
- Evergy need-by date – January 1, 2029.

Commercial Clarifications

The estimate assumes an EPC contracting methodology, with major equipment procured separately by Evergy (see Owner's Costs). Additionally, the estimate is based on the following commercial assumptions:

- Craft per-diem is included at an assumed rate of $X/day x 7-days per week.
- An allowance is included for an EPC Performance & Payment bond.
- Forward looking escalation is included through the life of the project, assuming a X% annual increase (per Evergy direction) for equipment, materials, and labor. No escalation was included for Owner purchased equipment as those procurement efforts are currently underway.
- An assumed EPC contingency of X% is included, per Evergy direction.
- An assumed EPC fee of X% is included.
- Builder's Risk insurance coverage costs are not included (assumed to be provided by Evergy).

Technical Clarifications

The following assumptions serve as the basis of our indicative price. We have generally assumed Evergy technical requirements consistent with those being developed for the EPC RFP.

- General:
  - This indicative price is based on the Mitsubishi M501JAC.
  - Major equipment deliveries are to the project-site.
  - No allowance was included for demolition or relocation of any potential existing utilities or structures.
  - The estimate assumes that temporary power during construction will be furnished by Evergy.
- Geotechnical:
  - Auger cast piles are assumed under all major foundations.
  - No soil remediation or soil improvement programs are included.
  - No hazardous and/or contaminated materials will be encountered on site.
  - Groundwater is assumed to be at a reasonable depth – no major dewatering operations are included.
  - No subsurface risk has been included.
- Civil:
  - Topography and soil conditions are such that the site can be balanced. No major material import (i.e., raising site elevation) are considered.
  - The estimate includes approximately X acres for temporary construction facilities.

INDICATIVE PRICE BASIS
(continued)

  - The estimate assumes crushed rock, asphalt paving, and grass seeding for finishes. Additional landscaping requirements are not considered.
- Structural / Architectural:
  - A powerhouse building is included for the gas turbine / generator / steam turbine. The HRSG will be outdoors.
- Mechanical:
  - Fuel gas compression is not required.
  - Dry cooling is assumed.
- Environmental:
  - Any special noise attenuation requirements to meet far field noise limits at the property line were not considered.
  - Identification, protection, or relocation of existing fish and wildlife habitat, wetlands, threatened and endangered species or historical, cultural, and archaeological artifacts are not included in the scope of work.
  - No allowance was included for impacts due to permitting constraints.

Owner's Costs:

The following assumptions apply to Owner's Costs shown separate from the estimated EPC price:

- $X is included for the gas turbine, steam turbine, and HRSG (power island) based on initial evaluation of pricing received from Mitsubishi (with a few million dollars assumed for resolution of outstanding C&Es).
- $X is included for the GTG / STG GSU transformers, based on initial evaluation of pricing received for the project.
- $X is included for modification of the adjacent 345kV switchyard, with an overhead road-crossing, and high voltage breakers.
- No other work off-site has been included (e.g. fuel gas transmission or water infrastructure).
- Owner's Engineering costs are included as shown in the estimate summary.
- Owner's contingency has not been included.
- Other Owner's Costs such as development, permitting, operations personnel, project management, legal counsel, temporary utilities, land, access rights, political concessions, sales taxes, duties, financing fees, interest during construction (IDC), allowance for funds used during construction (AFUDC), off-site transmission upgrades, and the like, are excluded.

CLASS IV CAPITAL COST ESTIMATE
EVERGY - VIOLA
1X1 J-CLASS COMBINED CYCLE
SUMNER COUNTY, KS

REV1 - 10/16/2024

Acct	Area / Discipline	Total Cost
01	Engineered Equipment	X
02	Civil	X
03	Deep Foundations	X
04	Concrete	X
05	Structural Steel	X
06	Architectural	X
07	Piping	X
08	Electrical / Instrument & Control	X
09	Insulation	X
10	Coatings	X
11	Misc Directs	X
Direct Cost		**X**
CM, Engineering, Startup		X
Commercial		X
Escalation		X
Indirect Cost		**X**
Contingency		X
Fee		X
Estimated EPC Cost		**X**
Owner Cost - Major Equipment Supply (PIE)		X
Owner Cost - Large Power Transformers (GSUs)		X
Owner Cost - HV Transmission to POI		X
Owner Cost - BR Insurance		X
Owner Cost - Fuel Gas Transmission & Interconnect		X
Owner Cost - Water Supply Infrastructure		X
Owner Cost - Owner's Engineering		X
Owner Cost - General, Taxes & Fees		X
Owner Cost - Owner Contingency		X
Total Project Cost Incl. Owner Cost		**X**

INDICATIVE PRICE BASIS

MCNEW 1X1 CCGT PROJECT (REV1) – OCTOBER 2024

Introduction

This document describes the general scope and basis for the indicative EPC price estimate for the McNew 1x1 combined cycle project in Reno County, KS. This estimate was prepared in accordance with AACE Class IV guidelines, and as further clarified herein. Indicative pricing and estimate quantities have been prepared considering costs, quantities and estimates from other projects which are similar in nature to the proposed project, but do not fully reflect the exact project scope, schedule or location. Our understanding is that this cost estimate will be utilized by Evergy (in conjunction with other market data) to develop initial project budgets.

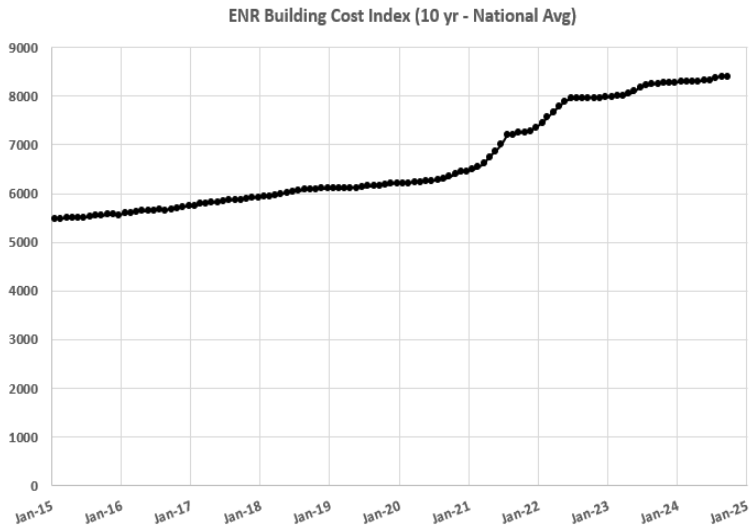
Statement of Limitations

This cost estimate is based on our experience, qualifications, and judgement as a professional consultant. This estimate is non-binding and is not an offer to sell. Information presented is subject to change and may be impacted by changes to scope, schedule, or commercial terms. BMcD has no control over items such as weather, economic or market conditions, force majeure events, availability of labor, productivity of labor, material, equipment, and other factors which affect cost opinions or schedule projections. BMcD does not guarantee that the actual costs, quantities, performance, schedules, schedule completion dates will not vary from estimates and indicative pricing submitted.

Industry Trends

The aftermath of the COVID-19 pandemic introduced unprecedented pricing volatility and supply chain disruption, the effects of which are still being felt throughout the world - including the power industry. Consider the Building Cost Index (BCI) published by ENR Magazine. The BCI is used throughout the construction industry as a gauge for cost trends. The BCI accounts for both labor and materials (such as structural steel, portland cement, and lumber). Prevailing wage rates and local commodity prices are sourced locally from 20 different cities across the Country. The BCI is published each month for these 20 cities, as well as a national average. The figure below shows the BCI national average over the past ten years.

INDICATIVE PRICE BASIS
(continued)



While the BCI rate of increase appears to have steadied in 2023 and 2024, prices remain significantly higher than they were pre-pandemic. Additionally, nationwide competition for skilled labor across all industries means that prices may remain volatile in the coming years as projects will need to pay to incentivize labor.

Increased demand for electricity also means that equipment lead times and prices have continued increasing steadily. Compared to late 2020, BMcD has seen gas turbine engine prices increase as much as 60%. Lead times have climbed to nearly three years for large gas turbines, or even four years for certain high voltage electrical equipment.

Schedule

The indicative price is based on the following anticipated schedule milestones:

- EPC Contractor award – Q3 2026.
- Site mobilization – Q3 2027.
- Commissioning – Q3/Q4 2029.
- Commercial Operation – Q4 2029.
- Evergy need-by date – January 1, 2030.



Commercial Clarifications

The estimate assumes an EPC contracting methodology, with major equipment procured separately by Evergy (see Owner's Costs). Additionally, the estimate is based on the following commercial assumptions:

- Craft per-diem is included at an assumed rate of $X/day x 7-days per week.
- An allowance is included for an EPC Performance & Payment bond.
- Forward looking escalation is included through the life of the project, assuming a X% annual increase (per Evergy direction) for equipment, materials, and labor. No escalation was included for Owner purchased equipment as those procurement efforts are currently underway.
- An assumed EPC contingency of X% is included, per Evergy direction.
- An assumed EPC fee of X% is included.
- Builder's Risk insurance coverage costs are not included (assumed to be provided by Evergy).

INDICATIVE PRICE BASIS
(continued)

Technical Clarifications

The following assumptions serve as the basis of our indicative price. We have generally assumed Evergy technical requirements consistent with those being developed for the EPC RFP.

- General:
  - This indicative price is based on the Mitsubishi M501JAC.
  - Major equipment deliveries are to the project-site.
  - No allowance was included for demolition or relocation of any potential existing utilities or structures.
  - The estimate assumes that temporary power during construction will be furnished by Evergy.
- Geotechnical:
  - Auger cast piles are assumed under all major foundations.
  - No soil remediation or soil improvement programs are included.
  - No hazardous and/or contaminated materials will be encountered on site.
  - Groundwater is assumed to be at a reasonable depth – no major dewatering operations are included.
  - No subsurface risk has been included.
- Civil:
  - Topography and soil conditions are such that the site can be balanced. No major material import (i.e., raising site elevation) are considered.
  - The estimate includes approximately X acres for temporary construction facilities.
  - The estimate assumes crushed rock, asphalt paving, and grass seeding for finishes. Additional landscaping requirements are not considered.
- Structural / Architectural:
  - A powerhouse building is included for the gas turbine / generator / steam turbine. The HRSG will be outdoors.
- Mechanical:
  - Fuel gas compression is not required.
  - Dry cooling is assumed.
- Environmental:
  - Any special noise attenuation requirements to meet far field noise limits at the property line were not considered.
  - Identification, protection, or relocation of existing fish and wildlife habitat, wetlands, threatened and endangered species or historical, cultural, and archaeological artifacts are not included in the scope of work.
  - No allowance was included for impacts due to permitting constraints.

Owner's Costs:

The following assumptions apply to Owner's Costs shown separate from the estimated EPC price:

- $X is included for the gas turbine, steam turbine, and HRSG (power island) based on initial evaluation of pricing received from Mitsubishi (with a few million dollars assumed for resolution of outstanding C&Es).
- $X is included for the GTG / STG GSU transformers, based on initial evaluation of pricing received for the project.
- An assumed $X is included for approximately X miles of transmission to the Reno County switchyard, located northeast of Hutchinson, KS.

INDICATIVE PRICE BASIS
(continued)

- No other work off-site has been included (e.g. fuel gas transmission or water infrastructure).
- Owner's Engineering costs are included as shown in the estimate summary.
- Owner's contingency has not been included.
- Other Owner's Costs such as development, permitting, operations personnel, project management, legal counsel, temporary utilities, land, access rights, political concessions, sales taxes, duties, financing fees, interest during construction (IDC), allowance for funds used during construction (AFUDC), off-site transmission upgrades, and the like, are excluded.

CLASS IV CAPITAL COST ESTIMATE
EVERGY - McNEW
1X1 J-CLASS COMBINED CYCLE
RENO COUNTY, KS

REV1 - 10/16/2024

Acct	Area / Discipline	Total Cost
01	Engineered Equipment	X
02	Civil	X
03	Deep Foundations	X
04	Concrete	X
05	Structural Steel	X
06	Architectural	X
07	Piping	X
08	Electrical / Instrument & Control	X
09	Insulation	X
10	Coatings	X
11	Misc Directs	X
Direct Cost		**X**
CM, Engineering, Startup		X
Commercial		X
Escalation		X
Indirect Cost		**X**
Contingency		X
Fee		X
Estimated EPC Cost		**X**
Owner Cost - Major Equipment Supply (PIE)		X
Owner Cost - Large Power Transformers (GSUs)		X
Owner Cost - HV Transmission to POI		X
Owner Cost - BR Insurance		X
Owner Cost - Fuel Gas Transmission & Interconnect		X
Owner Cost - Water Supply Infrastructure		X
Owner Cost - Owner's Engineering		X
Owner Cost - General, Taxes & Fees		X
Owner Cost - Owner Contingency		X
Total Project Cost Incl. Owner Cost		**X**

INDICATIVE PRICE BASIS

MULLIN CREEK 1X SCGT PROJECT (REV1) – OCTOBER 2024

Introduction

This document describes the general scope and basis for the indicative EPC price estimate for the Mullin Creek 1x simple cycle project in Nodaway County, MO. This estimate was prepared in accordance with AACE Class IV guidelines, and as further clarified herein. Indicative pricing and estimate quantities have been prepared considering costs, quantities and estimates from other projects which are similar in nature to the proposed project, but do not fully reflect the exact project scope, schedule or location. Our understanding is that this cost estimate will be utilized by Evergy (in conjunction with other market data) to develop initial project budgets.

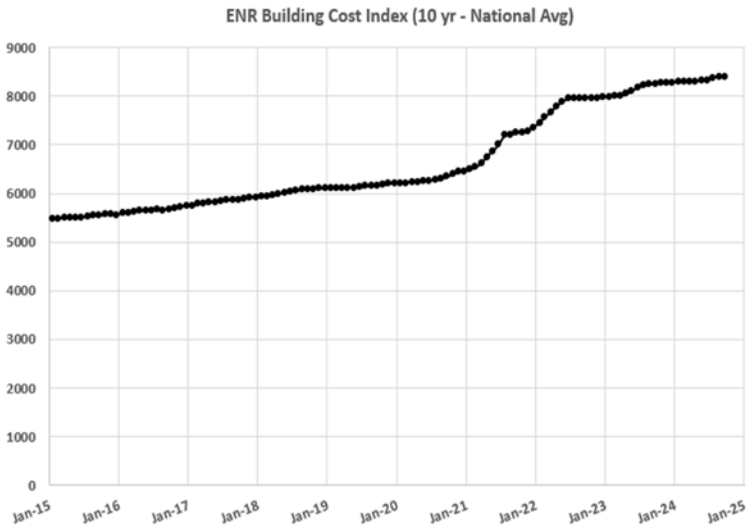
Statement of Limitations

This cost estimate is based on our experience, qualifications, and judgement as a professional consultant. This estimate is non-binding and is not an offer to sell. Information presented is subject to change and may be impacted by changes to scope, schedule, or commercial terms. BMcD has no control over items such as weather, economic or market conditions, force majeure events, availability of labor, productivity of labor, material, equipment, and other factors which affect cost opinions or schedule projections. BMcD does not guarantee that the actual costs, quantities, performance, schedules, schedule completion dates will not vary from estimates and indicative pricing submitted.

Industry Trends

The aftermath of the COVID-19 pandemic introduced unprecedented pricing volatility and supply chain disruption, the effects of which are still being felt throughout the world - including the power industry. Consider the Building Cost Index (BCI) published by ENR Magazine. The BCI is used throughout the construction industry as a gauge for cost trends. The BCI accounts for both labor and materials (such as structural steel, portland cement, and lumber). Prevailing wage rates and local commodity prices are sourced locally from 20 different cities across the Country. The BCI is published each month for these 20 cities, as well as a national average. The figure below shows the BCI national average over the past ten years.

INDICATIVE PRICE BASIS
(continued)



While the BCI rate of increase appears to have steadied in 2023 and 2024, prices remain significantly higher than they were pre-pandemic. Additionally, nationwide competition for skilled labor across all industries means that prices may remain volatile in the coming years as projects will need to pay to incentivize labor.

Increased demand for electricity also means that equipment lead times and prices have continued increasing steadily. Compared to late 2020, BMcD has seen gas turbine engine prices increase as much as 60%. Lead times have climbed to nearly three years for large gas turbines, or even four years for certain high voltage electrical equipment.

Schedule

The indicative price is based on the following anticipated schedule milestones:

- EPC Contractor award – Q3 2025.
- Site mobilization – Q4 2027.
- Commissioning – Q3/Q4 2029.
- Commercial Operation – Q4 2029.
- Evergy need-by date – January 1, 2030.



Commercial Clarifications

The estimate assumes an EPC contracting methodology, with major equipment procured separately by Evergy (see Owner's Costs). Additionally, the estimate is based on the following commercial assumptions:

- Craft per-diem is included at an assumed rate of $X/day x 7-days per week.
- An allowance is included for an EPC Performance & Payment bond.
- Forward looking escalation is included through the life of the project, assuming a X% annual increase (per Evergy direction) for equipment, materials, and labor. No escalation was included for Owner purchased equipment as those procurement efforts are currently underway.
- An assumed EPC contingency of X% is included, per Evergy direction.
- An assumed EPC fee of X% is included.
- Builder's Risk insurance coverage costs are not included (assumed to be provided by Evergy).

INDICATIVE PRICE BASIS
(continued)

Technical Clarifications

The following assumptions serve as the basis of our indicative price. We have generally assumed Evergy technical requirements consistent with those being developed for the EPC RFP.

- General:
  - This indicative price is based on the Mitsubishi M501JAC.
  - Major equipment deliveries are to the project-site.
  - No allowance was included for demolition or relocation of any potential existing utilities or structures.
  - The estimate assumes that temporary power during construction will be furnished by Evergy.
- Geotechnical:
  - Auger cast piles are assumed under all major foundations.
  - No soil remediation or soil improvement programs are included.
  - No hazardous and/or contaminated materials will be encountered on site.
  - Groundwater is assumed to be at a reasonable depth – no major dewatering operations are included.
  - No subsurface risk has been included.
- Civil:
  - Topography and soil conditions are such that the site can be balanced. No major material import (i.e., raising site elevation) are considered.
  - The estimate includes approximately X acres for temporary construction facilities.
  - The estimate assumes crushed rock, asphalt paving, and grass seeding for finishes. Additional landscaping requirements are not considered.
- Structural / Architectural:
  - A powerhouse building is included for the gas turbine / generator. The hot-SCR will be outdoors.
- Mechanical:
  - Fuel gas compression is not required.
- Environmental:
  - Any noise attenuation requirements to meet far field noise limits at the property line were not considered.
  - Identification, protection, or relocation of existing fish and wildlife habitat, wetlands, threatened and endangered species or historical, cultural, and archaeological artifacts are not included in the scope of work.
  - No allowance was included for impacts due to permitting constraints.

Owner's Costs:

The following assumptions apply to Owner's Costs shown separate from the estimated EPC price:

- $X is included for the gas turbine / SCR, based on initial evaluation of pricing received from Mitsubishi (with a few million dollars assumed for resolution of outstanding C&Es).
- $X is included for the GSU, based on initial evaluation of pricing received for the project.
- $X is included for modification of the adjacent 345kV switchyard, with an overhead road-crossing, and high voltage breakers.
- No other work off-site has been included (e.g. fuel gas transmission or water infrastructure).
- Owner's Engineering costs are included as shown in the estimate summary.

INDICATIVE PRICE BASIS
(continued)

- Owner's contingency has not been included.
- Other Owner's Costs such as development, permitting, operations personnel, project management, legal counsel, temporary utilities, land, access rights, political concessions, sales taxes, duties, financing fees, interest during construction (IDC), allowance for funds used during construction (AFUDC), off-site transmission upgrades, and the like, are excluded.

CLASS IV CAPITAL COST ESTIMATE
EVERGY - MULLIN CREEK
1X0 J-CLASS SIMPLE CYCLE
NODAWAY COUNTY, MO

REV1 - 10/16/2024

Acct	Area / Discipline	Total Cost
01	Engineered Equipment	X
02	Civil	X
03	Deep Foundations	X
04	Concrete	X
05	Structural Steel	X
06	Architectural	X
07	Piping	X
08	Electrical / Instrument & Control	X
09	Insulation	X
10	Coatings	X
11	Misc Directs	X
Direct Cost		**X**
CM, Engineering, Startup		X
Commercial		X
Escalation		X
Indirect Cost		**X**
Contingency		X
Fee		X
Estimated EPC Cost		**X**
Owner Cost - Major Equipment Supply (PIE)		X
Owner Cost - Large Power Transformers (GSUs)		X
Owner Cost - HV Transmission to POI		X
Owner Cost - BR Insurance		X
Owner Cost - Fuel Gas Transmission & Interconnect		X
Owner Cost - Water Supply Infrastructure		X
Owner Cost - Owner's Engineering		X
Owner Cost - General, Taxes & Fees		X
Owner Cost - Owner Contingency		X
Total Project Cost Incl. Owner Cost		**X**

Viola CCGT Total Estimated Cost

Item	Price
Power Island Equipment	$X
EPC	$X
Generator Step Up Transformer	$X
Water Supply	$X
Interconnection costs	$X
SPP Network Upgrades	$X
Owner's Engineer	$X
Owner's Costs	$X
Total Capital Investment	**$X**

Owner's Cost	
Owner's Contingency	$ X
Builders Risks	$ X
Salary (internal)	$ X
Mileage & Vehicles	$ X
Taxes	$ X
Land Purchases	$ X
Environmental	$ X
Plant Staff (2 years)	$ X
Furniture/Facilities	$ X
Tools & Lab	$ X
Security and IT	$ X
SPP Fees	$ X
Legal	$ X
PILOT/RMA	$ X
Development Expenses	$ X
Capital Spares	$ X
Total Owner's Costs	**$ X**

McNew CCGT Total Estimated Cost

Item	Price
Power Island Equipment	$X
EPC	$X
Generator Step Up Transformer	$X
Water Supply	$X
Interconnection costs	$X
SPP Network Upgrades	$X
Owner's Engineer	$X
Owner's Costs	$X
Total Capital Investment	**$X**

Owner's Cost	
Owner's Contingency	$ X
Builders Risks	$ X
Salary (internal)	$ X
Mileage & Vehicles	$ X
Taxes	$ X
Land Purchases	$ X
Environmental	$ X
Plant Staff (2 years)	$ X
Furniture/Facilities	$ X
Tools & Lab	$ X
Security and IT	$ X
SPP Fees	$ X
Legal	$ X
PILOT/RMA	$ X
Development Expenses	$ X
Capital Spares	$ X
Total Owner's Costs	**$ X**

Mullin Creek #1 Total Estimated Cost

Item	Price
Power Island Equipment	$X
EPC	$X
Generator Step Up Transformer	$X
Water Supply	$X
Interconnection costs	$X
SPP Network Upgrades	$X
Owner's Engineer	$X
Owner's Costs	$X
Total Capital Investment	**$X**

Owner's Cost	
Owner's Contingency	$ X
Builders Risks	$ X
Salary (internal)	$ X
Mileage & Vehicles	$ X
Taxes	$ X
Land Purchases	$ X
Environmental	$ X
Plant Staff (2 years)	$ X
Furniture/Facilities	$ X
Tools & Lab	$ X
Security and IT	$ X
SPP Fees	$ X
Legal	$ X
PILOT/RMA	$ X
Development Expenses	$ X
Capital Spares	$ X
Total Owner's Costs	**$ X**

Evergy Metro, Inc. d/b/a Evergy Missouri Metro and
Evergy Missouri West, Inc. d/b/a Evergy Missouri West

Docket No.: EA-2025-0075
Date: October 25, 2024

CONFIDENTIAL INFORMATION

The following information is provided to the Missouri Public Service Commission under CONFIDENTIAL SEAL:

Document/Page	Reason for Confidentiality from List Below
Direct, p. 20, Tables 5 and 6	3, 4, and 6
Direct, p. 22, lns. 19-21	3, 4, and 6
Direct, p. 29, lns. 21-23	3, 4, and 6
Direct, p. 30, lns. 3; 8-10; 13; and 19-21	3, 4, and 6
Direct, p. 31, ln. 1	3, 4, and 6
Schedules JKO-8 thru JKO13	3, 4, and 6

Rationale for the "confidential" designation pursuant to 20 CSR 4240-2.135 is documented below:

1. Customer-specific information;

2. Employee-sensitive personnel information;

3. Marketing analysis or other market-specific information relating to services offered in competition with others;

4. Marketing analysis or other market-specific information relating to goods or services purchased or acquired for use by a company in providing services to customers;

5. Reports, work papers, or other documentation related to work produced by internal or external auditors, consultants, or attorneys, except that total amounts billed by each external auditor, consultant, or attorney for services related to general rate proceedings shall always be public;

6. Strategies employed, to be employed, or under consideration in contract negotiations;

7. Relating to the security of a company's facilities; or

8. Concerning trade secrets, as defined in section 417.453, RSMo.

9. Other (specify) _____.

Should any party challenge the Company's assertion of confidentiality with respect to the above information, the Company reserves the right to supplement the rationale contained herein with additional factual or legal information.

Evergy Metro, Inc. d/b/a Evergy Missouri Metro

Docket No.: EA-2026-0154
Date: May 14, 2026

CONFIDENTIAL INFORMATION

The following information is provided to the Missouri Public Service Commission under CONFIDENTIAL SEAL:

Document/Page	Reason for Confidentiality from List Below
Olson Direct, p. 20, lns. 13-14	3, 4, and 6
Schedule JKO-3	3, 4, and 6

Rationale for the "confidential" designation pursuant to 20 CSR 4240-2.135 is documented below:

1. Customer-specific information;

2. Employee-sensitive personnel information;

3. Marketing analysis or other market-specific information relating to services offered in competition with others;

4. Marketing analysis or other market-specific information relating to goods or services purchased or acquired for use by a company in providing services to customers;

5. Reports, work papers, or other documentation related to work produced by internal or external auditors, consultants, or attorneys, except that total amounts billed by each external auditor, consultant, or attorney for services related to general rate proceedings shall always be public;

6. Strategies employed, to be employed, or under consideration in contract negotiations;

7. Relating to the security of a company's facilities; or

8. Concerning trade secrets, as defined in section 417.453, RSMo.

9. Other (specify) _____.

Should any party challenge the Company's assertion of confidentiality with respect to the above information, the Company reserves the right to supplement the rationale contained herein with additional factual or legal information.