# SBMU PSP ROLLOUT II





### BACKGROUND

Due to increased market competition pressures from natural gas and renewables as well as escalating costs for coal plant operations, the Sikeston Board of Municipal Utilities ("SBMU") announced their intention to initiate the development of a Power Supply Plan ("PSP") to aid the utility with long term planning to continue to meet the community's needs for reliable and affordable electricity. The effort kicked off in June, 2023 with a public open house describing the challenges the utility is confronting and the process the SBMU is taking to address them.

Last month, the SBMU released a PSP study process overview and its planning assumptions. As part of their commitment to the public and ratepayers, the SBMU is now releasing the full spectrum of technology options being evaluated in the PSP study before narrowing the choices to a set of the most promising alternatives later this year and anticipates selecting a path forward in early 2024.





### **ALTERNATIVES BEING EVALUATED**

### **Option 1: Continued Operation of the Existing Power Plant**

- 1. <u>Continue existing operations with coal as feedstock</u> the utility would continue to operate the 235 megawatt (MW) plant as-is until it became cost prohibitive/infeasible to continue operations
- 2. <u>Conversion of existing plant to natural gas as feedstock</u> the utility would convert the boilers and burners to run the existing 235 MW plant on natural gas instead of coal

#### **Option 2:** New Natural Gas Fired Power Plant

- 1. <u>Smaller (75 MW\*) gas fired plant</u> the utility would build a new facility that would focus on providing power to the Sikeston community and have limited partnership and market sales potential
- 2. Larger (270 MW\*) gas fired plant the utility would build a new facility that would provide power for the Sikeston community and allow for larger partnerships and market sales potential

**Option 3: Solar Generation** – the utility would look at constructing new solar power generation facilities, possibly in multiple phases





### **ALTERNATIVES BEING EVALUATED**

**Option 4: Purchase of market rate hydroelectricity** – the utility would rely on its existing allocation of 34 MW of hydro generated electricity from the Southwest Power Administration and supplement with market purchases on an as-needed basis.

**Option 5: Gas Fired Peaking Generation** – the utility would build a new facility with limited generation capacity that would be available to provide power during peak usage times.

**Option 6: Battery Storage** – the utility would build a new facility with limited storage capacity that would be available to provide back-up power during peak usage times.

**Option 7: Small Modular Nuclear Reactor** – the utility would build a facility that could generate up to 300 MW\* providing power for the Sikeston community and allow for larger partnerships and market sales potential

\*megawatts are expressed in approximate values - actual generation capacity would depend on performace charateristics of technology selected





## **EVALUATION CRITERIA**

SBMU will utilize the following criteria in evaluating the best technology options for the Sikeston community going forward:

#### Affordability:

- Cost of Electricity Production on a per kilowatt (kWh) basis
- Rate Stability
- Capital Costs
- Financial Capacity

#### **Reliability:**

- Fuel Availability
- Providing Resources to the Local Community

### **Flexibility:**

- Ability to Transition to Adapt to Future Needs
- Resource Diversity

#### Sustainability:

- Greenhouse Gas reductions
- Renewable Energy Share
- Job Growth and Continuity





# THANK YOU FOR PARTICIPATING!

WE LOOK FORWARD TO COLLABORATING WITH THE RESIDENTS OF SIKESTON TO ENSURE OUR ENERGY PROTECTION.

> FOR QUESTIONS OR COMMENTS: CUSTOMERSERVICE@SBMU.NET