Recommendation for WLAB Board Consideration Electric Utility Capacity Study and Plan

December 2024

Background

As a load serving entity, the City's electric utility must own, contract, or purchase necessary capacity to reliably serve its customers and meet the obligations of the Mid-Continent Independent System Operator, MISO. The current combination of forecasted peak load growth along with anticipated changes in contacted capacity necessitate reassessing the utility's capacity portfolio and developing a plan to meet future capacity obligations. Issues such as, the potential closure of the Sikeston Generation Station, ending the Dynergy contract and recent observations of much higher MISO capacity market prices indicate that the City staff should commence a study and plan development this fiscal year.

Purposed Scope

It's recommended the utility complete the capacity study for a term through at least 2045 in order to capture the anticipated retirement of existing fossil based assists under power purchase agreements, PPA's. The proposed the study shall also develop a timetable for the most likely remaining life/term of existing capacity resources and contracts, to include but not limited to the following:

- City owned generation assets: Power Plant, CEC, etc.
- Contracted capacity, such as the Dynergy Contract
- Contracted capacity of remaining fossil based PPA's
- Contracted capacity of current renewable PPA's

The study shall identify when capacity additions would be needed and the various options for replacing and/or added capacity through study term, this should include but not limited to:

- New City owned/contracted generation assets within the its service territory
- Possible contracted capacity within the MISO system, preferably in MISO region 5
- Possible capacity offset resources, such as battery systems or other load shedding resources with the City's service territory.
- Anticipated market availability and cost of the MISO capacity market.

The study shall weigh each option for cost, value, local reliability/resiliency benefit, schedule to implement, etc. The study shall develop and recommend a detailed plan with associated implementation schedule for the City utility to follow. It's also recommended the study draft(s) shall be brought the Water and Light Advisory Board for review and input before finalizing.

Proposed Schedule

It's recommend this study and plan development commence in this current fiscal year (FY2025) and finish in early fiscal year 2026.