



City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: July 18, 2022

Re: Amending the FY 2022 Annual Budget by appropriating funds for expenses associated with purchase power.

Executive Summary

Staff is recommending an ordinance authorizing an amendment to the FY 2022 budget for City Utilities Electric purchase power expenses. The FY 2022 current purchase power budget is \$64,357,608 and with the current market volatility with higher energy prices, reliability concerns and weather events, staff is requesting an additional \$22,500,000 to be appropriated. This would bring the total purchase power budget to \$86,857,608. The Electric Utility may not spend all of the funds appropriated as there are unknowns related to the weekly payments to MISO and SPP that occur and are out of our control. Staff has estimated the weekly payments for the remainder of the fiscal year based on the average payments made over the past 7-8 weeks.

Discussion

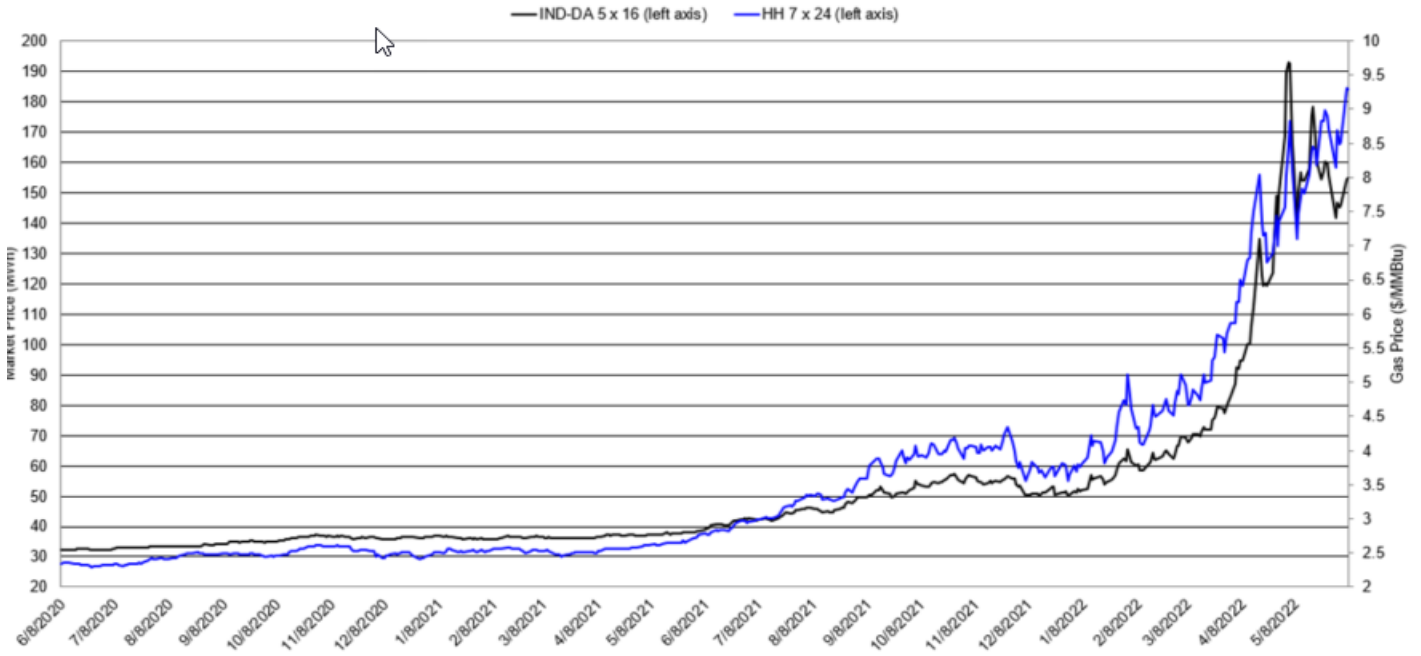
The City of Columbia has been experiencing steadily increasing purchase power expenses due to the effects of higher energy prices, reliability concerns, and weather events.

The main driver for increased energy prices is the increase in fuel prices for both natural gas and coal. The production of natural gas has not responded as quickly as demand has coming out of the pandemic, leading to higher gas prices. Coal contracts are being affected due to transportation issues as railroads are not able to staff at levels capable of delivering full amounts of coal contracts. Sikeston is currently operating at 65% capacity. The City of Columbia's 66 MW portion was initially reduced to 44 MW; however currently in hours 12-19 during weekdays we receive additional MWs, not to exceed 57 MW. This reduction of energy production from Sikeston exposes more of Columbia's load to market prices, which increases power supply cost. Likewise, Iatan 2 experienced an unplanned outage in early July, which will result in increases to power supply cost due to increased exposure to market prices.

Energy price increases have been seen locally, throughout the entire Midcontinent Independent System Operator (MISO) footprint, nation-wide and globally. Below is the Locational Marginal Pricing (LMP) for the past two years for Indiana Hub Day Ahead energy prices (black line) and the Henry Hub natural gas prices (blue line). LMP is a way for wholesale electric energy prices to reflect the value of electric energy at different locations, accounting for the patterns of load, generation, and the physical limits of the transmission system.



LMP Forward Curve for Jul-2022 - Aug-2022

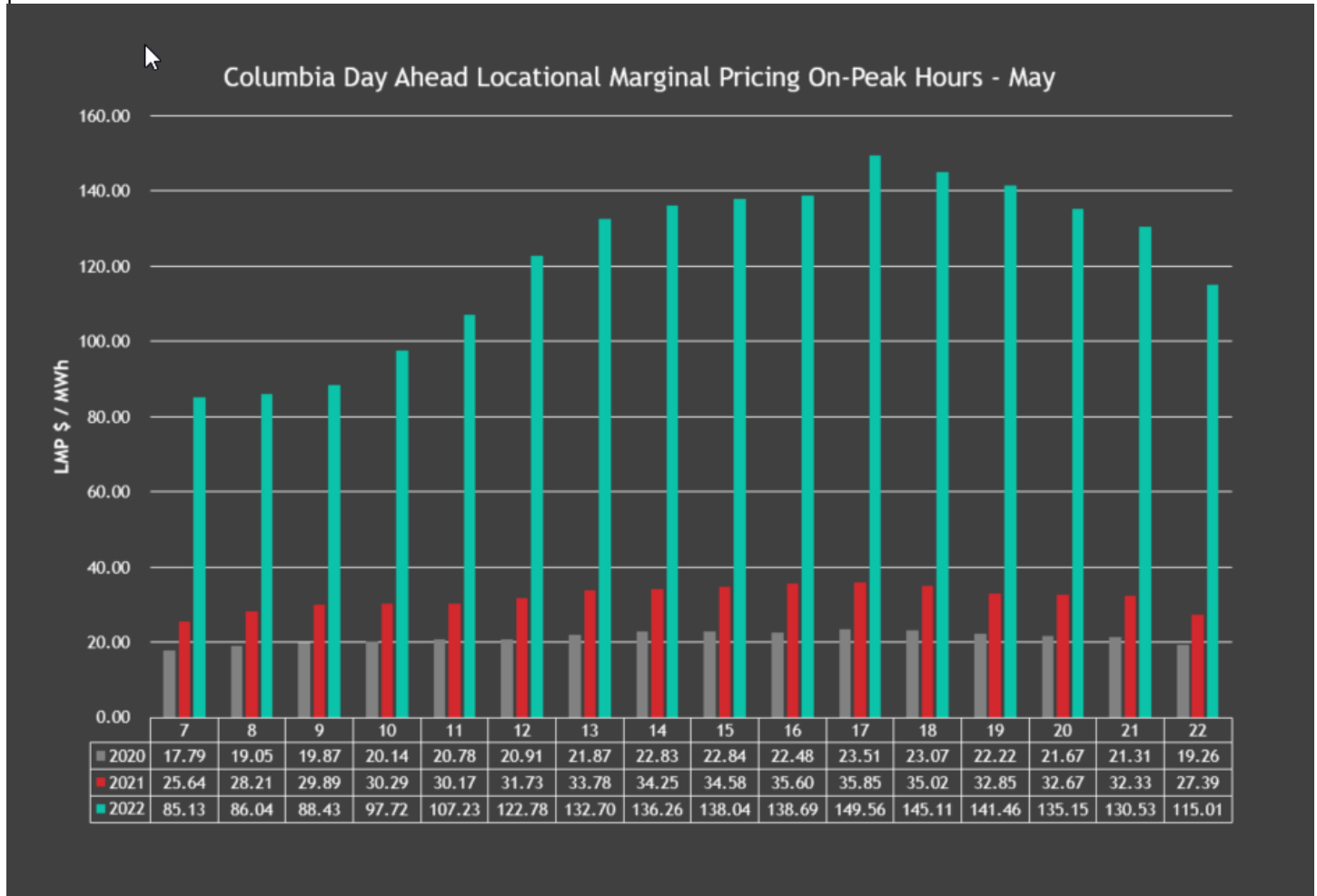




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Below is the Columbia Day Ahead LMP On-Peak Hours (hours ending 7-22) for May for the period of 2020 to 2022.



Reliability concerns exist within the MISO footprint and the 2022-2023 Planning Resource Auction results proved this. Below is the historical results from MISO's annual Planning Resource Auction. The City of Columbia is in Zone 5.

PY	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	Zone 7	Zone 8	Zone 9	Zone 10	ERZs
2015-2016		\$3.48		\$150.00		\$3.48		\$3.29		N/A	N/A
2016-2017	\$19.72				\$72.00				\$2.99		N/A
2017-2018						\$1.50					N/A
2018-2019	\$1.00					\$10.00					N/A
2019-2020			\$2.99				\$24.30		\$2.99		
2020-2021			\$5.00				\$257.53	\$4.75	\$6.88	\$4.75	\$4.89-\$5.00
2021-2022			\$5.00						\$0.01		\$2.78-\$5.00
2022-2023					\$236.66				\$2.88		\$133.70-236.66

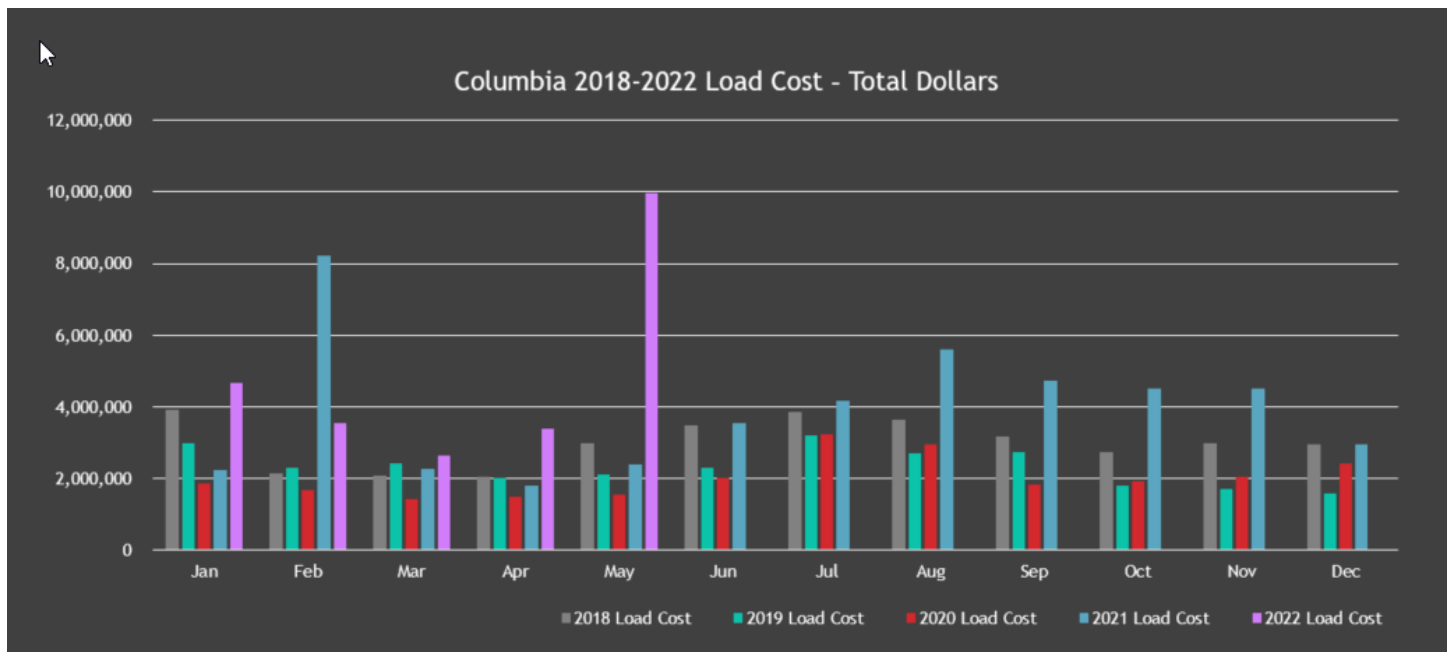


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Weather events can cause volatility and therefore affect energy prices as well. Current heat waves across the MISO footprint have caused MISO to declare conservative operations and have forced transmission owners and generators to delay planned maintenance outages to reduce supply concerns and congestion issues. The summer season always brings high loads and higher purchase power costs and we are anticipating the rising costs to continue.

Generators must be able to recover their fuel costs and market prices reflect that. Load serving entities like Columbia purchase 100% of load at the current market price at our location. Below is Columbia's 2018-2022 Load Cost.



Other factors to consider, to offset the cost of load purchases, Columbia receives revenue for generation injected into MISO. Revenue from Sikeston Power Plant energy has been lower due to coal conservation measures put in place by the plant due to reduced coal deliveries.

Below is the past five year expenditure history for purchase power:

FY 2018: total cost \$62,989,303; thru 6-30-18: \$41,093,984

FY 2019: total cost \$60,482,689; thru 6-30-19: \$39,618,076

FY 2020: total cost \$58,301,769; thru 6-30-20: \$38,945,042

FY 2021: total cost \$63,826,578; thru 6-30-21: \$42,542,561

FY 2022 YTD thru 6-30-22: \$53,843,266

The FY 2022 current purchase power budget is \$64,357,608 and with the current market volatility with higher energy prices, reliability concerns and weather events, staff is requesting an additional \$22,500,000 to be appropriated. This would bring the total purchase power budget to \$86,857,608. The Electric Utility may not spend all of the funds appropriated as there are unknowns related to the weekly payments to MISO and SPP that occur and are out of our control. Staff has estimated the weekly payments for the remainder of the fiscal year



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based on the average payments made over the past 7-8 weeks. These weekly payments could fluctuate up or down each week depending on energy prices, reliability and weather events.

During the FY 2021 budget process, the City Manager requested that all City departments cut 10% of their operating budgets. The Electric utility purchase power budget was reduced by \$6.8 million. If this budget cut had not been requested and approved, the budget amendment being requested would not be as significant.

Fiscal Impact

Short-Term Impact: \$22,500,000

Long-Term Impact: Funds will be budgeted in the FY 2023 proposed budget

Strategic & Comprehensive Plan Impact

[Strategic Plan Impacts:](#)

Primary Impact: Reliable Infrastructure, Secondary Impact: Secondary, Tertiary Impact: Tertiary

[Comprehensive Plan Impacts:](#)

Primary Impact: Infrastructure, Secondary Impact: Secondary, Tertiary Impact: Tertiary

Legislative History

Date	Action

Suggested Council Action

Approval of the ordinance