

City of Kirkwood City Council Work Session Thursday, July 18, 2024

5:00 p.m.

City Hall, Main Level Conference Room 139 S. Kirkwood Rd. Kirkwood, MO 63122 (Posted July 15, 2024)

(Please note that work sessions are for council discussion only and there will be no public comment portion of the meeting. When a topic is completed the council will immediately move on to the next item on the agenda.)

- I. Approval of the July 11, 2024 Work Session Minutes
- II. MSD/Sugar Creek Stormwater Mitigation
- III. Electric Budget Planning Discussion
- IV. Meeting Adjournment

Kirkwood City Council: Mayor Liz Gibbons, Council Members Gina Jaksetic, Nancy Luetzow, Mark McLean, Al Rheinnecker, Paul Schaefer, and Mark Zimmer

Contact Information: For full City Council contact information visit www.kirkwoodmo.org/council. To contact the City Clerk call 314-822-5802. To contact the Chief Administrative Officer call 314-822-5803.

Accommodation: The City of Kirkwood is interested in effective communication for all persons. Persons requiring an accommodation to attend and participate in the meeting should contact the City Clerk at 314-822-5802 at least 48 hours before the meeting. With advance notice of seven calendar days, the City of Kirkwood will provide interpreter services at public meetings for languages other than English and for the hearing impaired. Upon request, the minutes from this meeting can be made available in an alternate format, such as CD by calling 314-822-5802.



WORK SESSION MINUTES

A work session of the Kirkwood City Council was held on July 11, 2024, at 4:30 p.m. at Kirkwood City Hall, 139 S. Kirkwood Road, Kirkwood, Missouri. Present Mayor Gibbons, Council Members Jaksetic, Luetzow, McLean, Rheinnecker, Schaefer, and Zimmer. Also in attendance were Chief Administrative Officer Russell Hawes, Assistant Chief Administrative Officer David Weidler, City Clerk Laurie Asche, Chief Murphy, Chief Silvernail, Director of Public Services Chris Krueger, Communications Manager Jessica Winter, and City Attorney John Hessel.

MOTION TO CLOSE THE MEETING

Motion was made by Council Member Zimmer and seconded by Council Member Schaefer to close the meeting pursuant to RSMo Chapter 610.021 (1 – Legal).

Roll Call:

Mayor Gibbons	"Yes"
Council Member Schaefer	"Yes"
Council Member Zimmer	"Yes"
Council Member Jaksetic	"Yes"
Council Member Luetzow	"Yes"
Council Member McLean	"Yes"
Council Member Rheinnecker	"Yes"

The meeting was closed.

MOTION TO OPEN THE MEETING

Motion was made by Council Member Rheinnecker and seconded by Council Member McLean to open the meeting.

Roll Call:

Mayor Gibbons	"Yes"
Council Member Schaefer	"Yes"
Council Member Zimmer	"Yes"
Council Member Jaksetic	"Yes"
Council Member Luetzow	"Yes"
Council Member McLean	"Yes"
Council Member Rheinnecker	"Yes"

The meeting was opened.

APPROVAL OF THE JUNE 20, 2024 WORK SESSION MINUTES

Motion was made by Council Member Schaefer and seconded by Council Member Luetzow to approve the minutes of June 20th Work Session. The minutes were approved, with Council Members Rheinnecker, McLean, and Zimmer abstaining.



APPROVAL OF THE JULY 3. 2024 WORK SESSION MINUTES

Motion was made by Council Member Zimmer and seconded by Council Member Schaefer to approve the minutes of July 3rd Work Session. The minutes were approved, with Council Member Luetzow abstaining.

DISCUSSION ON CITY ATTORNEY RESIDENCY

Chief Administrative Officer Hawes suggested that the Council discuss the Charter provision that requires that the City Attorney must live in the City of Kirkwood.

The Council's consensus is to eliminate the requirement that the City Attorney must live in the City of Kirkwood and add it to the November 5th ballot.

PUBLIC SERVICES BUDGET PLANNING DISCUSSION

Director of Public Services Chris Krueger discusses budget planning with the Council. Some of the discussion is as follows:

Engineering

- The department reviews and issues excavation permits in the right of way, grading permits, driveway permits, stormwater reviews for a building permit, manages traffic signals and lighted pedestrian crossing
- Staffing 5.33 employees
- New employees: Assistant City Engineer will start on August 1, 2024, and a new City Forester will begin on July 29, 2024
- Upcoming Projects
 - Local Street Projects not eligible for Federal Funds
 - o W Essex (Federally Funded) Construction, Construction Administration
 - o E Essex (Federally Funded) Construction, Construction Administration
 - Lindeman (Federally Funded) Construction. Construction Administration.
 - Kirkwood Road Phase 1 (Federally Funded) ROW, Construction, Construction Administration
 - Woodgate (in conjunction with a water main replacement) Design and Construction
 - Kirkwood Road Phase 2 (Federally Funded) Preliminary Engineering, ROW, Construction, Construction Administration
 - Clay Avenue (Federally Funded) Preliminary Engineering, ROW, Construction, Construction Administration

Sanitation

- Staffing 16.33 employees
- Pickup Recycling, Trash, and Yard Waste from 9,244 Customers using six routes (3 trash and 3 recycling), with each route servicing approximately 1,500 residences per day
- One-yard waste route per day
- Run drop off recycling center on S Taylor
- Biggest Challenge is the maintenance and equipment failure on trash trucks
- Website updates Find your next scheduled pick.
- Residents who play the Recycle Quest Game can become "Certified Kirkwood Recyclers." They can also sign up for a special collection service or bulky pickup.

Streets

Staffing 13 employees



- Primary role is to complete street patching in asphalt or concrete
- Plow snow and spread salt in the Winter and storm response the remainder of the year
- Complete all street signage in-house
- Complete some street pavement striping

Water

- Staffing 18.84 employees
- Work on repairing main breaks, monitor and work on pump stations and 4 water towers
- Manages permanent restoration of main breaks
- Water main Replacement
 - Big Bend from Fillmore to Kirkwood Road
 - Raynor Road and Taylor Young Drive

Water Rates - Budgeting a 5% increase in water rates in April 2025

Lead Service Line (LSL) Inventory – Approx. 10,000 service lines that Kirkwood Water Serves, 530 Known LSL's, and 1,500 are an unknown material. The City has applied for \$2 Million to fund replacement service lines, but it has not been awarded.

FY26 projects

- Park #2 Pump Station in Design
- Woodgate Water Main Replacement Construction
- Lockett Road Water Main Replacement Construction
- Marshall Road Transmission line 20" EZ Valve installs

MOTION TO CLOSE THE MEETING

Motion was made by Council Member McLean and seconded by Council Member Zimmer to close the meeting pursuant to RSMo Chapter 610.021 (1 – Legal).

Roll Call:

Mayor Gibbons	"Yes"
Council Member Schaefer	"Yes"
Council Member Zimmer	"Yes"
Council Member Jaksetic	"Yes"
Council Member Luetzow	"Yes"
Council Member McLean	"Yes"
Council Member Rheinnecker	"Yes"

The meeting was closed.

MOTION TO OPEN THE MEETING

Motion was made by Council Member Zimmer and seconded by Council Member Schaefer to open the meeting.

Roll Call:



Mayor Gibbons	"Yes"
Council Member Schaefer	"Yes"
Council Member Zimmer	"Yes"
Council Member Jaksetic	"Yes"
Council Member Luetzow	"Yes"
Council Member McLean	"Yes"
Council Member Rheinnecker	"Yes"

The meeting was opened.

There being no	further matters t	to come before t	he council.	the meeting was	s adiourned.

Laurie Asche	
City Clerk	

City of Kirkwood Work Session July 18, 2024 OMCI Review by MSD

City of Kirkwood staff were informed of a request by MSD for municipalities with at least one OMCI taxing district to consider whether they support continuation of the property tax at one-quarter the current rate. We've scheduled MSD representatives to present at the July 18 work session to ensure City Council has the information it needs to make such a decision on the future of the OMCI tax in Kirkwood. We've attached rate letters for all the districts from which Kirkwood receives direct funding for reference. For example, in the Sugar Creek district Kirkwood would receive an annual distribution of over \$53,000 for storm water projects in the Sugar Creek watershed if the tax is continued at one-quarter the rate. This is above and beyond the \$300,000 Prop S distribution of impervious surface fees to start next year.

MSD has informed us that they need an affirmative recommendation from jurisdictions that comprise more than 50% of the land area in any given OMCI district in order to continue the tax at the lesser rate. Sugar Creek is the only district in Kirkwood where Kirkwood comprises more than 50% of its area (Kirkwood 74%, Des Peres 26%). The effect of this is that Kirkwood will determine the taxing status for the entire district. Des Peres is in the process of making a decision that may serve to inform Kirkwood's decision on this matter. Des Peres expects to have its decision by end of August.

MSD requires that each municipality that supports having MSD's Board of Trustees consider implementing a reduced OMCI tax going forward notify them no later than October 2024. Support would be indicated by City Council resolution. Municipalities who do not support this action can either respond as such or not respond at all.

The following document provides information to help each community decide whether or not they wish to formally and publicly support having MSD staff making a recommendation to MSD's Board of Trustees to continue a portion of the current OMCI (Operation, Maintenance, Construction, and Improvement) property tax within the Sugar Creek OMCI sub-district starting in tax year 2025 for the purpose of making available additional stormwater municipal grants beyond those provided for in the recently passed Proposition S Stormwater Proposal.

The current status for each community or portion of a community located in this sub-district is listed in the chart on the next page.

- (1) Current annual grant amount ending with collections in tax year 2024 (MSD FY 2025)
- (2) Future Prop S annual grant amount starting with tax year 2025 (MSD FY 2026)
- (3) Proposed additional OMCI grant amount starting with tax year 2025 (MSD FY 2026); See below for proposal.

The proposal being considered is to put in place an annual municipal stormwater grant to supplement the Proposition S municipal stormwater grants starting in tax year 2025. The amount of the OMCI property tax would be 0.011/0.000000 assessed valuation (or 0.0000000 of the current tax rate) to produce the approximate additional grant amounts shown on the chart above.

MSD's Board of Trustees consider implementing this tax starting in tax year 2026. Support would need to be in the form of a communication (letter, e-mail, etc.) to MSD staff, sent by an appropriate representative of each municipality, following whatever procedures each municipality finds appropriate. Municipalities may also notify MSD staff if they do not support this proposal by either notifying us or by not providing any response. Note that the positive responses will be publicly available and presented in a public format by MSD staff to MSD's Board of Trustees as part of the consideration process.

Please feel free to contact MSD staff if you have any questions.

City	FY25 OMCI Grant (1)	Proposition S Grant (2)	Proposed OMCI Grant (3)
Des Peres	\$54,745.00	\$75,000.00	\$27,372.50
Kirkwood	\$107,144.00	\$300,000.00	\$53,572.00
St. Louis County	\$1,175.00	\$1,550,000.00	\$587.50

The following document provides information to help each community decide whether or not they wish to formally and publicly support having MSD staff making a recommendation to MSD's Board of Trustees to continue a portion of the current OMCI (Operation, Maintenance, Construction, and Improvement) property tax within the Deer Creek OMCI sub-district starting in tax year 2025 for the purpose of making available additional stormwater municipal grants beyond those provided for in the recently passed Proposition S Stormwater Proposal.

The current status for each community or portion of a community located in this sub-district is listed in the chart on the next page.

- (1) Current annual grant amount ending with collections in tax year 2024 (MSD FY 2025)
- (2) Future Prop S annual grant amount starting with tax year 2025 (MSD FY 2026)
- (3) Proposed additional OMCI grant amount starting with tax year 2025 (MSD FY 2026); See below for proposal.

The proposal being considered is to put in place an annual municipal stormwater grant to supplement the Proposition S municipal stormwater grants starting in tax year 2025. The amount of the OMCI property tax would be 0.016/100 assessed valuation (or 1 of the current tax rate) to produce the approximate additional grant amounts shown on the chart above.

MSD staff is requesting that these municipalities let MSD staff know if they support having MSD's Board of Trustees consider implementing this tax starting in tax year 2026. Support would need to be in the form of a communication (letter, e-mail, etc.) to MSD staff, sent by an appropriate representative of each municipality, following whatever procedures each municipality finds appropriate. Municipalities may also notify MSD staff if they do not support this proposal by either notifying us or by not providing any response. **Note that the positive responses will be publicly available and presented in a public format by MSD staff to MSD's Board of Trustees as part of the consideration process.**

Please feel free to contact MSD staff if you have any questions.

City	FY25 OMCI Grant (1)	Proposition S Grant (2)	Proposed OMCI Grant (3)
Brentwood	\$139,357.00	\$75,000.00	\$69,678.50
Clayton	\$401,595.00	\$125,000.00	\$200,797.50
Country Life Acres	\$3,578.00	\$30,000.00	\$1,789.00
Creve Coeur	\$249,571.00	\$125,000.00	\$124,785.50
Crystal Lake Park	\$7,995.00	\$30,000.00	\$3,997.50
Des Peres	\$77,432.00	\$75,000.00	\$38,716.00
Frontenac	\$134,174.00	\$50,000.00	\$67,087.00
Glendale	\$73,552.00	\$75,000.00	\$36,776.00
Huntleigh	\$27,352.00	\$30,000.00	\$13,676.00
Kirkwood	\$86,061.00	\$300,000.00	\$43,030.50
Ladue	\$339,717.00	\$75,000.00	\$169,858.50
Maplewood	\$53,508.00	\$75,000.00	\$26,754.00
Olivette	\$42,610.00	\$75,000.00	\$21,305.00
Richmond Heights	\$140,487.00	\$75,000.00	\$70,243.50
Rock Hill	\$53,062.00	\$50,000.00	\$26,531.00
Shrewsbury	\$4,647.00	\$75,000.00	\$2,323.50
Town & Country	\$62,588.00	\$125,000.00	\$31,294.00
University City	\$36,724.00	\$300,000.00	\$18,362.00
Warson Woods	\$33,513.00	\$40,000.00	\$16,756.50
Webster Groves	\$165,783.00	\$300,000.00	\$82,891.50
Westwood	\$11,143.00	\$30,000.00	\$5,571.50

The following document provides information to help each community decide whether or not they wish to formally and publicly support having MSD staff making a recommendation to MSD's Board of Trustees to continue a portion of the current OMCI (Operation, Maintenance, Construction, and Improvement) property tax within the Gravois Creek OMCI sub-district starting in tax year 2025 for the purpose of making available additional stormwater municipal grants beyond those provided for in the recently passed Proposition S Stormwater Proposal.

The current status for each community or portion of a community located in this sub-district is listed in the chart on the next page.

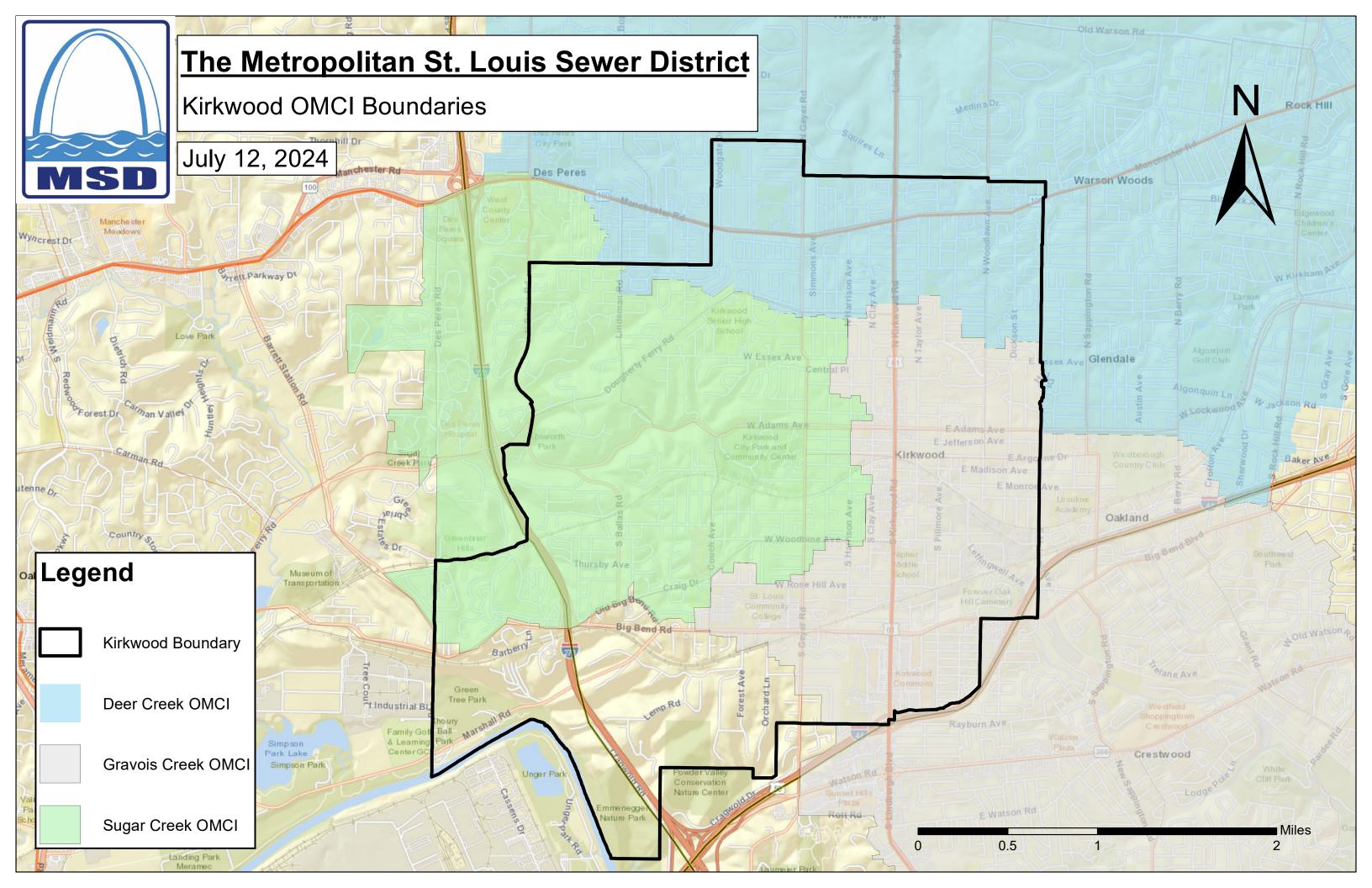
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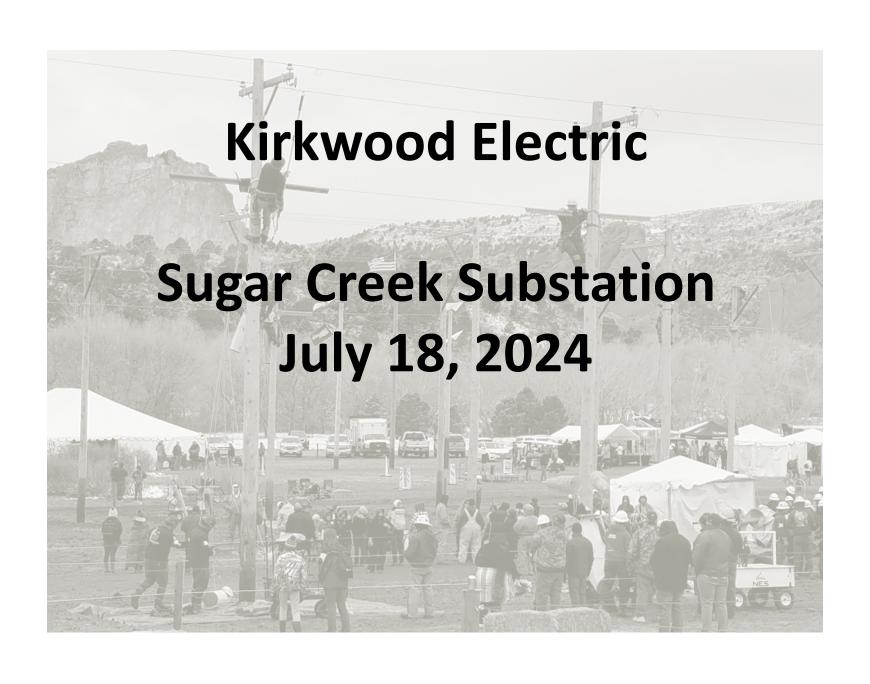
The proposal being considered is to put in place an annual municipal stormwater grant to supplement the Proposition S municipal stormwater grants starting in tax year 2025. The amount of the OMCI property tax would be 0.014/100 assessed valuation (or 14 of the current tax rate) to produce the approximate additional grant amounts shown on the chart above.

MSD's Board of Trustees consider implementing this tax starting in tax year 2026. Support would need to be in the form of a communication (letter, e-mail, etc.) to MSD staff, sent by an appropriate representative of each municipality, following whatever procedures each municipality finds appropriate. Municipalities may also notify MSD staff if they do not support this proposal by either notifying us or by not providing any response. Note that the positive responses will be publicly available and presented in a public format by MSD staff to MSD's Board of Trustees as part of the consideration process.

Please feel free to contact MSD staff if you have any questions.

City	FY25 OMCI Grant (1)	Proposition S Grant (2)	Proposed OMCI Grant (3)
Bella Villa	\$3,015.00	\$30,000.00	\$1,507.50
Crestwood	\$125,768.00	\$125,000.00	\$62,884.00
Grantwood Village	\$10,863.00	\$30,000.00	\$5,431.50
Green Park	\$47,988.00	\$40,000.00	\$23,994.00
Kirkwood	\$144,476.00	\$300,000.00	\$72,238.00
Lakeshire	\$6,414.00	\$40,000.00	\$3,207.00
Oakland	\$18,154.00	\$40,000.00	\$9,077.00
St. Louis County	\$370,110.00	\$1,550,000.00	\$185,055.00
Sunset Hills	\$74,689.00	\$75,000.00	\$37,344.50
Webster Groves	\$32,625.00	\$300,000.00	\$16,312.50







Distribution System Modernization Timeline

- 2006 Study Outlines Savings and System Performance Advantages
- Since 2006 5 of 6 Substations
 Renovated
- 3/4 of the Distribution System Upgraded
- 2024 New Sugar Creek Substation
- 2024 New Substation Design Completed



Sugar Creek Substation

- Southwest Kirkwood on Ballas
- 2 New 16MVA Transformers \$1,904,348
- New Switchgear Controlling 4 Circuits -\$1,795,845
- Capable of Delivering Power to over
 4,000 Customers
- Construction Start Date Fall 2024
- Construction Completion Summer 2025
- Estimated \$5M Project cost



Resolution 110-2024 Civil Construction of the Substation

- L Keeley Construction
- \$1,214,066 (which includes a contingency of \$84,703)
- Mobilization, Fencing, Ground Grid -\$268,659
- Switchgear Foundation \$141,514
- Transformer Foundations \$318,622
- Demolition and new 34.5kV and 12,470
 Circuit Work \$400,568

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Resolution 107-2024 Sugar Creek Substation Steel Structures

- Electrorep Energy Products from Meyer
 Utility Structures
- 17 Structures Galvanized Steel
- Almost Identical Footprint of the Current Substation
- Structures to be Assembled by Civil
 Contractor
- Total Weight 7,563#
- \$76,897
- 18 Week Lead Time



Resolution 109-2024 St. Louis Community College Service Extension Design

- CLC Engineering, LLC
- Designer of the New Sugar Creek Substation
- Phase One Substation Transformer Move to the Community College Site – Fall 2024
- Phase Two Additional Substation Transformers and Switchgear move to the Community College Site – Fall 2025
- \$124,607 (which includes a contingency of \$12,460.70
- Service extension coordinated with College upgrades



Resolution 108-2024 Repair of Transformers

- Sunbelt Solomon
- 3 Pole mounts transformers repaired
- 2 Pad mount transformers repaired
- 1 Pole mount transformer replaced
- Sunbelt Solomon is Kirkwood Electric's salvage transformer contractor
- Sunbelt Solomon currently has the transformers on site
- Sunbelt Solomon was just awarded for this service - resolution 97-2024 dated 6/20/2024
- Favorable Price (\$51,325 total) and Lead time 8 10 weeks







GOVERNMENT BRIEFING

KIRKWOOD ELECTRIC DEPARTMENT

PRESENTED BY





01 GOVERNANCE

02SUPPLIERS AND CONTRACTS

03FINANCIAL PLANNING

04
POWER SUPPLY STRATEGY

POLITICS IS THE ART OF THE POSSIBLE

Otto von Bismarck

GOVERNANCE

ELECTRIC OPERATIONS AND SUPPORT





- Mark Petty,
 Electric Director
- Sara Foan-Oliver,
 Procurement
 Director



Missouri Public Utility Alliance



- John Twitty, CEO
- John Grotzinger, COO
- Doug Healy,
 Counsel
- Steve Pearson (DC Counsel, Spiegel McDiarmid)





GDS Associates

- Chris Dawson,
 Vice President
 Kyle Haemig,
 Senior Project
 Manager
- Megan Morello,
 Project Manager





KIRKWOOD HAS TRUE INDEPENDENCE

- City Council governs
 - Ratemaking authority no State oversight
 - Greater local control than most munis power supply

Distribution

Kirkwood runs and owns its distribution system

Transmission

- Ameren owns Kirkwood's transmission
- MISO operates Ameren's transmission

Power Supply

- Kirkwood has many power suppliers
- No current power supply contracts with Ameren

Midcontinent Independent System Operator (MISO)

- MISO runs power market
- MISO has functional control of all transmission grid
- MISO regulated by FERC*
- *Federal Energy Regulatory Commission



-- INDEPENDENCE MEANS...

- Ability to define power supply goals
 - Diversified power supply resources
 - Minimize impact of market or policy changes
 - Can and do use MISO for supplemental power
 - Kirkwood historically prioritizes cost stability
 - Risk management
 - Common situation: Buy from MISO? Or at set cost from supplier?
- Competitive power procurements
 - Least cost principle
 - Ability to choose
- Ability to own transmission wires and transformers
 - Don't have to operate transmission lines just provide capital
 - Highly regulated process but guaranteed revenue
 - Transmission is growing share of cost ownership just keeping up
- Ability to partner with who can help



- MISO RELATIONSHIP

- Kirkwood deals directly with MISO grid

- No middleman
- Market Participant
- Transmission Customer, becoming Transmission Owner

Kirkwood has MISO obligations

- Capacity Requirements for reliability
- Credit/Collateral support ongoing MISO power purchases
- Compliance tasks mainly in spring
 - Support in doing tasks from GDS and MPUA

- Kirkwood pays MISO bills

- Power bills weekly, GDS built module to predict
- Transmission bills monthly



Someone is sitting in the shade today because someone planted a tree a long time ago

Warren Buffett

SUPPLIERS & CONTRACTS

RECENT AND CURRENT CONTRACTS

Foundational Contracts

- MISO
- Prairie StateEnergy Campus(PSEC)
- Grain Belt
 - Anticipated start2027 2030

Capacity

- Ameren: ended May 2023
- Big Rivers: ended May 2022
- Cordelio: June 2024
 - May 2034
- **SIPC**: ended summer 2023
- Voltus: June 2025 –
 May 2027

Energy

- **AEP:** 2023 2024
- Trafigura: Fall 2024
- Transalta: ended

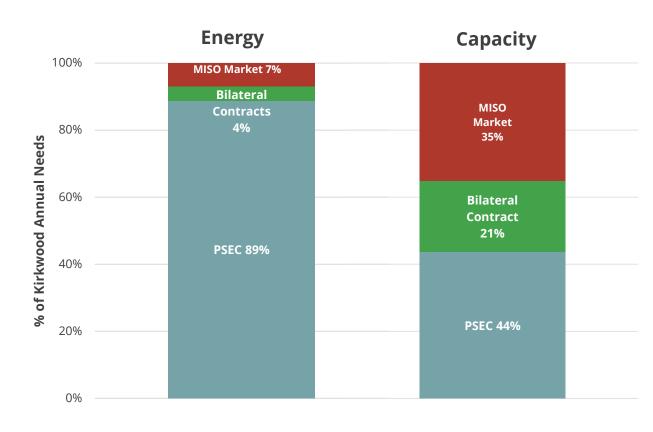
fall 2023



KIRKWOOD POWER SUPPLY RESOURCES

- Kirkwood's energy requirements met by MISO market, PSEC, and bilateral purchases ("hedges")
 - AEP 2-year summer energy hedge expires August 2025
 - Trafigura contract to hedge PSEC outage hedge for Sept-Oct 2024
- 2. Kirkwood's capacity
 Requirements met by PSEC,
 bilateral capacity hedges, and
 MISO market
 - Cordelio June 2024 May 2034
 - MidAmerican June 2024 May 2025
- 3. Capacity requirements essentially separate from energy

Current FY Power Portfolio





COMPETITIVE PROCUREMENTS

- All procurements are competitive
 - Terms and not-to-exceed cost approved by Council before transaction executed
 - Lowest cost counterparty chosen
- Easy means: EEI Master Agreements
 - Key contract terms settled in advance
 - Ensuring payment and delivery credit
 - Exit rights
 - Once agreed, all future procurements only require defining product and price
- One-off opportunistic procurements
 - Like SIPC usually capacity, occasional

Agreements

American Electric Power (AEP)

Ameren

Cordelio

NextEra

Trafigura

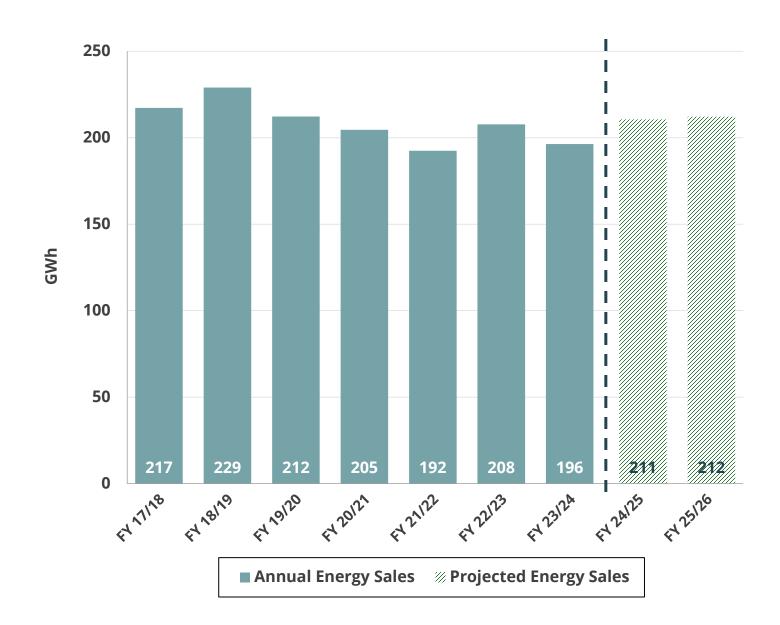
Transalta

Vistra



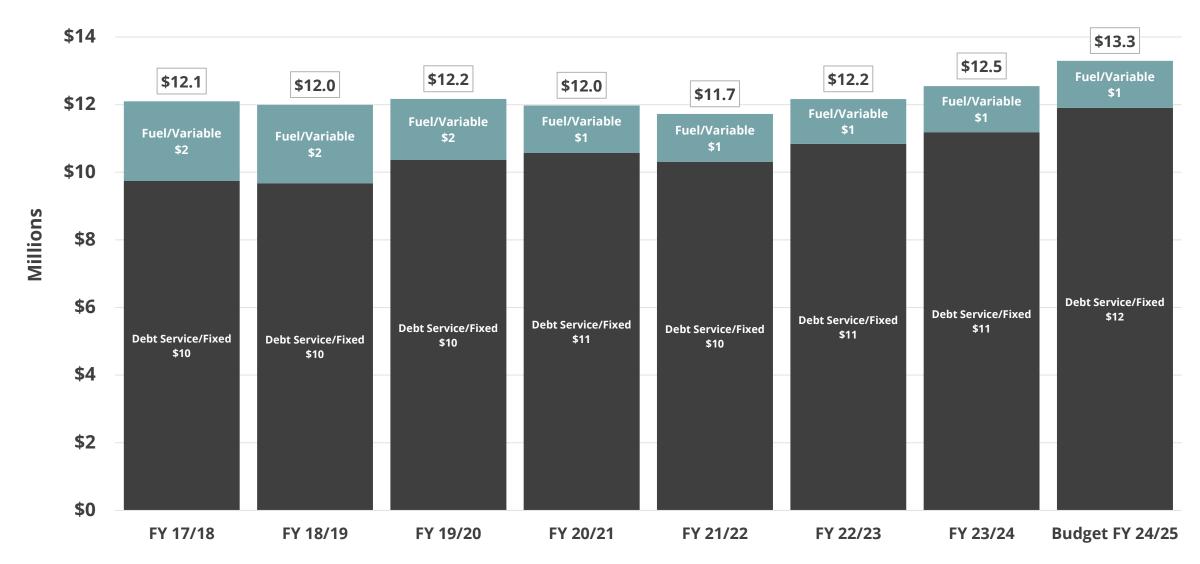
KIRKWOOD SALES HAVE FALLEN

- Lower revenues
- Electric sales dropped since 2019/20
 - Commercial and Industrial
 - Energy efficiency
- New load forecast coming this fall



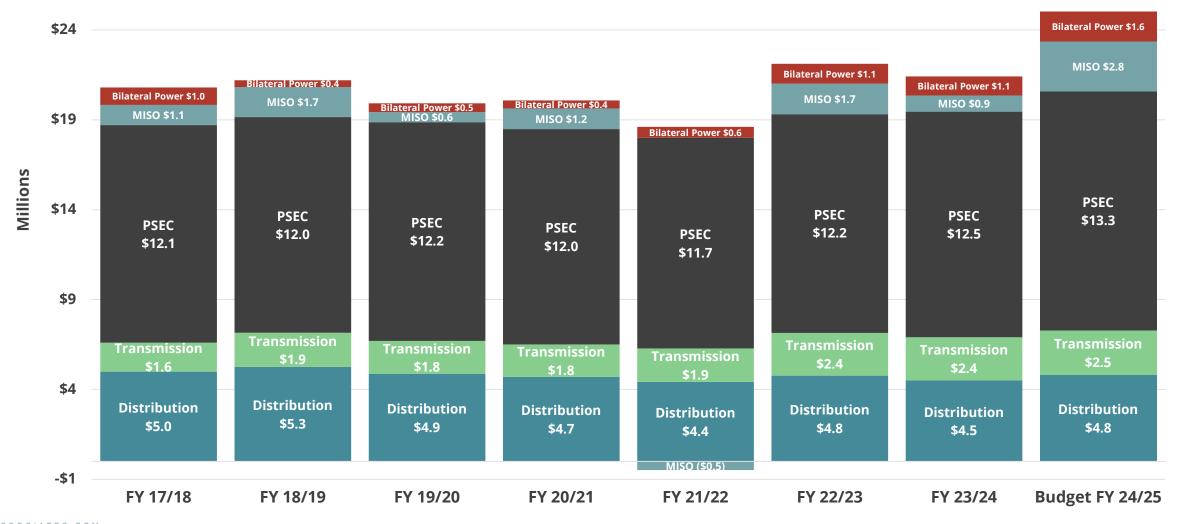


— PSEC IS BACKBONE OF POWER SUPPLY



COSTS TO SERVE ARE STABLE

\$29



PLANS ARE WORTHLESS, BUT PLANNING IS EVERYTHING

Dwight Eisenhower



FINANCIAL PLANNING

PILLARS OF CONTINUED SUCCESS

Rate Stabilization Collateral Capex Ongoing Procurements

Require Accessible Cash Reserves

- Rate Stabilization
 - Electric rates must be steady, but all utilities' costs vary wildly
 - If electric changed prices <u>daily</u> like gas stations, would bounce **5x** as much!
 - Rate Stabilization gives <u>years</u> of rate certainty
 - A fund to simplify admin
 - Pay into fund for good months, withdraw in expensive



Reuters

RATE STABILIZATION AND COLLATERAL

Rate Stabilization

Collateral

Capex

Ongoing Procurements



Bank Run, "It's a Wonderful Life"

Collateral

- Direct MISO market relationship
- Market participation requires
 - Compliance with MISO requirements (GDS & MPUA assist)
 - Kirkwood must keep \$1M of cash on hand at MISO as collateral
 - Can change with markets -GDS forecasts anticipate cash calls

CAPEX AND ONGOING PROCUREMENTS

Rate Stabilization

Collateral

Capex

Ongoing Procurements

Capex

- Kirkwood has multiple capital investment needs:
 - PSEC
 - Distribution system
 - Transmission Owner
 - New, but important
- All other costs expensed, don't require debt service

Ongoing Procurements

- Expenses managed, kept relatively stable
- Purchase resolutions required to continue diversified, competitive procurements
- MISO bills ongoing
 - Energy
 - Capacity
 - Transmission

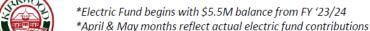
Better Interest Rates, More Unsecured Credit

CASH RESERVE SITUATION

- As of March 30,
 Kirkwood has \$5.5M
 in cash reserves
- Despite adverse circumstances, anticipate cushion to stay same thru FY
 - Capacity
 - Transmission Rates
- Healthy reserves mean we don't have to raise rates

Projected Electric Fund Impact





^{*}Projected Load based on 5.7% lower 2022 Load Forecast and assumes 2.4 ¢/kWh Distribution Rate



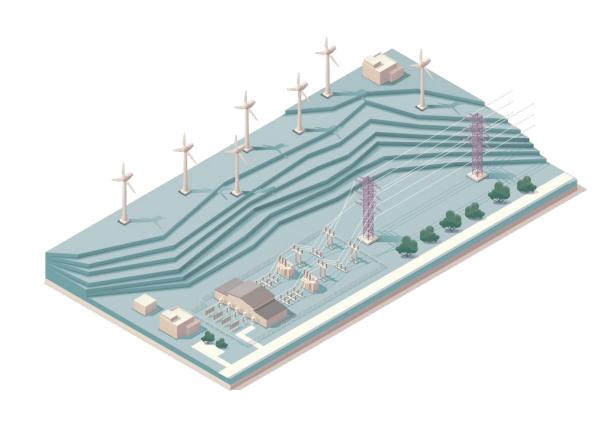
AS THEY ARE, THINGS TO STAY HAVE TO CHANGE

Giuseppe di Lampedusa

BUILDING A BETTER FUTURE

-WHAT WE'RE DOING RIGHT NOW

- Capacity changes and optimizing capacity need
 - ✓ Rate stability
- Near term risk mitigation strategy to manage stability includes:
 - ✓ Finishing distribution upgrades
 - √ EV grants
 - √ Go further?
 - ✓ Waiting for Grain Belt wind, online in 2027-2030



-VISION FOR THE FUTURE

1. Building load

- Economic development
- EV charging in town
 - Grant applications
- Load-building opportunities data centers?

2. Distributed Resources

 Grants for backup generators for medical needs and municipal buildings

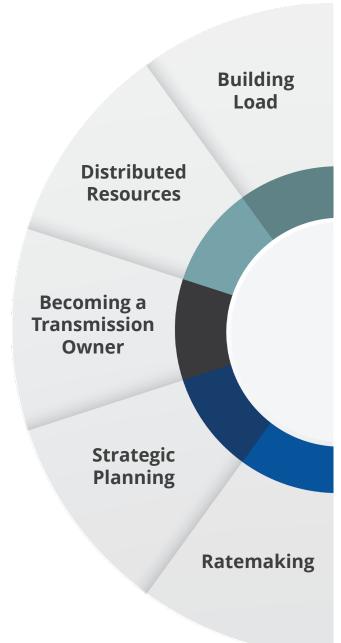
3. Becoming a Transmission Owner

Guaranteed return, and some expenses paid

4. Contingency Planning

PSEC retirement or changes in load

5. Ratemaking



-LONG TERM GOALS - STABILITY & REVENUE

Distributed battery

- "Backup generator" for city functions
- Grid capacity insurance against spikes

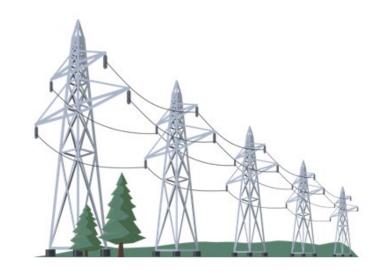


- Allow Kirkwood transmission revenue offset incoming higher expenses
- Guaranteed return when abide by rules
- Supports rate stabilization goals

Contingency Planning

- More load? What if load drops?
- What happens if PSEC retires?







DEVELOPING NEW RATES FOR KIRKWOOD

- Rate structure: Wide conversation
 - Customer charge overhaul?
- Time of Use (TOU) rates encourage usage when low system needs
 - Incentive to optimize system
 - Incentive for consumers to buy when power cheap
 - Require AMI meters to show "when" usage
- Enables future initiatives
 - More retail solar
 - More EV charging
 - Revenue neutral
 - Demand response flat needs





If we go on explaining, we shall cease to understand one another

Talleyrand



QUESTIONS & DISCUSSION

CHRIS DAWSON, VICE PRESIDENT





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MISO SUMMARY





MISO's reliability footprint and regional control center locations.

CONTACT

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Regional Offices

Little Rock, AR Washington, DC

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MISO Media Center 317-249-5650 media@MISOenergy.org







See Real-Time Displays also









JANUARY 2024

720 City Center Drive

Eagan, MN

Follow us on Social







on the MISO Mobile App



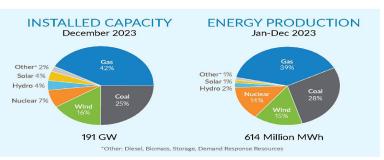




Fact Sheet

MISO is an independent, not-for-profit, member-based organization responsible for keeping the power flowing across its region reliably and cost effectively. MISO focuses on three critical tasks:

- Managing the flow of high-voltage electricity across 15 U.S. states and the Canadian province of Manitoba
- Facilitating one of the world's largest energy markets with more than \$40 billion in annual transactions
- 3 Planning the grid of the future



KEY FACTS

Area Served	15 U.S. States and Manitoba, Canada	
Population Served	45 Million	
Transmission Line	75,000 Miles	
Generating Units	2,956	
Record Demand	127.1 GW 7/20/2011	
Wind Peak	25.6 GW 1/12/2024	
Solar Peak	3.3 GW 8/31/2023	
Members	54 Transmission Owners	
	143 Non-transmission Owners	
Market Participants	+500	
Carbon Reduction	Approximately 32% since 2014	

MISO TRANSMISSION EXPANSION PLAN (MTEP)

	LRTP Tranche 1*	MTEP23
Approved New Projects	18	572
Miles of Transmission Line	2,000	742
New Project Investment	\$10.3 billion	\$9 billion

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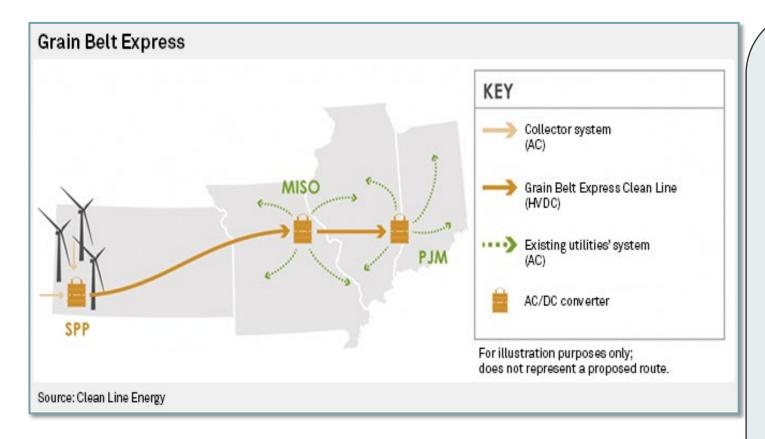








GRAIN BELT EXPRESS PROJECT (WIND)



Farmers, energy advocates continue to battle over Grain Belt Express addition

- **❖ Grain Belt Express Project** 780-mile HVDC transmission line. Owned by Invenergy
 - **❖** Deliver wind-generated power
- ❖ Proposed in 2009
- Most regulatory approvals
- **Expected COD: 2027-2030**
 - ❖ Dispute, depends on MISO-adjudicated grid upgrades
- Cheap Pricing, 25 years







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PSEC SUMMARY

- Prairie State Energy Campus
- Mine mouth coal plant
- Marissa, IL, on MISO grid
- PSEC Board, 9 public power group owners
- Kirkwood has 25 MW of plant's 1,627
- Structured as lease* from MPUA, mirrors ownership (cost sharing)
- MPUA debt, Kirkwood pays fixed charge monthly
- Monthly energy/fuel and admin charges
- Prospects For Future:
- Agreements signed 2007, Plant in service 2012, life of plant (2040s) or shutdown
 - Sale possible, requires MPUA agreement
 - PSEC board could end contract
- Currently highest-operating coal plant in US
- Sierra Club lawsuit Clean Air permit
- PSEC board has MPUA rep, MPUA rep advised by MPUA-project members including Kirkwood



https://prairiestateenergycampus.com/

* PPA (Purchased Power Agreement)





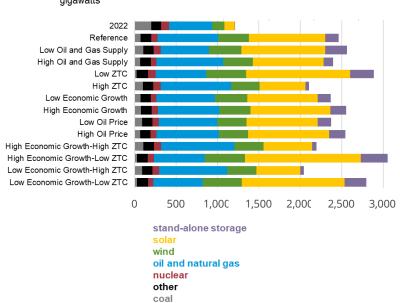




ENERGY TRANSITION - GROWTH

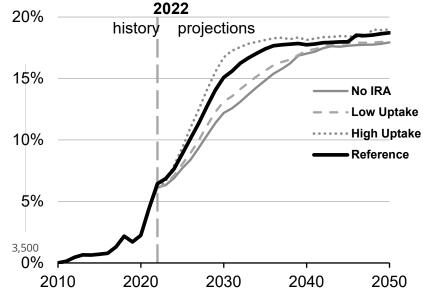
SOURCES HAVE LESS CARBON

Total installed capacity in all sectors, 2022 (history) and 2050 gigawatts



Inflation Reduction Act \$7,500 tax credit may speed growth in sales of electric vehicles

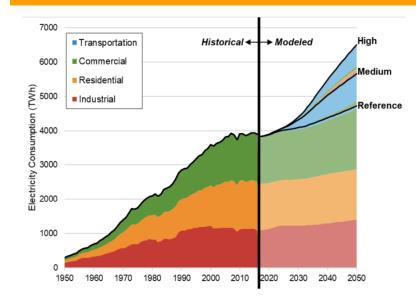
Market share of electric light-duty vehicles* percentage



Data source: U.S. Energy Information Administration, *Annual Energy Outlook 2023* (AEO2023) eia

Note: *Includes battery electric and plug-in hybrid electric vehicles. IRA=Inflation Reduction Act

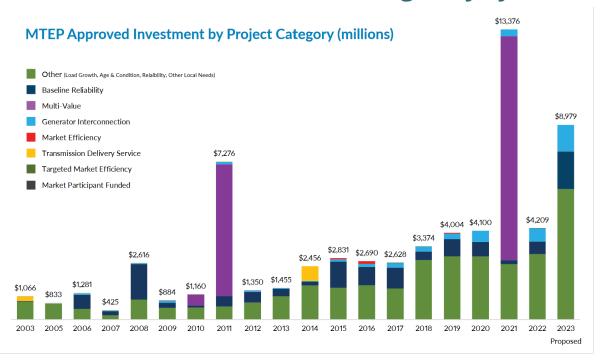
ELECTRIFICATION

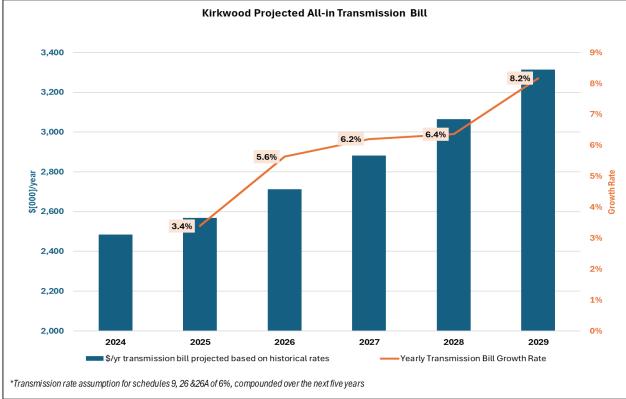




TRANSMISSION OPPORTUNITIES

\$600 Billion: A new Interstate Highway System









FEDERAL LEGISLATION

INFLATION REDUCTION ACT (IRA)

- Federal legislation extends wind and solar tax credits until 2034
- Creates direct ITC / PTC benefits for public power & non-profits
- Promotes EVs & infrastructure

Incentivizes hydrogen development and nuclear energy

US energy storage additions to double in 2023 to nearly 25 GWh — report EXTRA

Tuesday, September 26, 2023 1:00 PM ET

By Garrett Hering
Market Intelligence

Add To

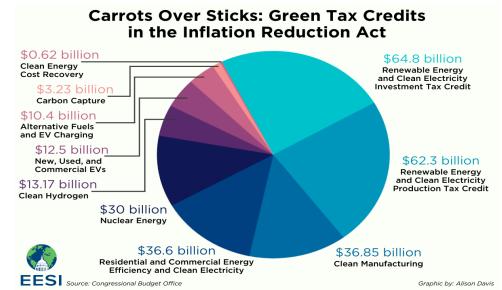
Create Alert Email Print PDF Feedback

A + A -

The US energy storage market is poised to reach new heights in 2023 despite significant project delays and cancellations, according to a new report highlighting the power sector's battery surge.

Nearly 25 GWh of energy storage capacity at grid-scale, residential, community, commercial and industrial sites will come online in 2023, according to a report from research firm Wood Mackenzie and the American Clean Power Association, released Sept. 25. That forecast would roughly double the amount of US energy storage capacity added in 2022.







EPA REGULATIONS

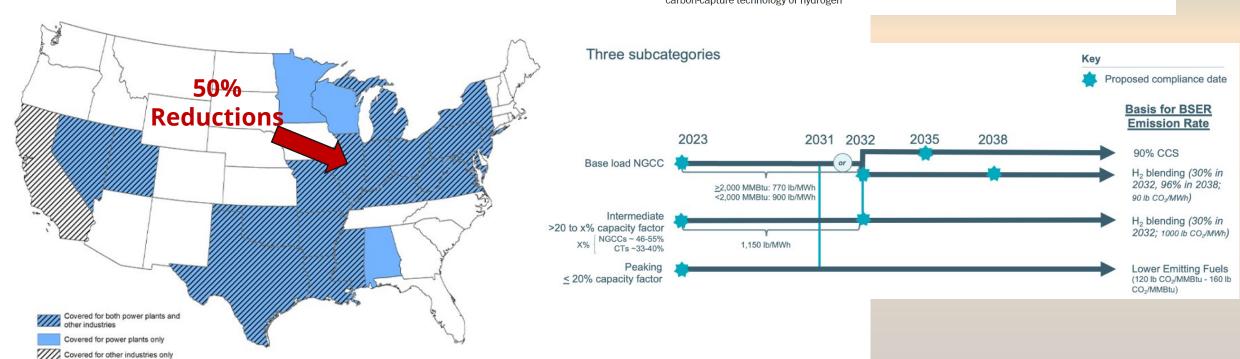
GOOD NEIGHBOR RULE & PROPOSED CO2 PLAN

EPA Good Neighbor Plan Expected to Accelerate Coal Plant Retirements

23 States Required to Reduce Impact on Downwind Neighbors

EPA plan would impose drastic cuts on power plant emissions by 2040

A long-awaited climate rule, which is sure to face legal challenges, would push plants that burn fossil fuels to use carbon-capture technology or hydrogen





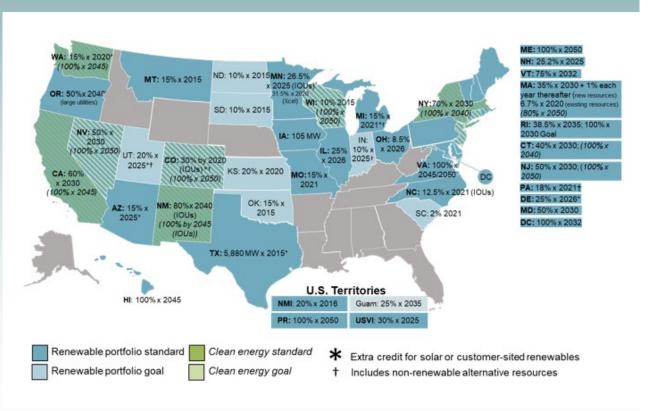




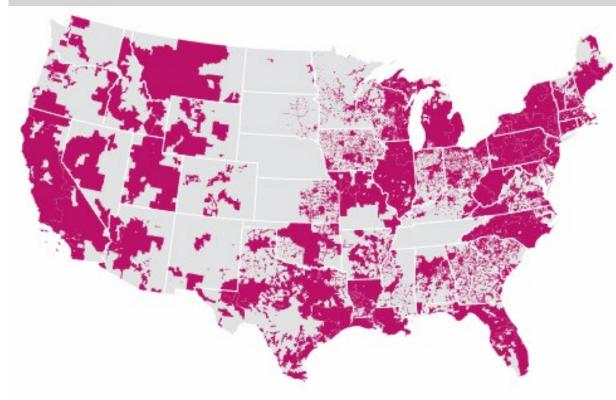


RENEWABLE PORTFOLIO STANDARD (RPS)

State RPS / CES Goals

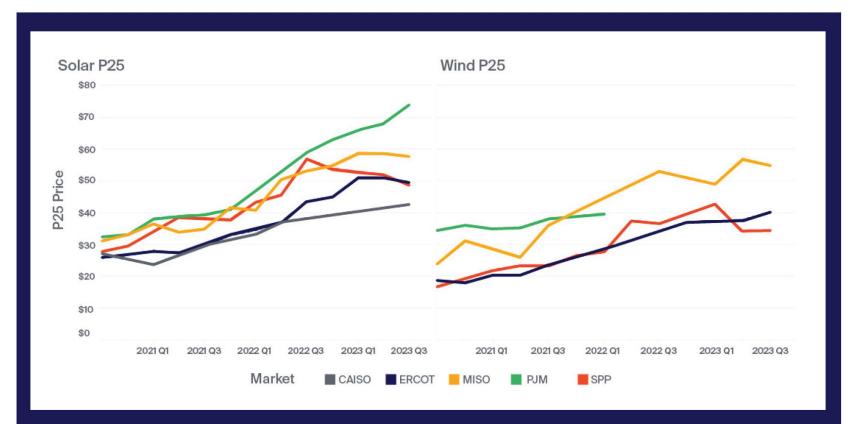


Electric & Gas Utilities with RPS/CES



RENEWABLE PRICING

U.S. Renewable Energy Marketplace: Wind & Solar PPA Pricing Trends



Prices shown reflect the P25 prices of flat, hub-settled, unit contingent offers inclusive of project RECs received over time. Markets and technologies with fewer than four distinct projects in a given quarter are not shown. Please note that Edison Energy has transitioned from publishing median pricing to P25 pricing, which refers to the 25th percentile of relevant bids offered in the quarter.

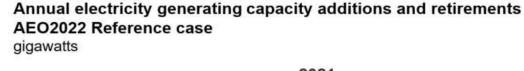
The U.S. median PPA price has continued to moderate for the second quarter in a row.

Median and P25 PPA prices decreased in Q3 for ERCOT solar, MISO wind, and MISO solar.

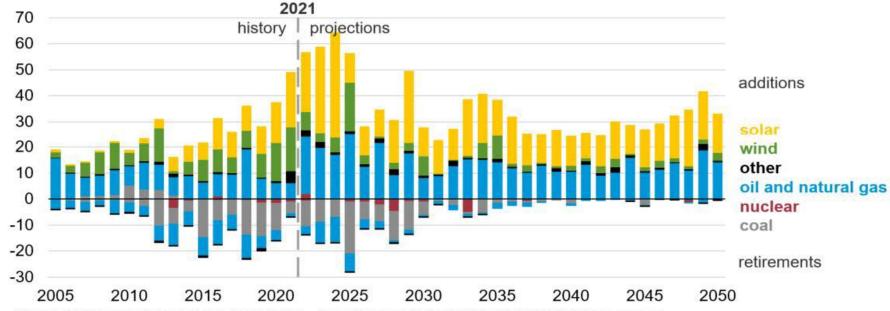
PJM solar median (+3%) and P25 (+9%) PPA prices represented the largest increases this quarter.

PROJECTED GENERATION ADDITIONS

- Expectation is large additions of renewables and natural gas generation
- Natural gas generation is the only thermal generation projected to be built over immediate future







Source: U.S. Energy Information Administration, *Annual Energy Outlook 2022* (AEO2022) Reference case Note: Solar includes both utility-scale and end-use photovoltaic power generation capacity.



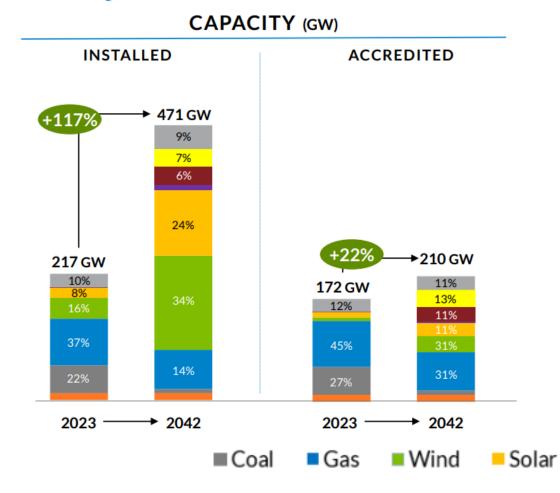
MISO FLEET TRANSITION

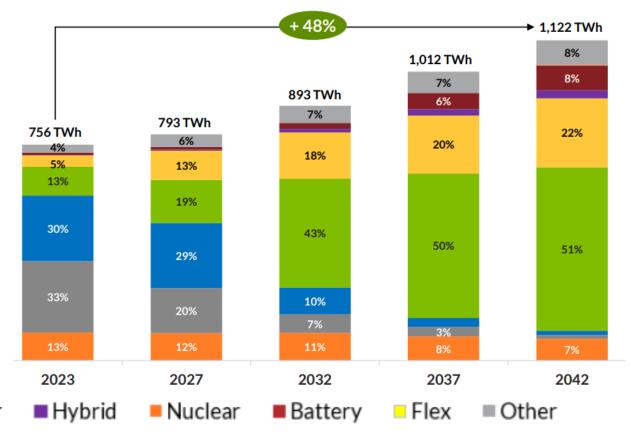
Within Future 2A, MISO anticipates significant resource additions and retirements along with energy production growth trending toward increasing renewables

Wind and solar are projected to serve 80% of MISO's annual load by 2042, reflecting a decarbonized and more operationally complex system

FUTURE 2A ANNUAL ENERGY PRODUCTION

(TWh and % of Total)





TRANSMISSIONINVESTMENT



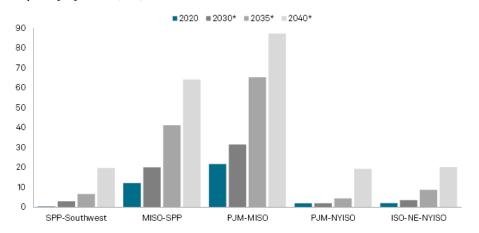
DIVE BRIEF

Electric grids could be the 'weak link' of clean energy transition, IEA warns

A large-scale transmission buildout and development of more flexible grids are keys to keeping the Paris climate accord goals in reach.

Published Oct. 18, 2023

US DOE study sees major need for more interregional transmission capacity by 2040 (GW)



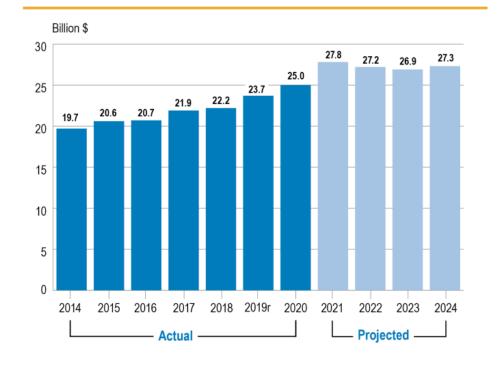
Data accessed Sept. 19, 2023.

Estimates assume moderate load growth and high clean energy penetration (moderate/high scenario).

Source: US Department of Energy Draft National Transmission Needs Study.

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Actual and Projected Transmission Investment (Nominal Dollars)



^{*} Entimeted seed

LOCAL RATES COMPARISON

*TOU rates
**TOU rate options



COMMERCIAL AMEREN RATES COMPARISON

□ Commercial Rates:

- Small General Service (GS) is restaurant
- Large GS is retail like a Target

COMMERCIAL RETAIL RATES

