

**REGULAR SESSION –WEDNESDAY, MARCH 15, 2023**

STATE OF KANSAS        )  
                                          ) SS  
CITY OF KANSAS CITY )

The Board of Public Utilities of Kansas City, Kansas (aka BPU, We, Us, Our) met in Regular Session on Wednesday, March 15, 2023 at 6:00 P.M. The following Board Members were present: Rose Mulvany Henry, President; Thomas Groneman, Vice President; Robert L. Milan, Secretary; Jeff Bryant, and Mary Gonzales. David Haley attended via Zoom.

Also present: William Johnson, General Manager; Angela Lawson, Deputy Chief Counsel; Lori Austin, Chief Financial Officer/Chief Administrative Officer; Jeremy Ash, Interim Chief Operating Officer; Johnetta Hinson, Executive Director Customer Service; Glen Brendel, Executive Director Electric Production; Darrin McNew, Acting Executive Director Electric Operations; Jerin Purtee, Executive Director Electric Supply; David Mehlhaff, Chief Communications Officer; Dennis Dumovich, Director of Human Resources; Andrew Ferris, Director Electric Supply Planning; Chris Stewart, Director Civil Engineering; Dustin Miller, Director of Applications; Durward Johnson, Senior Civil Engineer; and Robert Kamp, IT Project Manager.

A video of this meeting is on file at the Board of Public Utilities and can be found on the BPU website, [www.bpu.com](http://www.bpu.com).

Ms. Mulvany Henry called the Board meeting to order at 6:00 P.M. She welcomed all that were listening to or viewing the meeting. She informed all that the meeting was being recorded including video and audio. During the public comment section, those attending in person, wishing to speak, should use the sign-up sheet at the entry and provide their name and address. Public comments were limited to five minutes and should be addressed to the Board. Members of the public who wished to speak to the Board using Zoom needed to use the Raise Hand feature at the bottom of the application or window to signal that they wish to address the board during the public comment section. Members of the public connected by phone only, needed to press \*9 to indicate they wished to address the Board in the public comment section. No confidential information should be shared, including, account information. Staff would not provide individual account information during an open meeting. As always, the public could also email or call the BPU with any concerns. Ms. Mulvany Henry introduced herself and the other Board Members along with the General Manager, and Legal Counsel.

Roll call was taken and all Board Members were present, Mr. Haley via Zoom.

**Item #3 – Approval of Agenda**

A motion was made to approve the Agenda by Mr. Bryant, seconded by Ms. Gonzales, and unanimously carried.

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**Item #4 – Approval of Regular Session Minutes of March 1, 2023**

A motion was made to approve the minutes of the Regular Session of March 1, 2023, by Mr. Bryant, seconded by Mr. Milan, and unanimously carried.

**Item #5 – Public Comments**

Ms. Susan Stevens, 4018 Silver, Community Conscious Action Network, commented on her experience with the rising cost of utilities.

Mr. David Smith, 400 Troup Ave., expressed his appreciation regarding the Board’s efforts regarding community assistance.

Mr. Ty Gorman, 2843 Parkwood Blvd., expressed his thoughts on the Community Engagement session that he listened to as well as the Weatherization presentation in the Work Session.

**Item #6– Legislative Update – Josh Svaty**

Mr. Josh Svaty, Gencur Svaty Public Affairs, reviewed with the Board, various federal funding opportunities. (See attached PowerPoint.)

Mr. Svaty responded to comments and questions from the Board.

Mr. Svaty explained that COVID aid funds were loosely governed blocks of money. The upcoming funds, which he reviewed, were all specific pieces of legislation with direct intent and would have associated rules and regulations structured behind them.

**Item #7– General Manager / Staff Reports**

- i. *Customer Bill Presentation:* Mr. Andrew Ferris, Director Electric Supply Planning, walked through the BPU bill. He discussed the layout, and what was included, He also reiterated that this detailed explanation as well as a video could be found at [www.bpu.com](http://www.bpu.com) under the Residential tab. (See the attached.)

Mr. Ferris responded to questions and comments from the Board.

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- ii. *Budget Transfer – Electric Production:* Mr. Glen Brendel, Executive Director Electric Production, explained the need to transfer capital dollars to fund discovery work on CT4. (See attached PowerPoint.)

Mr. Brendel answered questions from the Board.

A motion was made to approve the Budget Transfer for work on CT4, by Mr. Groneman, seconded by Mr. Milan, and unanimously carried.

- iii. *Water Division Update:* Mr. Durward Johnson, Senior Civil Engineer reviewed with the Board some upgrades and testing done at the Emergency Interconnect that BPU shared with WaterOne at 117<sup>th</sup> and Parallel. (See attached PowerPoint.)

Mr. Johnson responded to questions and comments from the Board.

- iv. *Miscellaneous Comments:* Mr. Johnson informed the Board that on March 23<sup>rd</sup>, there would be a meeting with BPU’s utility assistance partners to continue conversations on what they were facing with the public, answer questions, and talk about how BPU could assist them as they worked to help the community with utility assistance.

**Item #8 – Board Comments**

Mr. Groneman thanked everyone that presented. He also reminded everyone that the APPA Lineworkers Rodeo was going to be held March 31- April 1 at the Agriculture Hall of Fame.

Mr. Haley thanked staff for the informative reviews and also Mr. Svaty and the public. He would give an update on the UG Economic Development & Finance Standing Committee meeting that he had attended at the next Board meeting.

Mr. Milan expressed his thoughts on how the Community Engagement committee might select the public participants for the committee. He also expressed his thoughts on the oath of office Board members took when each became a Board member, and the importance of reading and understanding the BPU ethics policy and the Boards responsibilities.

Ms. Mulvany Henry thanked the presenters from the Work and Regular Sessions. She renewed her request to have presentations beforehand in order to review them before the meetings. She also said it would be important to keep tabs on the funds that could potentially

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be utilized by the UG and BPU to benefit this community. She also thanked those who attended in person and on Zoom.

Mr. Bryant thanked staff for the well planned and well delivered presentations. He expressed his thoughts on the utility bill presentation, including the additional UG fees on the bill. He would continue to request such presentations as one more avenue to communicate with residents.

Ms. Gonzales spoke about visiting with the crews working on a new development in her area. She thanked Mr. Bryant and Ms. Mulvany Henry, and the input from others, that she believed would be helpful in getting the Community Engagement committee off the ground. She also expressed her appreciation for all of the information presented.

**Item #9 – Adjourn**

At 8:09 P.M. a motion to adjourn was made by Mr. Bryant, seconded by Mr. Milan and unanimously carried.

ATTEST:

  
Secretary

APPROVED:

  
President





# Federal Funding & You

Kimberly & Josh Svaty

Kansas City Board of Public  
Utilities

15 March 2023

# Federal Funding

## Kansas Infrastructure Opportunities

### Acronym Key:

- Infrastructure Investment and Jobs Act - IIJA
- Bipartisan Infrastructure Law- BIL
- Inflation Reduction Act - IRA

# Infrastructure Investment and Jobs Act (IIJA) Bipartisan Infrastructure Law (BIL)

- Once-in-a-generation investment in infrastructure



No More  
Lead Pipes



High-Speed  
Internet Access



Better Roads  
and Bridges



Investments in  
Public Transit



Upgrade Airports  
and Ports



Investment in  
Passenger Rail



Network of Electric  
Vehicle Chargers



Upgrade Power  
Infrastructure



Resilient  
Infrastructure



Investment in  
Environmental  
Remediation

# Infrastructure Investment and Jobs Act (IIJA) Bipartisan Infrastructure Law (BIL)

- **\$1.2 Trillion Investment in Infrastructure/Economic Growth/Jobs/Communities**
  - >375 unique programs at over a dozen federal agencies
  - >125 new programs across 9 federal agencies representing 25% of spending
  - >90 of investments will be delivered by non-federal partners
  - ~60% flowing through formula grants
  - ~38% of funding contains provisions that allow for expanded federal cost sharing arrangements – particularly for rural and disadvantaged communities

# Bipartisan Infrastructure Law Overview

**\$1.2 trillion**

Nationwide over 5 years

**60%**

Formula Funds

**\$3.8 billion**

For Kansas

**40%**










Competitive Grants

**TBD**

For Kansas

Source: Kansas Infrastructure Hub

# BIL Formula Funding for Kansas

	Avg. Annual Funding	5-year Total
 Federal Highway Aid*	\$520 million	\$2.6 billion
 Bridge Replacement & Repair	\$45 million	\$225 million
 Public Transportation	\$54 million	\$272 million
 Airports	\$22 million	\$109 million
 EV Charging Network	\$8 million	\$40 million
 Broadband	\$20 million	\$100 million
 Water Infrastructure	\$91 million	\$454 million
 Wildfires Protection	\$5 million	\$25 million
 Cyberattack Protection	\$2.8 million	\$14 million
<b>Statewide Totals:</b>	<b>\$768 million</b>	<b>\$3.8 billion</b>

NOTE: Not all new money & does not include potential discretionary dollars

\*Includes state, city & county

Source: Kansas Infrastructure Hub



# Inflation Reduction Act (IRA)

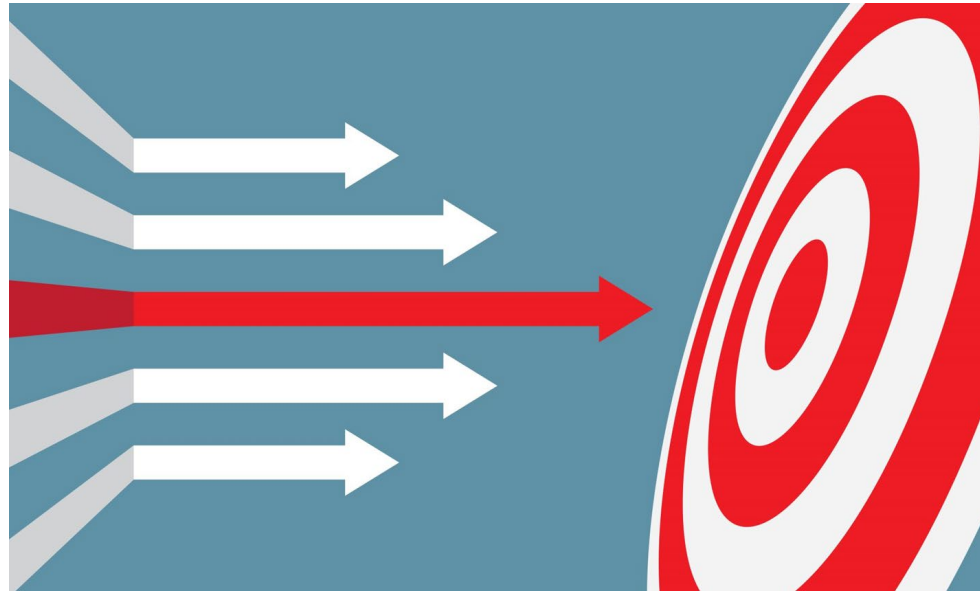
- What's in the IRA:
  - Creation of a 15% corporate minimum tax rate
  - Prescription drug price reform
  - IRS tax enforcement
  - Affordable Care Act (ACA) subsidy extension
- And,
- Energy security and climate change investments
  - Investment in domestic energy production and manufacturing
  - Reduction in carbon emissions by roughly 40 percent by 2030
  - Allows tax-exempt entities to claim energy tax credits directly (includes municipal utilities)



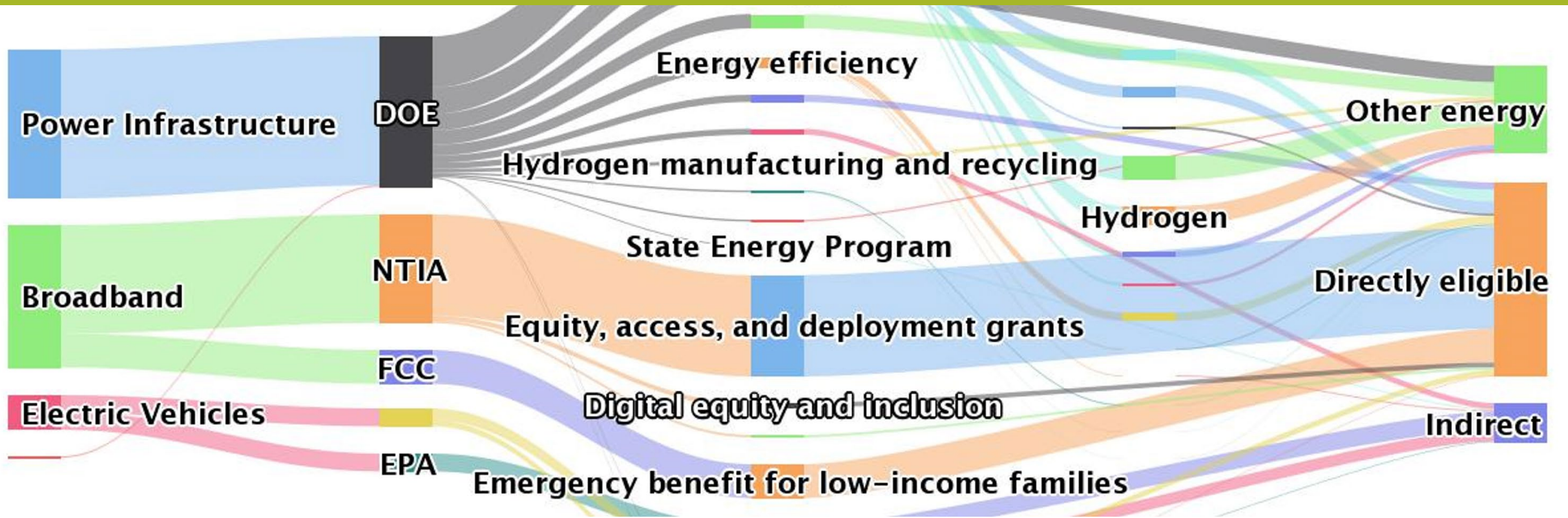
# IRA Energy and Climate Funding

<b>Energy and Climate</b>	<b>\$386 billion</b>
Clean Electricity Tax Credits	\$161 billion
Air Pollution, Hazardous Materials, Transportation and Infrastructure	\$ 40 billion
Individual Clean Energy Incentives	\$ 37 billion
Clean Manufacturing Tax Credits	\$ 37 billion
Clean Fuel and Vehicle Tax credits	\$ 36 billion
Conservation, Rural Development, Forestry	\$ 35 billion
Building Efficiency, Electrification, Transmission, Industrial, DOE Grants and Loans	\$ 27 billion
Other Energy and Climate Spending	\$ 14 billion





# FUNDING OPPORTUNITIES



# FUNDING PATHWAYS

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# KCBPU Exploring the Following Opportunities

- Preventing Outages and Enhancing Resilience of the Electric Grid (KCC hosting forum this week)
- Energy Efficient Transformer Rebates
- Energy Sector Operational Support for Cyber resilience program
- Brownfield Cleanup Grants (sub-program)
- Brownfield Revolving Loan Fund Grants (sub-program)
- Extended Product System Rebates
- Weatherization Assistance Program
- Energy Efficiency Revolving Loan Fund Capitalization Grant Program
- Brownfield Projects
- Charging and Fueling Infrastructure Grants (Community Charging)
- Charging and Fueling Infrastructure Grants (Corridor Charging)
- National Electric Vehicle Infrastructure Formula Program
- Clean School Bus Program

Program Name	Agency Name	Funding Amount
Power Marketing Administration Transmission Borrowing Authority	Department of Energy	\$10,000,000,000
Regional Clean Hydrogen Hubs	Department of Energy	\$8,000,000,000
Civil Nuclear Credit Program	Department of Energy	\$6,000,000,000
Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency	Department of Energy	\$5,000,000,000
Preventing Outages and Enhancing the Resilience of the Electric Grid / Hazard Hardening	Department of Energy	\$5,000,000,000
Four Regional Clean Direct Air Capture Hubs	Department of Energy	\$3,500,000,000
Weatherization Assistance Program	Department of Energy	\$3,500,000,000
Battery Materials Processing Grants	Department of Energy	\$3,000,000,000
Battery Manufacturing and Recycling Grants	Department of Energy	\$3,000,000,000
Smart Grid Investment Matching Grant Program	Department of Energy	\$3,000,000,000
Carbon Capture Demonstration Projects Program	Department of Energy	\$2,537,000,000
Transmission Facilitation Program	Department of Energy	\$2,500,000,000
Carbon Storage Validation and Testing	Department of Energy	\$2,500,000,000
Advanced Reactor Demonstration Program	Department of Energy	\$2,477,000,000
Carbon Dioxide Transportation Infrastructure Finance and Innovation Program	Department of Energy	\$2,100,000,000
Energy Improvement in Rural or Remote Areas	Department of Energy	\$1,000,000,000
Clean Hydrogen Electrolysis Program	Department of Energy	\$1,000,000,000
Carbon Capture Large-Scale Pilot Programs	Department of Energy	\$937,000,000
Advanced Energy Manufacturing and Recycling Grants	Department of Energy	\$750,000,000
Critical Material Innovation, Efficiency, And Alternatives	Department of Energy	\$600,000,000
Rehabilitation of High Hazard Potential Dams	Department of Homeland Security	\$585,000,000
Maintaining and Enhancing Hydroelectricity Incentives	Department of Energy	\$553,600,000
Energy Efficiency and Conservation Block Grant Program	Department of Energy	\$550,000,000
Purchase of Power and Transmission Services	Department of Energy	\$500,000,000
State Energy Program	Department of Energy	\$500,000,000
Clean Hydrogen Manufacturing Recycling Research, Development, and Demonstration Program	Department of Energy	\$500,000,000
Industrial Emission Demonstration Projects	Department of Energy	\$500,000,000
Grants for Energy Efficiency and Renewable Energy Improvements at Public School Facilities	Department of Energy	\$500,000,000
Industrial Research and Assessment Center Implementation Grants	Department of Energy	\$400,000,000
Energy Storage Demonstration and Pilot Grant Program	Department of Energy	\$355,000,000
Earth Mapping Resources Initiative	Department of the Interior	\$320,000,000
Carbon Utilization Program	Department of Energy	\$310,140,781
Assisting Federal Facilities with Energy Conservation Technologies Grant Program	Department of Energy	\$250,000,000
Energy Efficiency Revolving Loan Fund Capitalization Grant Program	Department of Energy	\$250,000,000
Cost-effective Codes Implementation for Efficiency and Resilience	Department of Energy	\$225,000,000
National Dam Safety Program	Department of Homeland Security	\$215,000,000

Energy and Minerals Research Facility	Department of the Interior	\$167,000,000
Industrial Research and Assessment Centers	Department of Energy	\$150,000,000
Long-Duration Energy Storage Demonstration Initiative and Joint Program	Department of Energy	\$150,000,000
Rare Earth Elements Demonstration Facility	Department of Energy	\$140,000,000
Rare Earth Security Activities	Department of Energy	\$127,000,000
Battery and Critical Mineral Recycling	Department of Energy	\$125,000,000
Hydroelectric Production Incentives	Department of Energy	\$125,000,000
Watershed Rehabilitation Program	Department of Agriculture	\$118,000,000
Front-End Engineering and Design Program Out Activities Under Carbon Capture Tech Program 962 Of EPA (Sec 40303)	Department of Energy	\$100,000,000
Commercial Direct Air Capture Technology Prize Competition	Department of Energy	\$100,000,000
Enhanced Geothermal Systems and Pilot Demonstrations	Department of Energy	\$84,000,000
Section 243 Hydroelectric Efficiency Improvement Incentives (Sec 40332)	Department of Energy	\$75,000,000
Critical Material Supply Chain Research Facility	Department of Energy	\$75,000,000
Marine Energy Research, Development, and Demonstration	Department of Energy	\$70,400,000
Wind Energy Technology Program	Department of Energy	\$60,000,000
Energy Efficiency Materials Pilot Program	Department of Energy	\$50,000,000
Energy Auditor Training Grant Program	Department of Energy	\$40,000,000
Solar Energy Research and Development	Department of Energy	\$40,000,000
Wind Energy Tech Recycling Research & Development	Department of Energy	\$40,000,000
National Marine Energy Centers	Department of Energy	\$40,000,000
Hydropower Research, Development, and Demonstration	Department of Energy	\$36,000,000
Solar Recycling Research & Development	Department of Energy	\$20,000,000
New Solar Research & Development	Department of Energy	\$20,000,000
Pre-Commercial Direct Air Capture Prize Competitions	Department of Energy	\$15,000,000
Pumped Storage Hydropower Wind and Solar Integration and System Reliability Initiative	Department of Energy	\$10,000,000
Extended Product System Rebates	Department of Energy	\$10,000,000
Energy Efficient Transformer Rebates	Department of Energy	\$10,000,000
Lithium-Ion Recycling Prize	Department of Energy	\$10,000,000
Career Skills Training	Department of Energy	\$10,000,000
Building, Training, And Assessment Centers	Department of Energy	\$10,000,000
Capital Improvement and Maintenance for Dams	Department of Agriculture	\$10,000,000
<b>TOTAL - CLEAN ENERGY AND POWER</b>		<b>\$74,952,140,781</b>

**Clean Energy and Power - \$74,952,140,781**



Program Name	Agency Name	Funding Amount	Department of Agriculture	\$250,000,000	Department of Agriculture	\$50,000,000		
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) - Formula	Department of Transportation	\$7,299,999,998	ent And Maintenance - Legacy Road And Program	Department of Agriculture	\$250,000,000	ience	Department of Energy	\$50,000,000
Flood Mitigation Assistance Grants (National Flood Insurance Act Sec 1366)	Department of Homeland Security	\$3,500,000,000	erior Wildfire Management - Preparedness	Department of the Interior	\$245,000,000		Department of Energy	\$50,000,000
Coastal Storm Risk Management, Hurricane, And Storm Damage Reduction Projects	Department of Defense – Army Corps of Engineers	\$2,550,000,000	als and Emergency Preparedness Grants	Department of Transportation	\$234,125,000		Department of the Interior	\$50,000,000
Inland Flood Risk Management Projects	Department of Defense – Army Corps of Engineers	\$2,500,000,000	agement	Department of Commerce	\$207,000,000		Department of the Interior	\$50,000,000
Aquatic Ecosystem Restoration Projects	Department of Defense – Army Corps of Engineers	\$1,900,000,000	vironmental Infrastructure Assistance	Department of Defense – Army Corps of Engineers	\$200,000,000	ederal Lands	Department of the Interior	\$50,000,000
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) - Discretionary	Department of Transportation	\$1,400,000,000	assage	Department of the Interior	\$200,000,000		Department of Defense – Army Corps of Engineers	\$45,000,000
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) - Discretionary	Department of Transportation	\$1,400,000,000	cape Restoration Partnership Program	Department of Agriculture	\$180,000,000	t Were	Department of Defense – Army Corps of Engineers	\$45,000,000
Building Resilient Infrastructure and Communities (Robert T Stafford Act Section 203(i))	Department of Homeland Security	\$1,000,000,000	ath Basin	Department of the Interior	\$162,000,000	ities	Department of the Interior	\$45,000,000
Community Wildfire Defense Grant Program For At-Risk Communities	Department of Agriculture	\$1,000,000,000	m	Department of Defense – Army Corps of Engineers	\$160,000,000		Department of Homeland Security	\$38,800,000
State and Local Cybersecurity Grant Program	Department of Homeland Security	\$1,000,000,000	ts Via States And Tribes	Department of Agriculture	\$160,000,000		Department of Homeland Security	\$35,000,000
Wildfire Management - Fuels Management	Department of the Interior	\$878,000,000	Restoration Contracts	Department of Agriculture	\$150,000,000		Department of Defense – Army Corps of Engineers	\$30,000,000
Reforestation Trust Fund (Replant Act)	Department of Agriculture	\$528,000,000	ilience - Community Relocation	Department of the Interior	\$130,000,000		Department of Defense – Army Corps of Engineers	\$30,000,000
Hazardous Fuels Management	Department of Agriculture	\$514,000,000	l Observing Systems	Department of Commerce	\$100,000,000	f 2020	Department of Defense – Army Corps of Engineers	\$30,000,000
Hazard Mitigation Revolving Loan Funds/Safeguarding Tomorrow through Ongoing Risk Mitigation (STORM) Act (Robert T Stafford Act, Sec 205)	Department of Homeland Security	\$500,000,000	ld Recovery Fund	Department of Homeland Security	\$100,000,000	l Units Of 'sc-911	Department of Agriculture	\$30,000,000
Watershed And Flood Prevention Operations	Department of Agriculture	\$500,000,000	ects To Improve Watershed Health	Department of the Interior	\$100,000,000	t	Department of the Interior	\$26,000,000
National Oceans and Coastal Security Fund	Department of Commerce	\$492,000,000	ation For Biochar And Innovative Wood	Department of Agriculture	\$100,000,000	ation	Department of the Interior	\$23,668,000
Flood and Inundation Mapping and Forecasting, Water Modeling, and Precipitation Studies	Department of Commerce	\$492,000,000	st Landscape Restoration Program	Department of Agriculture	\$100,000,000		Department of Agriculture	\$20,000,000
Habitat Restoration	Department of Commerce	\$491,000,000	ion	Department of Agriculture	\$100,000,000		Department of Agriculture	\$20,000,000
Federal Wildland Firefighter Salaries And Expenses	Department of Agriculture	\$480,000,000	on Grants	Environmental Protection Agency	\$100,000,000		Department of the Interior	\$17,000,000
Continuing Authorities Program (Under Flood Control Act And River And Harbor Act)	Department of Defense – Army Corps of Engineers	\$465,000,000	egmentation On Federal/Non-Federal Land	Department of Agriculture	\$100,000,000		Department of Homeland Security	\$14,500,000
Hazardous Fuels (Mechanical Thinning And Timber Harvesting; Precommercial Thinning In Young Growth)	Department of Agriculture	\$400,000,000	agement on Federal Lands Program and agement on Cooperative Lands Program	Department of Agriculture	\$100,000,000	, and Risks	Department of Homeland Security	\$13,400,000
Financial Assistance To Facilities That Purchase And Process Byproducts For Ecosystem Restoration Projects	Department of Agriculture	\$400,000,000	ent And Maintenance - Construction And oads For Forest Restoration Projects That isk	Department of Agriculture	\$100,000,000		Department of Homeland Security	\$12,800,000
Grants For States And Tribes For Voluntary Restoration	Department of the Interior	\$400,000,000	und	Department of the Interior	\$100,000,000	c	Department of Agriculture	\$10,000,000
Burned Area Recovery	Department of Agriculture	\$325,000,000	nding For Invasives	Department of the Interior	\$100,000,000	ronmental	Department of Agriculture	\$10,000,000
Department of Interior Wildfire Management - Burned Area Rehabilitation	Department of the Interior	\$325,000,000	ce	Department of Agriculture	\$88,000,000	Program	Department of Agriculture	\$10,000,000
Colorado River Drought Contingency Plan	Department of the Interior	\$300,000,000	ilience - Adaptation Planning	Depar				\$10,000,000
Emergency Watershed Protection Program	Department of Agriculture	\$300,000,000	mputing	Depar				\$8,000,000
Flood Control and Coastal Emergencies	Department of Defense – Army Corps of Engineers	\$251,000,000	ire Finance and Innovation Program	Depar				\$5,000,000
Cybersecurity for the Energy Sector Research, Development, and Demonstration Program	Department of Energy	\$250,000,000	t to Implement National Seed Strategy	Department of Agriculture	\$77,866,999		Department of Agriculture	\$5,000,000
Rural And Municipal Utility Advances Cybersecurity Grant And Technical Assistance Program	Department of Energy	\$250,000,000	nding (Or Other) For National Revegetation	Department of the Interior	\$70,000,000		Department of Homeland Security	\$4,000,000
Aquatic Ecosystem Restoration And Protection Projects	Department of the Interior	\$250,000,000	ture Security and Resilience Research	Department of Homeland Security	\$69,806,250		Department of Homeland Security	\$2,800,000
Prescribed Fires	Department of Agriculture	\$250,000,000	tegy	Department of Agriculture	\$60,000,000	g At-Risk	Department of Agriculture	\$1,200,000
				Department of Commerce	\$50,000,000		Department of Homeland Security	\$1,000,000
				Department of Commerce	\$50,000,000			
			l Observing Systems	Department of Commerce	\$50,000,000			

**Resilience - \$37,866,099,248**

<b>TOTAL - RESILIENCE</b>		<b>\$37,866,099,248</b>
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What's In It  
for Kansas?

# Kansas Infrastructure Hub

- Kansas' coordinated approach
  - Working to identify best practices from across the nation for deploying funds and maximizing Kansas' funding opportunities.
- State Agency Sub-Cabinet
  - Administration
  - Agriculture
  - Commerce
  - Health and Environment
  - Transportation
  - Kansas Corporation Commission
  - Kansas Water Office
- Led by KDOT



# Kansas Infrastructure Hub

- Advisory Committee
  - Public and Private Sector Partners to Maximize Funding to Kansas
- Kansas Infrastructure Summit
  - Wichita July 13-14
  - 500 attendees in-person/150 online





## Problematic Issues for Kansas Communities

- Required matching funds for various funding opportunities;
- Registering for grant eligibility (Grants.gov);
- Internal capacity to develop and submit grant and other funding applications; and
- Internal capacity to administer grant awards.



# Possible State Proposal

## State Funding

- Matching Grant Funds
- Federal Grant Registration Assistance
- Grant Writing and Administration Support



# Utility Organization Partnership



# Utility Organization Partnershi

- KMU/KMEA/KPP Partnership
  - Hired Washington Law Firm
    - Amanda Wood, Becker & Poliakoff
  - Identify Funding Opportunities
    - Generation/Grid Security & Reliability/EV Infrastructure/Renewables/Water/Broadband/Others
  - Conduct Informational Webinars
  - Answer Questions
  - Serve as Overall Resource for Combined Membership
  - Points of Contact:
    - KMU – Greg Dumars
    - KMEA – Tyson McGreer
    - KPP – Brooke Carroll

**KMEA**  
KANSAS MUNICIPAL  
ENERGY AGENCY

**KANSAS MUNICIPAL UTILITIES**

**KPP**  
ENERGY

Infrastructure Investment Jobs Act  
& Inflation Reduction Act Webinar

**Thursday, October 6th**  
**11 a.m.**

**Click HERE to**  
**Join the Meeting**

As federal agencies continue to roll out plans for the \$1,2 trillion in funding for infrastructure needs, plan ahead to make sure that you are prepared to compete for your share of funding for your community. The webinar will review new funding opportunities, requirements and projected timelines, and also ongoing federal funding streams. Hear from Amanda Wood, our DC-based federal funding consultant, who brings her deep understanding of existing and emerging programs to give you guidance and answer your questions. Please join as we discuss how to maximize federal funds to empower your utility and your community.

**Questions**

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Brooke Carroll | KPP  
Energy  
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620.205.6838





What Can We Do? Now?

# PLAN NOW!!!

- Identify Potential Local, Regional, and/or Collaborative Projects
- Involve Stakeholders Early
- Identify Grant Writing Capabilities
- Monitor and Track Funding Opportunities
  - KMU/KMEA/KPP Partnership
  - Relevant Agency Announcements
- Be ready when funding announcement are released
- Engage Elected Officials
  
- Goal: Maximize Funding for Kansas



# Grant Application Process and Timing



## **Pre-Award Phase** (approximately 4 months)

Funding Opportunity Announcement (FOA) published on Grants.gov  
Grant applications are due 30 to 60 days after the FOA is published  
Applications undergo review process (e.g., peer review, financial review) for 1-3 months



## **Award Phase** (approximately 1-2 months)

Funding recommendations become a final funding decision  
Grant-making agency sends Notice of Award (NOA) to successful grant applicant  
Post Award (approximately 1-5 years)



## **Implementation Phase**

Applicant does routine progress and financial reporting for the duration of the grant  
Grantors conduct audits and monitoring for the duration of the grant  
Closeout is the official ending to the grant

# Is Your Community Ready?

- Register with GRANTS.gov - NOW!
  - If registered, new Unique Entity Identifier (UEI) requirement as of April 2022
  - 36 KMU Members are not currently registered
- Validate entity with SAM.gov
  - System for Award Management
- Register with FedConnect.net
  - Bridges the gap between government agencies, vendors, and grants applicants





# *Inflation Reduction Deficit Reduction*

<b>Offsets (over 9 years)</b>	
Book Profits Min. Tax	\$220 billion
Stock Buybacks Tax	\$75 billion
Extend Business Loss Limits	\$55 billion
Prescription Drug Reform	\$240 billion
<b>Total Offsets:</b>	<b>\$ 590 billion</b>
<b>Investments (over 9 years)</b>	
Energy Tax Incentives	\$260 billion
Energy Spending	\$80 billion
Additional IRS Funding	\$80 billion
Ag/Other Spending	\$50 billion
ACA Tax Credit Extension	\$65 billion
<b>Total Investments:</b>	<b>\$ 535 billion</b>
<b>Deficit Reduction:</b>	<b>\$55 billion</b>
Potential IRS Rev: \$180 Billion	
<b>Deficit Reduction (w/IRS):</b>	<b>\$235 billion</b>

## *Major Components of the IRA*

Business  
Revenue  
Raisers

Business  
Energy Tax  
Incentives

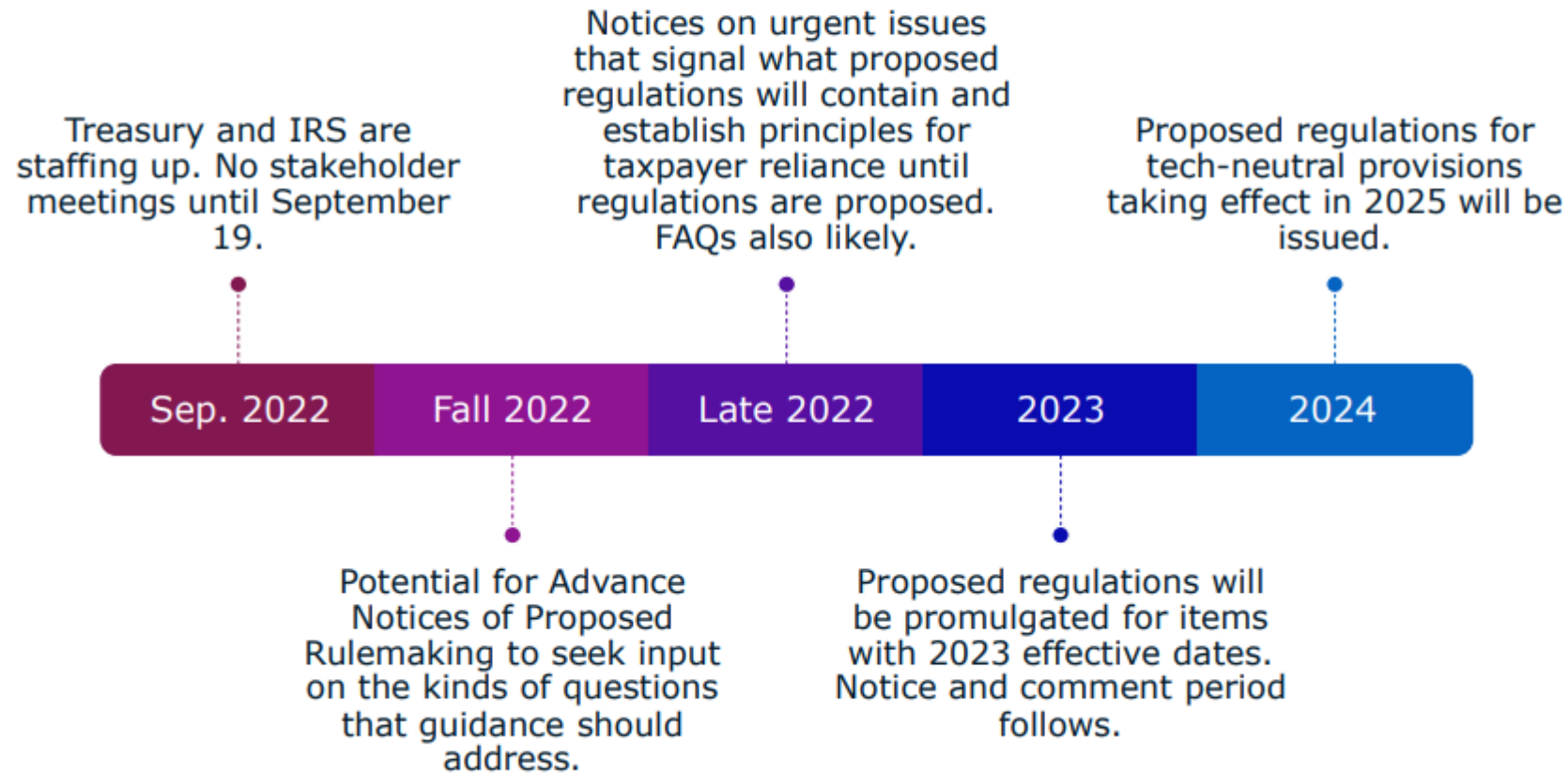
Individual  
Energy Tax  
Credits

Expansion of  
Refundability  
Methods

Health Care  
Tax  
Provisions

IRS Funding  
Increase

# Treasury Timeline for Guidance



*Who Will Influence  
the Answer To All  
These Questions?*



- Big Impact Players on Tax Guidance:

**John Podesta**  
**Lily Batchelder**  
**Tom West**  
**Secretary Granholm**  
**Janet Yellen**





# Big Winners

SAF



Brokers



Manufacturers



Treasury  
and IRS



Nuclear



Auto Dealers

Hydrogen

# Big Winner #1: Hydrogen

Long term certainty	Separate from the clean fuels production tax credit
Fully transferable and refundable	Required to commence construction by 2033; no deadline for placed-in-service
No domestic content requirement	Additional resources available through Hydrogen Hubs
Grants available from the EPA	Demand for hydrogen is growing

monolith



## *Big Winner #2: Brokers Matching Taxpayers to Enterprises Earning Tax Credits*

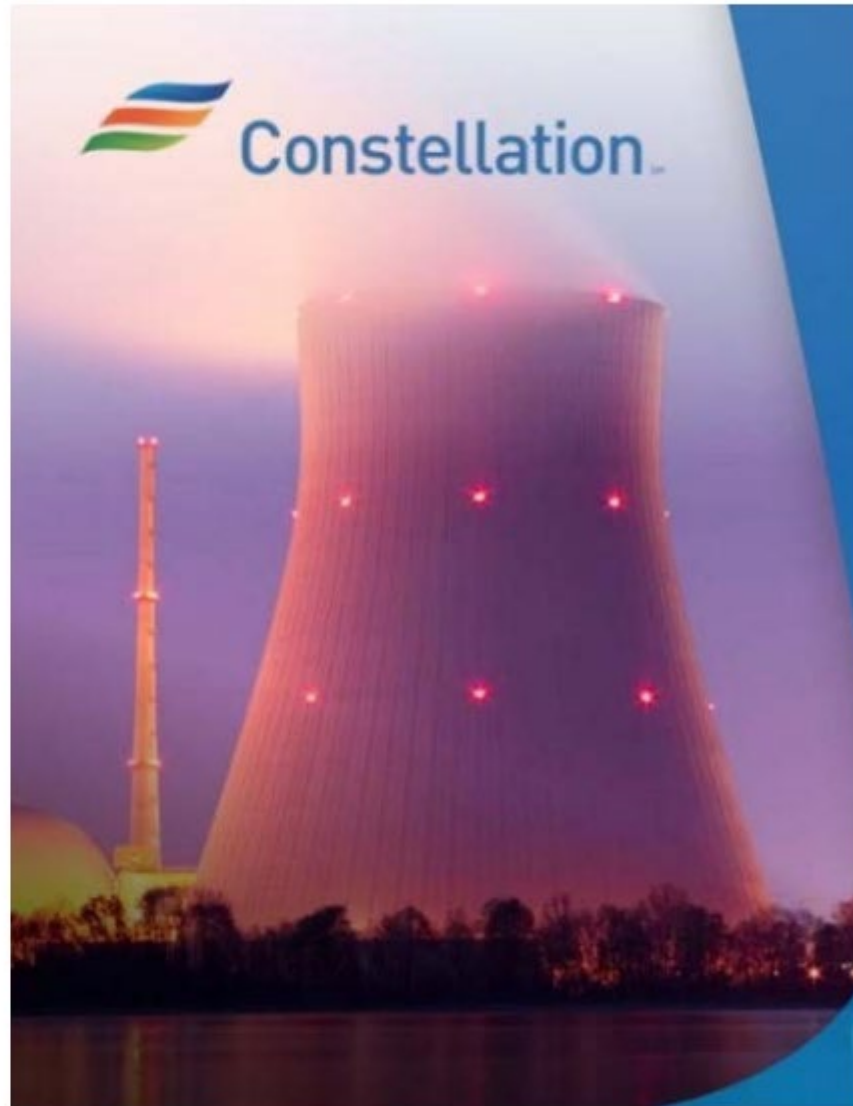
- Unprecedented Direct Pay
- Unprecedented Transferability
- Tax Equity Deals Still Likely
- No Adverse Impact on General Business Credits
- Market will evolve to maximize participation and minimize haircut



## ***Big Winner #3: Existing Nuclear Facilities***

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- One tenth of the estimated revenue cost of the climate tax title goes to existing nuclear facilities.
- No additional capital expenditures are required.
- The structure of the credit provides a floor price for the sale of nuclear-generated electricity for the next decade.





## *Big Winner #4: The Treasury Department and the IRS*

With limited legislative history and broad regulatory authority, Treasury will craft a significant amount of law through guidance

House Ways & Means Build Back Better markup and Senate Finance Committee markup of Clean Energy for America Act contain the most legislative history

Floor colloquies during both the House and Senate floor consideration of the Schumer-Manchin-Sinema final version also will be influential

IRS gets the largest cash infusion it will ever see.





## ***Winner #5: Sustainable Aviation Fuel***

- No one has figured out how to fuel an airplane with batteries
- Cleaner aviation fuel earns a larger credit:
  - SAF \$1.25-1.75
  - Biodiesel \$1.00
  - Alternative Fuels \$0.50
- The life cycle analysis gives multiple options for computation
- Downside: SAF credit expires after five years (12/31/27)





## ***Winner #6: EV Auto Dealers***

- The electric vehicle credit cap is removed. All brands should qualify for up to a \$7,500 credit.
- Auto dealers will be able to claim the credit at the point of sale on behalf of the buyer through an innovative Treasury window structure. The result will be a \$7,500 reduction in the price of the EVs.
- Dealers will have to become arbiters of EV purchaser's incomes since the credit is limited to individuals with the following income:
  - Joint return—\$300,000
  - Head of household—\$225,000
  - All others—\$150,000





## *Winner #7: Industrial Manufacturers*

- Provides almost \$6 billion for competitive DOE grants on a 50/50 cost share basis for technology designed to accelerate greenhouse gas emissions reductions
- For vehicle manufacturers:
  - \$2 billion for competitive DOE grants for electric, hybrid and hydrogen fuel cell vehicles
- Provides \$10 billion in new funding for investment tax credits for clean energy manufacturing facilities. Categories of qualifying manufacturing and recycling projects are those that produce:
  - electric and fuel cell vehicles and their components, along with refueling infrastructure;
  - renewable energy equipment and components, and renewable fuels;
  - energy storage equipment and components;
  - energy conservation products;
  - grid modernization equipment; and
  - carbon capture, transport and storage equipment

## *New Concepts in the IRA*

Technology Neutral Credits

Prevailing Wage Requirement

Apprenticeship Requirement

Domestic Content Bonus

Energy Communities Bonus

Full Direct Pay

Broad Transferability



## *Delayed Tech Neutral Credit: Electricity*

### **Through 2024**

#### **Traditional ITC / PTC**

- Wind
- Solar
- Geothermal
- Battery Storage
- Fuel Cell
- Biomass
- Trash Combustion
- Landfill Gas
- Hydropower
- Wave and Tide Power

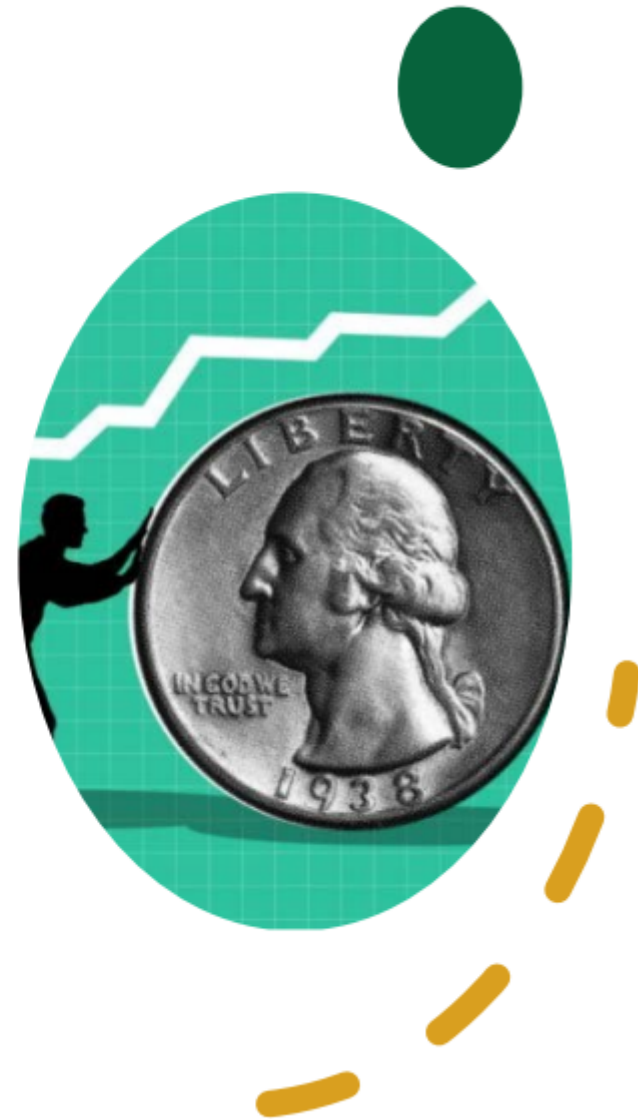
### **2025 until at least 2032**

#### **Clean Electricity Credit**

- New zero-emissions facilities can choose ITC or PTC
- Credit availability would phase out beginning the later of when the U.S. power sector emits 75% less carbon than 2022 levels, or 2032

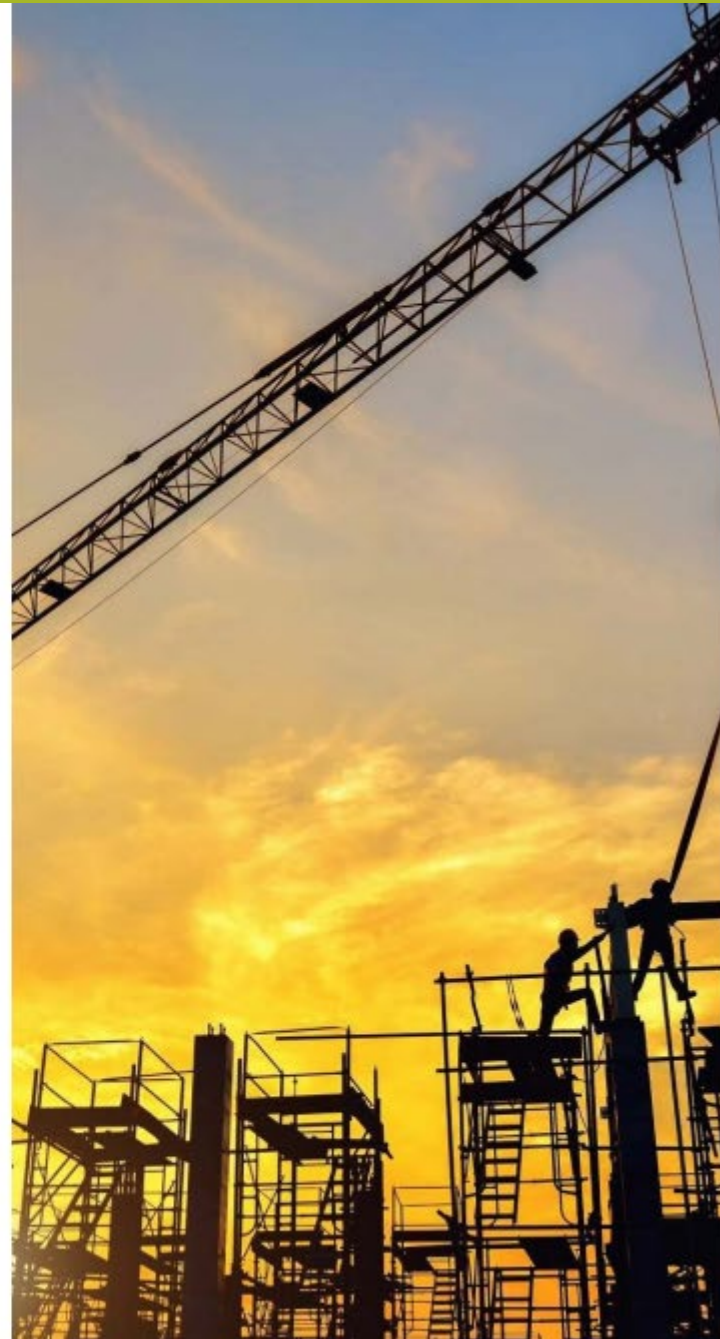
# *Prevailing Wage & Apprenticeship Requirements*

- New energy credits generally adopt a two-tier credit structure, with the maximum credit contingent on meeting prevailing wage and apprenticeship requirements
- Inflation Reduction Act provisions with prevailing wage/apprenticeship requirements for maximum benefit:
  - Section 13101 – Credit for Electricity Produced from Certain Renewable Resources (PTC)
  - Section 13102 – Energy Investment Credit (ITC)
  - Section 13103 – Low-Income Communities Bonus Energy Credit for Wind and Solar
  - Section 13105 – Zero-Emission Nuclear Power Production Credit
  - Section 13204 – Clean Hydrogen
  - Section 13404 – Alternative Fuel Refueling Property Credit
  - Section 13501 – Advanced Energy Project Credit
  - Section 13701 – Clean Electricity Production Credit
  - Section 13702 – Clean Electricity Investment Credit



# Prevailing Wage Requirements

- Prevailing wage:
  - Generally, applies to the construction of the facility or equipment subject to the credit as well as any alteration or repair during the period of the credit.
  - IRS is expected to issue guidance identifying prevailing wage rates determined by the Department of Labor for:
    - Type of labor (i.e., construction, alteration, or repair)
    - Locality in which the facility or equipment is located
    - A taxpayer failing to satisfy these requirements may cure the failure by compensating each worker the difference between wages paid and the prevailing wage, plus interest, in addition to paying a \$5,000 penalty to the Treasury for each worker paid below the prevailing wage.





# Apprenticeship Requirements

- Apprenticeship requirement:
  - Requires apprentices to account for a set percentage of the labor force for the construction, alteration or repair of the facility or equipment subject to the credit (i.e., 10% (2023), 12.5% (2023), 15% (2024 and beyond)) based on year construction commences
  - Qualified apprentices must come from a DOL registered apprenticeship program
  - IRS is expected to issue guidance on:
    - Applicable DOL/state apprenticeship-to-journeyworker ratios
    - Exceptions for good-faith effort to meet apprenticeship requirement
    - Penalties (i.e., \$50 per required apprentice hour); higher intentional-disregard penalty



# Domestic Content Bonus Credit

- Domestic content

- Generally, requires certifying that facilities are composed of steel, iron, or products manufactured in the U.S.
  - A manufactured product is deemed to have been manufactured in the U.S. if not less than the adjusted percentage of the total cost of all manufactured products (including components) are mined, produced, or manufactured in the U.S.
- A product is deemed to have been manufactured in the U.S. if an applicable percentage of the total cost of the components are mined, produced, or manufactured in the U.S.
  - The applicable percentage varies by the credit and year construction begins
  - For most credits, the applicable percentage starts at 40% (20% for offshore wind) and increases annually up to 55%

Year Construction Begins	Facility Type	
	Offshore Wind	All Others
Before Jan. 1, 2025	20 percent	40 percent
2025	27.5 percent	45 percent
2026	35 percent	50 percent
2027	45 percent	55 percent
After Dec. 31, 2027	55 percent	55 percent



# Energy Communities Bonus Credit

- Enhanced credits are available for facilities or projects placed in service after 2022 in energy communities:
  - Sections 45 and 45Y PTCs: 10% increase in amount of credit extra if the energy community requirements are satisfied
  - Sections 48 and 48E ITCs: 10% increase in credit rate if meet energy community requirements and (i) project has maximum net output of less than 1 megawatt, (ii) project begins construction before date that is 60 days after Secretary publishes guidance on prevailing wage and apprenticeship requirements, **or** (iii) meet prevailing wage and apprenticeship requirements
- Energy communities include:
  - Brownfield sites
  - Areas that have (or have had since 2009) 0.17% or greater employment or 25% or greater local tax revenues related to the extraction, processing, transport or storage of coal, oil or natural gas, and have an unemployment rate at or above the national average unemployment rate for the previous year, **or**
  - Census tracts (or adjoining tracts) where a coal mine closed after 1999, or a coal-fired electric generating unit was retired after 2009
- IRS guidance is expected on the areas qualifying as “energy communities”



# Business Energy Tax Credits



## *Credit for Electricity Produced from Certain Renewable Resources*

- Effective dates
  - Modifications generally apply to facilities placed in service after 12/31/2021
  - Reduction for tax-exempt financing is effective as of 8/16/2022
  - Domestic content, elective payment, energy community, and amendments for qualified hydroelectric production and marine and hydrokinetic renewable energy apply to facilities placed in service after 12/31/2022



## *Credit for Electricity Produced from Certain Renewable Resources*

- Section 45 electricity PTC – significant modifications:
  - 2-tier credit: base credit rate of 0.3 cents per kilowatt hour, maximum credit rate of 1.5 cents per kilowatt hour for prevailing wage and apprenticeship requirements
  - Additional increases for domestic content and energy communities
  - Extends beginning-of-construction deadline to projects that begin construction before 1/1/2025 for:
    - Wind (including offshore wind), geothermal, biomass, trash combustion, landfill gas, hydropower, and wave and tide power projects
  - Revives credit for solar energy facilities
  - For qualified hydroelectric and marine and hydrokinetic facilities, (1) expands qualified hydroelectric and marine and hydrokinetic energy to include energy derived from pressurized water used in a pipeline for the distribution of water for agricultural, municipal, or industrial consumption, and not primarily for the generation of electricity, and (2) removes 50% credit reduction the previously applied to qualified hydroelectric and marine and hydrokinetic facilities



## Energy Investment Credit

### — Miscellaneous

- Removes additional phaseout for wind facilities placed in service after 12/31/2021
- Reduction for tax-exempt financing similar to PTC (section 45(b)(3))
- Revises section 50 to provide that the amount of the ITC no longer reduces the eligible basis of property for purposes of computing the low-income housing tax credit
- Direct pay and transferability options

### — Effective dates

- Modifications generally apply to facilities placed in service after 12/31/2021
- Reduction for tax-exempt financing is August 16, 2022 date of enactment
- Domestic content, elective payment, energy community, LIHTC, and provisions for energy storage technology, biogas property, microgrid controllers, dynamic glass, interconnection property, and linear generators assembly property apply for property placed in service after 12/31/2022



## Energy Investment Credit

### • Section 48 electricity ITC – significant modifications:

#### — Amount of Credit

- Base credit rate of 6% of the basis of qualified energy property costs (2% for microturbines) and maximum credit rate of 30% (10% for microturbines) for projects meeting the prevailing wage and apprenticeship requirements
- Additional increases for domestic content and energy communities

#### — Timing

- Extended credit for solar, fuel cell, microturbines, combined heat and power system property, small wind, and waste energy recovery property placed in service after 12/31/2021 and beginning construction before 1/1/2025
- Extended credit for geothermal heat pumps placed in service after 12/31/2021 and beginning construction before 1/1/2035
  - However, phases out for projects that begin construction after 1/1/2033

#### — New Qualifying Investments

- Qualified energy property expanded to include (i) energy storage technology, (ii) biogas property, (iii) microgrid controllers, (iv) dynamic glass, (v) interconnection property, and (vi) linear generators assembly property that begins construction before 1/1/2025



## ***Low-Income Communities Bonus Energy Credit for Wind and Solar***

- Qualified low-income residential building project
  - Installed in (i) residential rental building under various housing programs, and (ii) financial benefits of electricity are allocated equitably among occupants
- Qualified low-income economic benefit project
  - At least 50% of the financial benefits (which includes electricity acquired at a below-market rate) of the electricity produced are provided to households with income of (i) less than 200% of the poverty line, or (ii) less than 80% of the area median gross income

## ***Low-Income Communities Bonus Energy Credit for Wind and Solar***

- Credit recapture for property that ceases to be bonus eligible:
  - 1 year after placed in service, 100% recapture
  - 2 years after placed in service, 80% recapture
  - 3 years after placed in service, 60% recapture
  - 4 years after placed in service, 40% recapture
  - 5 years after placed in service, 20% recapture
- Direct pay and transferability options
- Effective for projects placed in service after 12/31/2022
- Guidance Issues:
  - Allocation and application process
  - Deduction of qualified low-income residential building project & qualified low-income benefit project



## Clean Electricity Production Credit

- GHG emissions rate
  - The amount of GHG emitted by the facility, expressed as grams of CO<sub>2</sub>E per KWh
  - Treasury Secretary to publish annual table of GHG rates for categories of facilities
  - GHG emitted does not include any qualified carbon dioxide that is captured by the taxpayer and disposed of in secure geological storage or utilized
- Credit phase out after applicable year
  - Phase out starts on the latter of (i) 2032, or (ii) year in which annual GHG emissions from producing electricity is equal to or less than 25% of such emissions for 2022
  - 100% of credit in first year following applicable year, then reduced by 25% each year thereafter

## Clean Electricity Production Credit

- New section 45Y tech-neutral PTC (which will replace current section 45 PTC) is equal to the product of (1) kilowatt hours of electricity produced at a qualified facility and sold to an unrelated party during the year, and (2) the applicable amount for such facility
- New section 45Y tech-neutral PTC (which will replace current section 45 PTC) is equal to the product of (1) kilowatt hours of electricity produced at a qualified facility and sold to an unrelated party during the year, and (2) the applicable amount for such facility
- Applicable amount (adjusted for inflation)
  - Base amount: 0.3 cents
  - Alternative amount: 1.5 cents
    - Applies if maximum output is less than 1 megawatt or prevailing wage and apprenticeship requirements are met
  - Increases for energy communities and domestic content
  - Reduction for tax-exempt financing
- Qualified facility - if requirements are satisfied, facility is qualified for 10 years from date placed in service
  - Must be used to generate electricity
  - Placed in service after 12/31/2024 (includes new units and additions to existing facilities)
  - GHG emissions rate may not be greater than 0
- Consumption, sales or storage only considered for electricity produced within U.S. or U.S. possession





## ***Clean Electricity Production Credit***

- No double benefit for:
  - Section 45 PTC
  - Section 45Q credit for carbon oxide sequestration
  - Section 45J advanced nuclear power facility
  - Section 45U zero-emission nuclear power production credit
  - Section 48 ITC
  - Section 48E technology-neutral ITC
  - Section 48A advanced coal project credit
- Direct pay and transferability options
- Secretary to issue guidance on or before 1/1/2025
- Applies to facilities placed in service after 12/31/2024

## *Zero-Emission Nuclear Power Credit*

- The law provides a new credit for the production of electricity from an existing qualified nuclear power facility for a 10-year period beginning with electricity produced and sold after 2023.
- The base credit is 0.3 cents per kilowatt-hour and a maximum credit rate of 1.5 cents per kilowatt-hour.
- A qualified nuclear power facility is any nuclear facility that is owned by the taxpayer, that uses nuclear energy to produce electricity, was not previously awarded a credit allocation under section 45J and is placed in service before the date of enactment (e.g., Aug. 16, 2022).
- Tax-exempt taxpayers may elect the direct-payment option in lieu of the credit.
  - Provides support for existing nuclear power plants and should allow a significant number of them to continue to operate for the next 10 years.



## Clean Hydrogen Credit

- Clean Hydrogen Credit (new section 45V)
  - PTC/ITC optionality for facilities beginning construction before 1/1/2033
  - 10-year PTC up to \$3/kg **OR** ITC up to 30%
  - Credit based on hydrogen lifecycle greenhouse gas emissions rate (well to gate) – limited to 4 kilograms or less of CO2e per kilogram of hydrogen produced



	4 - 2.5 kgs CO2e/ kg H2	<2.5 - 1.5 kgs CO2e/ kg H2	<1.5 - 0.45 kgs CO2e/ kg H2	<0.45 kgs CO2e/k g H2
PTC – Base credit	\$0.12	\$0.15	\$0.20	\$0.60
– Maximum credit (5x base)	\$0.60	\$0.75	\$1.00	\$3.00
ITC – Base credit	1.2%	1.5%	2%	6%
– Maximum credit (5x base)	6%	7.5%	10%	30%

## Clean Hydrogen Credit

- Other features and requirements:
  - Hydrogen produced may be for sale or use; U.S. production required
  - Third-party verification of production and sale/use
  - No double benefit for section 45Q credit under PTC or ITC
  - Direct-pay – available to for-profit businesses; generally applies to year facility placed in service plus 4 following years
  - Transferability option
  - Tax-exempt bond financing rule – rules similar to section 45(b)(3):
    - New credit amount reduced by the product of (1) credit amount, and (2) lesser of (i) 15%, and (ii) the fraction of proceeds of a tax-exempt obligation used to finance the facility over the aggregate amount of additions to the capital account of the facility
    - Applies to facilities beginning construction after Aug. 16, 2022
  - Repeals hydrogen excise-tax credit (section 6426(d)(2)) for fuel sold after 12/31/2022
  - Effective dates:
    - PTC: hydrogen produced after 12/31/2022
    - ITC: property placed in service after 12/31/2022 (if construction started before 2023, only basis attributable to construction after 12/31/2022)



## Carbon Capture Credit

- Section 45Q guidance issues:
  - Prevailing wage and apprenticeship requirements
    - Applies to construction of facilities and alteration and repairs during the 12-year credit period
    - Not applicable until 60 days after guidance issued, based on commencement construction date; still applies to alteration and repairs after guidance date
  - Baseline carbon oxide determination for electricity generating facilities
  - Denial of double-benefits for carbon-capture equipment associated with other credits (e.g., hydrogen PTC/ITC, clean fuels PTC)

## Carbon Capture Credit

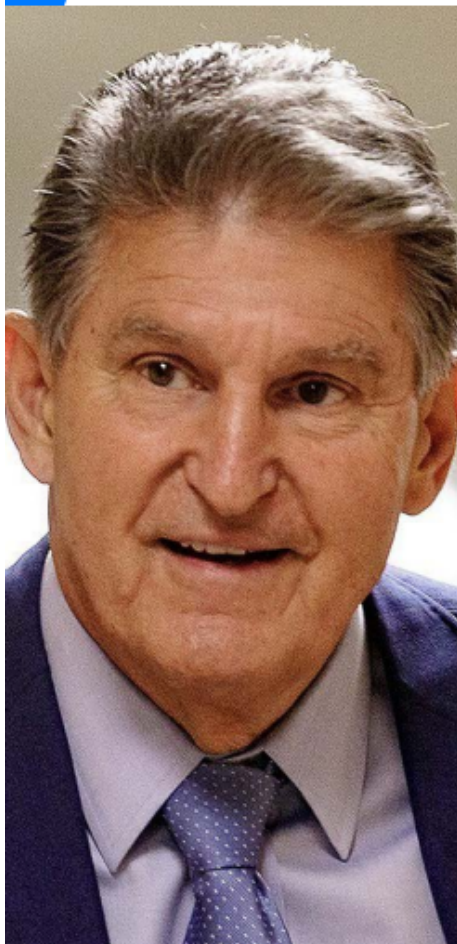
- Section 45Q carbon capture credit – significant modifications:
  - Credit value increased and expanded for carbon-capture facilities beginning construction after 12/31/2022:

		Sequestration	EOR/Utilization
Industrial capture	Base credit	\$17/ton	\$12/ton
	Maximum credit (5x base)	\$85/ton	\$60/ton
Direct-air capture	Base credit	\$36/ton	\$26/ton
	Maximum credit (5x base)	\$180/ton	\$130/ton

- Maximum credit based on meeting prevailing wage and apprenticeship requirements
- Enhanced credit applies to construction beginning before 1/1/2033
  - No placed in-service deadline



## *Advanced Energy Project Credit*



- Allocates \$10 billion to extend section 48C qualified advanced energy project (QAEP) credit
  - At least \$4 billion must go to projects located within certain census tracts that did not previously receive a certification and allocation of credits under prior section 48C
  - Treasury Secretary has 180 days from enactment to set up certification program (i.e., Feb. 12, 2023)
- Base credit rate of 6% and maximum rate of 30% for meeting prevailing wage and apprenticeship requirements
- Certification process
  - After acceptance of an application by the Treasury Secretary, the taxpayer has 2 years to provide evidence that requirements for certification have been met
  - After certification, the taxpayer has 2 years to place project in service
- Qualifying projects are evaluated and based on:
  - reasonable expectation of commercial viability,
  - potential for domestic job creation,
  - net impact on reducing greenhouse gas emissions,
  - cost of energy and reduction in energy consumption or emissions, and
  - time from certification to project completion.



## *Advanced Manufacturing Production Credit*

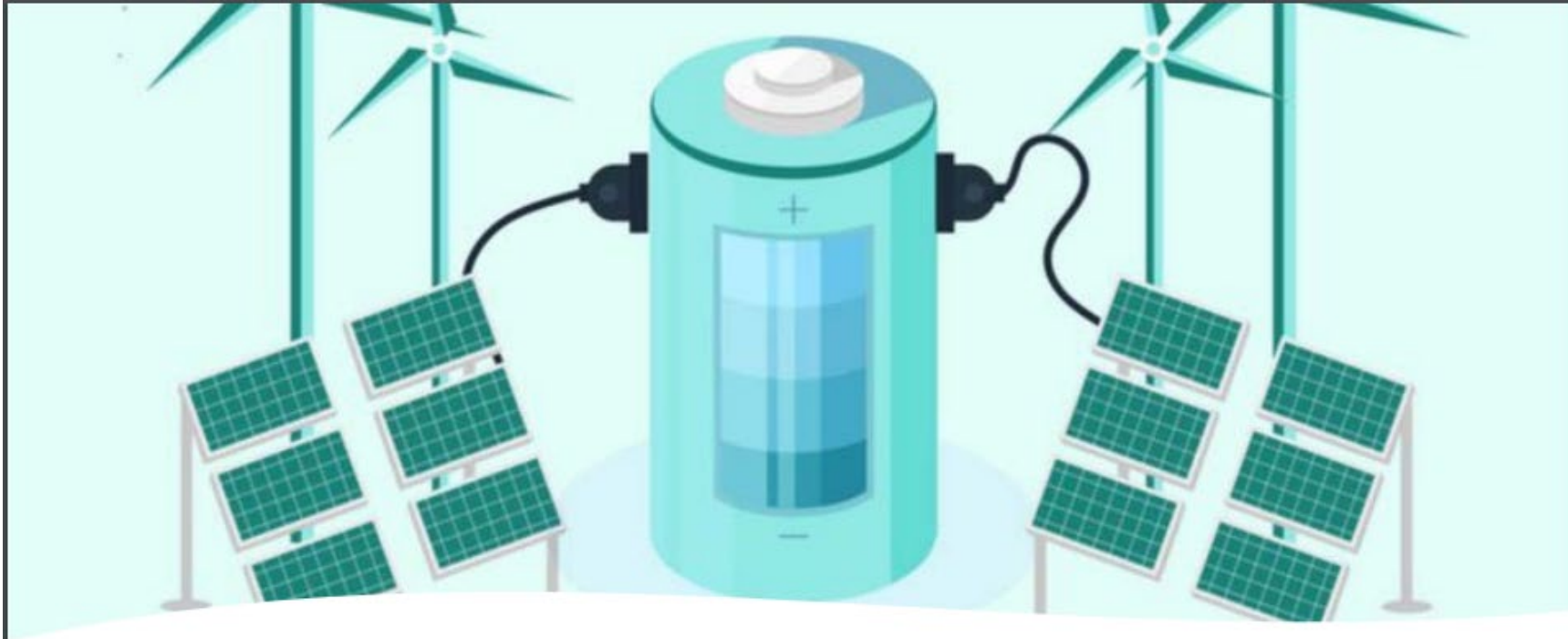
- New PTC (section 45X) for each eligible component that is produced in the U.S. and sold to unrelated parties as part of the taxpayer's business
  - Election available to treat sales of components to related parties as sales to unrelated parties
  - Treasury Secretary to provide guidance on form and manner of election, which may require registration to prevent improper or excessive credits
- Credit amount varies based on the eligible components
  - E.g., \$12/square meter for photovoltaic wafers, and \$3/kilogram of solar grade polysilicon
- Eligible component
  - solar energy component
  - wind energy component
  - central inverter, commercial inverter, distributed wind inverter, microinverter, residential inverter or utility inverter
  - qualifying battery component
  - applicable critical minerals
  - Exception: Eligible components do not include any property produced at a facility for which section 48C credit is taken



## *New Energy Efficient Home Credit*

- The Act retroactively extends the section 45L credit for qualified new energy efficient homes acquired through Dec. 31, 2032 (previously expired for homes acquired after Dec. 31, 2021).
  - Single Family Homes: the credit is extended to homes acquired prior to 2033 and the credit amount is increased to \$2,500 (for energy efficient homes meeting certain Energy Star requirements). The credit can increase to \$5,000 for homes certified as zero energy ready under the DOE Zero Energy Ready Home Program.
  - Multifamily Homes: a base credit of \$500 and a maximum credit of \$2,500 is provided for multifamily units meeting certain Energy Star requirements. The credit can increase to a base credit of \$1,000 and a maximum credit of \$5,000 for multifamily units certified as zero energy ready under the DOE Zero Energy Ready Home Program. To claim the bonus credit amount, home builders must satisfy the prevailing wage requirements for the full construction period.
- The credit is non-transferable and non-refundable.





## ***Cost Recovery for Qualified Property, Facilities, and Energy Storage Technology***

- Facilities and properties placed into service after 12/31/2024 are treated as five-year property for depreciation purposes, allowing for accelerated cost recovery:
  - Any qualified tech-neutral PTC facility (defined in 45Y(b)(1)(A))
  - Any qualified tech-neutral ITC property (defined in 48E(b)(2))
  - Any tech-neutral ITC energy storage technology (defined in 48E(c)(2))



Individual Energy  
Tax Credits





## *Residential Clean Energy Credit*

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- Prior to the new law, taxpayers were eligible for a 26% credit for installing renewable energy property in a residence in 2021 or 2022, 22% if placed in service in 2023, with a complete phaseout thereafter. Qualifying property included solar electric, solar water heating, fuel cell, small wind, biomass fuel property or geothermal heat pump properties.
- The new law extends the credit through 2034 for residential solar, wind, geothermal, and biomass fuel.
- Applies a 30% credit for property placed in service between 2022 and 2032. Credit decreases to 26% for property placed in service in 2033 and 22% for property placed in service in 2034.
- Expands eligibility to battery storage technology with a capacity of at least 3 kilowatt-hours.

## Clean Vehicle Credit

- The new law maintains the existing \$7,500 consumer credit for the purchase of a qualified new clean vehicle, including electric vehicles, plug-in hybrids, and hydrogen fuel cell vehicles.
- The credit is split into two components:
  - \$3,750 if critical minerals requirements are satisfied
    - Critical minerals in a battery must be (1) extracted in the U.S. or a country with which the U.S. has a free trade agreement in effect, or (2) recycled in North America. The value of minerals must be equal or greater to an applicable percentage
  - \$3,750 if battery component requirements are satisfied
    - The percentage of the value of the components contained in a battery manufactured or assembled in North America must be equal to or greater than the applicable percentage



## Clean Vehicle Credit



- The clean vehicle credit requires that a minimal percentage of components be North American-made.

Critical minerals requirements	
2023	40%
2024	50%
2025	60%
2026	70%
2027 and later	80%

Battery component requirements	
2023	50%
2024-2025	60%
2026	70%
2027	80%
2028	90%
2029 and later	100%



## *Alternative Fuel Refueling Property Credit*

- Modifies the section 30C alternative fuel refueling property credit:
  - Extends the credit to property placed in service prior to 2033.
  - Removes the per-location limitation and increases the per item limitation to \$100,000.
  - Base credit of 6% and a maximum credit of 30% if prevailing wage and apprenticeship requirements are met.
  - Property must be located in an eligible census tract, which is either (1) described in section 45D(c) (low-income communities for purposes of the New Market Tax Credit), or (2) is not in an urban area.
- Allows for transferability of credits for projects placed in service after 2022.



## Clean Vehicle Credit



### • Features & requirements:

- No credit is available if the manufacturer's suggested retail price exceeds \$80,000 (vans, SUVs and pickups) or \$55,000 for all other vehicles.
- No credit is available to buyers with modified adjusted gross income greater than \$300,000 (joint filers), \$225,000 (head of household) or \$150,000 (all others).
- Removed the previous manufacturer quota, which phased out the tax credit for manufacturers as they neared 200,000 clean vehicles sold. Applies to vehicles placed in service after 2022.
- Beginning in 2023, the buyer is allowed to transfer the credit to the dealer, thereby allowing the credit effectively to be taken into account in the purchase price. The transfer process includes significant requirements for vehicle dealers to qualify. The Treasury Secretary is directed to establish a direct-payment program for dealers to monetize the transferred credits.





## *Credit for Previously Owned Clean Vehicles*

- New section 25E refundable credit for the purchase of used electric or fuel-cell vehicles after 2022 through 2032.
- The base credit is equal to the lesser of \$4,000 or 30% of the sale price.
- Previously owned clean vehicles:
  - Have a model year at least two years earlier than the calendar year of acquisition (e.g., 2021 or older if acquired in 2023)
  - Original use commenced with someone other than the buyer
  - Acquired in a qualified sale (by a dealer for \$25,000 or less and where the credit has not yet been taken)
- The buyer's modified adjusted gross income may not exceed \$150,000 (joint filers), \$112,500 (head of household) or \$75,000 (all others).

## Program Objectives

The Greenhouse Gas Reduction Fund will be designed to achieve the following program objectives:

1. Reduce greenhouse gas emissions and other air pollutants.
2. Deliver the benefits of greenhouse gas and air pollution reducing projects to low-income and disadvantaged communities.
3. Mobilize financing and private capital to stimulate additional deployment of greenhouse gas and air pollution reducing projects.

## Zero-Emissions Technologies Competition

This competition will award \$7 billion in competitive grants to states, tribes, municipalities, and eligible non-profit entities to enable the deployment of residential rooftop solar, community solar and associated storage and upgrades in low-income and disadvantaged communities - so that all families have access to low-cost clean energy. EPA expects to make up to 60 grants under this competition.

## General and Low-Income and Disadvantaged Communities Competition

This competition will award \$19.97 billion in competitive grants to create a national network of eligible non-profit entities who will facilitate the technical assistance and capacity building necessary to strengthen the ecosystem of community-based organizations, small businesses, workers, suppliers and financial institutions required to accelerate the transition to an equitable net-zero economy and catalyze the jobs of the future. These grantees will partner with community financing institutions like state, local and independent green banks, community development financial institutions, credit unions, and others to enable investments in projects that reduce pollution and lower energy costs – particularly in low-income and disadvantaged communities. EPA expects to make between 2 and 15 grants under this competition.

# About the Greenhouse Gas Reduction Fund

The Inflation Reduction Act provides \$27 billion to EPA for expenditure until September 30, 2024 to administer the Greenhouse Gas Reduction Fund. This includes:

1. \$7 billion for competitive grants to enable low-income and disadvantaged communities to deploy or benefit from zero-emission technologies, including distributed technologies on residential rooftops;
2. Nearly \$12 billion for competitive grants to eligible entities to provide financial and technical assistance to projects that reduce or avoid greenhouse gas emissions; and
3. \$8 billion for competitive grants to eligible entities to provide financial and technical assistance to projects that reduce or avoid greenhouse gas emissions in low-income and disadvantaged communities.



# Weatherization Assistance Program

- The Weatherization Assistance Program is allocated to state.
- In Kansas, the Kansas Housing Resources Corporation is the administrator for the program and it is managed through four regional providers.
- In FY2023 Kansas will receive \$3,259,743 for the program.
- Weatherization assistance is to income-eligible households to improve energy efficiency, therefore lowering utility bills by ensuring households retain heat and air conditioning while keeping the elements out.
- Additional Weatherization Assistance Program information is available at [Kansas Housing Resource Corporation](#).

# Low Income Home Energy Assistance Program (LIHEAP/LIEAP)

- The program provides an annual one-time benefit.
- Program has been in existence for over two decades, but under the BILIIJA programs, Kansas receives an additional \$936,883.

In order to qualify, applicants must meet the following requirements:

1. An adult living at the address must be personally responsible for paying the heating costs incurred at the current residence, payable either to the landlord or the fuel vendor.
2. Applicants must demonstrate a recent history of payments toward purchase of the primary heating energy.

## **Benefits Levels Vary According To Certain Factors**

- Household income
- Number of persons living at the address
- Type of dwelling
- Type of heating fuel

# LIEAP Requirements

The combined gross income (before deductions) of all persons living at the address may not exceed 150% of the federal poverty level according to the guidelines listed below:


Persons Living at the Address	Maximum Gross Monthly Income
1	\$1,699
2	\$2,289
3	\$2,879
4	\$3,469
5	\$4,059
6	\$4,649
7	\$5,239
8	\$5,829
9	\$6,419
10	\$7,009
11	\$7,599
12	\$8,189
+1	\$590 for each additional person



Questions?



# A NEW & EASY-TO-READ BPU Residential Customer Billing Statement

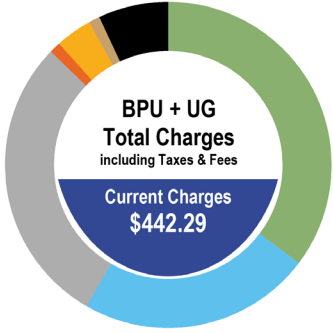


**KANSAS CITY BPU**  
THE POWER OF COMMUNITY

ACCOUNT NUMBER 0000000    CUSTOMER NAME JOHN DOE  
BILLING DATE 08/26/21    SERVICE LOCATION 123 MAIN STREET


Previous Balance	Payments	Past Due	BPU Charges	UG Charges	Taxes & Fees	Current Charges	Amount Due
\$437.43	\$-437.43	\$0.00	\$258.51	\$147.86	\$35.92	\$442.29	\$442.29


Visit us on the web at: [www.BPU.com](http://www.BPU.com)




**BPU + UG  
Total Charges**  
including Taxes & Fees  
**Current Charges  
\$442.29**


**CHARGES FOR BPU SERVICES**


  
**ELECTRIC**  
\$156.17

  
**WATER**  
\$102.34


**CHARGES FOR UG SERVICES**


  
**WASTEWATER**  
\$127.36

  
**STORMWATER**  
\$4.50

  
**TRASH & RECYCLE**  
\$16.00

**TAXES & FEES**

  
**TAXES**  
\$5.16


  
**UG PAYMENT IN LIEU OF TAXES**  
\$30.76

*\*Please see additional pages for detailed charges*  
 For questions pertaining to BPU charges (913) 573-9190  
 For questions pertaining to UG charges and PILOT 3-1-1 or (913) 573-5311

**IMPORTANT MESSAGES**

We are currently under a residential disconnection moratorium. All disconnect information provided will be retained for future use. Please Note: On October 6th, 2021 this moratorium will be reviewed. This is a Test Bill.

Please detach this coupon and return it with your payment. For additional payment options, please see the reverse.



**KANSAS CITY BPU**  
THE POWER OF COMMUNITY

540 MINNESOTA AVENUE  
KANSAS CITY, KS 66101-2930

CHECK HERE FOR ACCOUNT INFORMATION CHANGES ON REVERSE SIDE

**ACCOUNT INFORMATION**

ACCOUNT NUMBER: 0000000  
SERVICE ADDRESS: 123 MAIN STREET

KAN0803T  
2000001099 391/1

JOHN DOE  
123 MAIN STREET  
KANSAS CITY, KS 66101-9999

AMOUNT DUE	<b>\$442.29</b>
DUE DATE	<b>09/20/21</b>
AFTER DUE DATE	<b>\$464.40</b>
AMOUNT PAID	

Please Make Checks Payable and Remit to

KANSAS CITY BOARD OF PUBLIC UTILITIES  
PO BOX 219661  
KANSAS CITY, MO 64121-9661

000000000000 2 0000046440 0000044229 4

Graph of all BPU and UG charges

Summary of utility bill activity

Breakdown of BPU charges

Breakdown of UG charges

Breakdown of all taxes and fees

Updated Message Center to notify you about upcoming events or important information

Payment due information

Take a look at the back page →

# A NEW & EASY-TO-READ BPU Residential Customer Billing Statement

## Back of the New Customer Billing Statement

### GENERAL INFORMATION ABOUT YOUR BILL

**KWH** - Kilowatt Hour is 1,000 watts of electric energy used for one hour.  
**CCF** - Is the measurement of the amount of water used. One 'CCF' equals 100 cubic feet or approximately 748 gallons of water.  
**KW** - Demand is the measurement of electric capacity or demand, which is the maximum amount used in a 30-minute period. It is measured in Kilowatts (KW).  
**ELECTRIC CUSTOMER CHARGE** - This charge normally provides for recovery of costs incurred in providing service to customers and is not related to how much energy a customer uses. The Customer Charge represents a portion of the cost of system access and customer service including the cost of meter reading, bill calculation, postage and the expenses associated with the basic plant investment at each service location, such as meters, transformers, service lines, etc.  
**WATER CUSTOMER CHARGE** - A monthly charge based on the water meter size. The charge covers the cost of providing service to customers.  
**ENERGY RATE COMPONENT (ERC)** - The Energy Rate Component is a rider applied to the amount of energy used by a customer to recover the Utility's fuel and all purchased power costs and other ancillary costs incurred to provide energy to customers.  
**ENVIRONMENTAL SURCHARGE (ESC)** - The Environmental Surcharge is a rider to provide for the annual recovery of the Utility's capital investment in projects that are required to meet Federal, State, or Local environmental regulations.  
**ESTIMATED READING (EST)** - Weather related or unforeseen circumstances may prevent us from obtaining an actual meter reading. In this case, your meter reading will be estimated.  
**KANSAS WATER PLAN TAX** - A State of Kansas imposed tax based on gallons of water consumed.

For additional definitions, information and rates, please visit [www.BPU.com](http://www.BPU.com), and go to Residential or Business > Rates > Rate Application Manual.

Updated BPU definitions and general information

**Save time, save money!** Sign up for the **Automatic Bank Draft Payment Plan** and/or **Paperless Billing** by visiting [www.BPU.com](http://www.BPU.com) or calling (913) 573-9190 for information.

Pay online at: [www.BPU.com](http://www.BPU.com)

Drop Box: 540 Minnesota Ave, Kansas City, KS 66101

Pay by phone: 855-BPU-BILL (855-278-2455)

Kiosk: Visit [www.BPU.com](http://www.BPU.com) for locations

Different ways to pay your BPU bill

Kansas City Board of Public Utilities  
Address, Phone, Email Change and Comments

Address change form

Please change my mailing address as follows:

Name \_\_\_\_\_ Account Number \_\_\_\_\_

Street Address \_\_\_\_\_ Apt/Suite \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Email Address \_\_\_\_\_

Additional Comments \_\_\_\_\_

DO NOT WRITE BELOW THIS LINE

# A NEW & EASY-TO-READ BPU Residential Customer Billing Statement

## Second sheet breakdown of individual charges and usage information

BPU Call Center hours


Electric Use Graph (current & historic) with temperature data

Itemized electric charges

Itemized water charges

Details of tax charges

Payment information

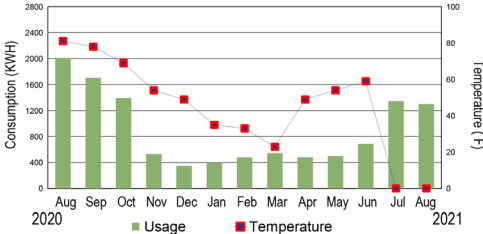


**Customer Service Hours**  
Monday - Friday 7:00 AM - 6:00 PM

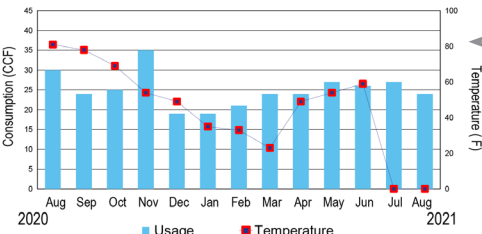
Customer Service, BPU Billing Inquiries (913) 573-9190  
 24 Hour Outage Service (913) 573-9522  
 Water Issues (913) 573-9622  
 Main Number (913) 573-9000

Board of Public Utilities contact information

**Electric Usage History**



**Water Usage History**



BPU Billing Details	
<b>ELECTRIC</b>	
Electric Customer Charge	\$22.00
Electric Consumption Charge	\$84.06
Energy Rate Component \$ 0.02998	\$38.97
Environmental Surcharge \$ 0.00857	\$11.14
<b>Total Electric Charges</b>	<b>\$156.17</b>

BPU Billing Details	
<b>WATER</b>	
Water Customer Charge	\$19.35
Water Consumption Charge	\$82.99
<b>Total Water Charges</b>	<b>\$102.34</b>

Total Charges for BPU Services	
<b>Total Charges for BPU Services</b>	<b>\$258.51</b>

Taxes Details	
Kansas Water Plan Tax	\$0.57
Sales Tax	\$4.59
<b>Total Taxes</b>	<b>\$5.16</b>

Payment Details	
Regular Payment (08/19/21)	\$437.43
<b>Total Payments Received - Thank You</b>	<b>\$437.43</b>

Electric Usage Information				
Service Period: 07/24/21-08/23/21	Rate: 100			
Read Date	Meter No.	Previous Read	Current Read	Current Usage
08/23/21	15186750	82085	83385	1300 KWH

Water Usage Information				
Service Period: 07/24/21-08/23/21	Rate: 010			
Read Date	Meter No.	Previous Read	Current Read	Current Usage
08/23/21	NE92472091	12767826	13009259	24 CCF

Payment Details	
Regular Payment (08/19/21)	\$437.43
<b>Total Payments Received - Thank You</b>	<b>\$437.43</b>

2000001100 391/2

This is a test bill. BPU Warns Customers of Telephone Scams Targeting Customers. Multiple reports have been made about calls stating if payment is not made, services will be shut off within 30 minutes.

If you made an application for KERA and have received the Pre-Qualification letter please email your letter to Docs@bpu.com, or contact customer service at 913 573 9190.

Additional messages for general information

Board of Public Utilities contact information

Water Use Graph (current & historic) with temperature data

Electric usage details

Water usage details

Page 3 of 4

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Take a look at the back page →

# A NEW & EASY-TO-READ BPU Residential Customer Billing Statement

## Breakdown of pass-through charges from the Unified Government of Wyandotte County

All charges billed by the Unified Government (UG)

**Breakdown of UG charges**

- Itemized Wastewater charges (formerly Water Pollution Abatement)
- Monthly fee (formerly Stormwater Management)
- Monthly fee to provide trash and recycle services (formerly Trash Removal Service)
- Monthly Amount which is a percentage of gross BPU revenues (formerly PILOT)

**Office Hours**  
Monday - Friday 8:00 AM - 5:00 PM

Unified Government Billing Details	
<b>WASTEWATER</b>	
Monthly Base Charge	\$21.32
Consumption Charge @ Average 22	\$106.04
<b>Total Wastewater Charges</b>	<b>\$127.36</b>
<b>STORMWATER</b>	
Monthly Base Charge	\$4.50
<b>Total Stormwater Charges</b>	<b>\$4.50</b>
<b>TRASH &amp; RECYCLE</b>	
Monthly Base Charge	\$16.00
<b>Total Trash &amp; Recycle Charges</b>	<b>\$16.00</b>
<b>Total Charges for UG Services \$147.86</b>	
<b>UG Payment in Lieu of Taxes</b>	
Payment in Lieu of Taxes	\$30.76
<b>Total UG Payment in Lieu of Taxes \$30.76</b>	

**UG contact information**

Trash & Recycling Services (913) 573-5311  
 Wastewater (913) 573-1300  
 Storm Water Management (913) 573-5400  
 PILOT (913) 573-5400  
 Other Questions (913) 573-5000

**UNIFIED GOVERNMENT OF WYANDOTTE COUNTY/KANSAS CITY, KANSAS SERVICES**

WASTEWATER - Wastewater utility is responsible for the day-to-day and future operations of sewer collection and treatment, which includes routine system maintenance and capital investment to safeguard water quality for our health and environment. The BPU acts as the billing and collection agent for the UG.

WINTER AVERAGE CALCULATION - Residential Wastewater Charges are based upon the average monthly billed water consumption (CCF) for the billing periods from December through March. The average for those months is the basis for the next twelve months.

STORMWATER MANAGEMENT - Stormwater management utility is responsible for the collection system of stormwater runoff from storms or other weather events to prevent standing water and flooding. The utility includes routine system maintenance and capital investments to safeguard water quality for our health and environment. The BPU acts as the billing and collection agent for the UG.

RESIDENTIAL TRASH - Residential trash utility is responsible for the collection of "Regular" (non-industrial) garbage from residential sources, including paper, discarded food items, and other general discards and recyclables. Green waste includes yard clippings, leaves, and trees. The BPU acts as the billing and collection agent for the UG.

PAYMENT IN LIEU OF TAXES (PILOT) - UG ordinance requires the BPU to pay a percentage of its gross revenues to meet certain UG costs incurred due to BPU operating as a public utility. The PILOT is in lieu of property taxes and franchise fees.

Conquering COVID IS A WIN - WIN. Wyandotte Countians Can Now Receive Prizes when They Get a COVID-19 Vaccine. Unified Government Public Health department launches vaccine and testing incentive program for Wyandotte County

Current Gifts and Prizes Available - While Supplies Last! Mobile vaccines available for request at WycoVaccines.org or by calling 3-1-1

Message Center  
for important information

Updated definitions  
from the UG on  
pass-through charges



# CT4 Fuel Nozzles



# Key Topics

- NOx control
- Permit Limits for Similar Machines
- Historical view of NOx Performance
- Brief History of Combustion Problems
- Current Combustion Problems - Debris
- Options
- Potential Impact

# What is DLN

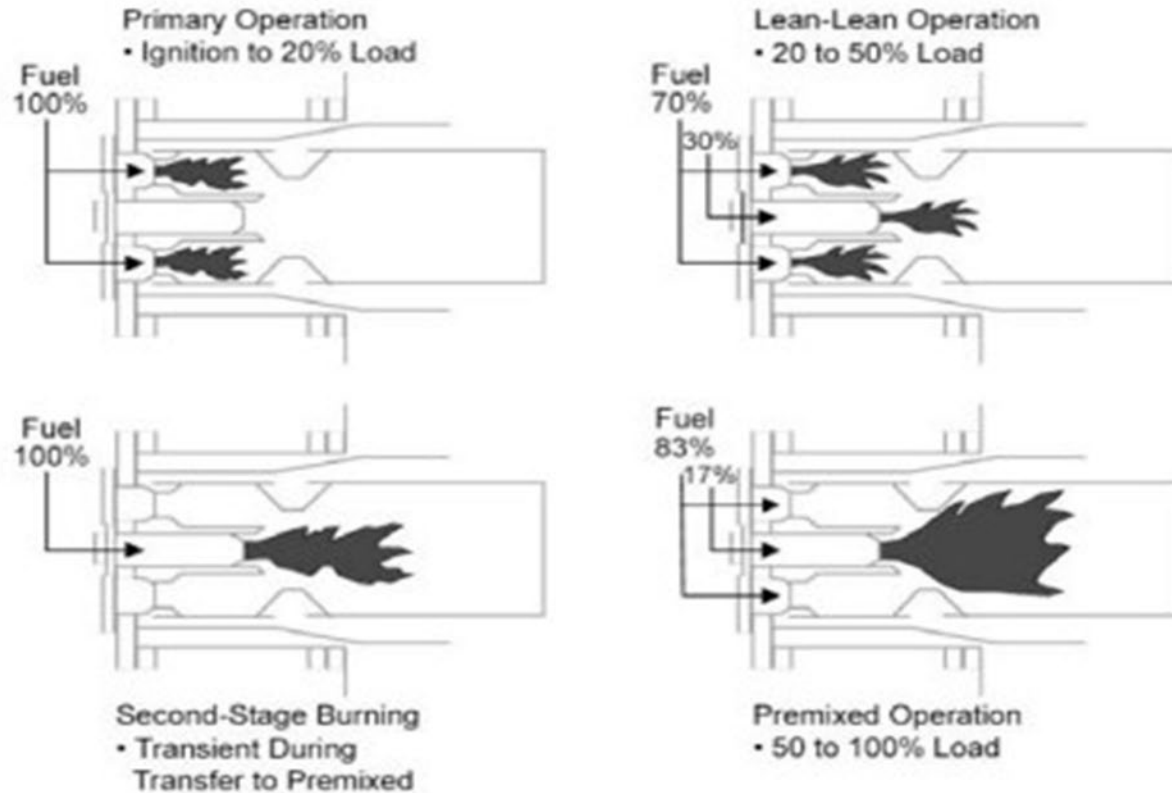


Fig. 2. Fuel-Staged Dry Low NO<sub>x</sub> Operating Modes

# Examples of other DLN permit limits

**Table 2:** NO<sub>x</sub> emission limits.

Number of Permits	NO <sub>x</sub> Emission Limit (ppm)
37	<9.0
51	9.0
106	<15.0
11	15.0
117	<25.0
10	25.0
5	>25.0

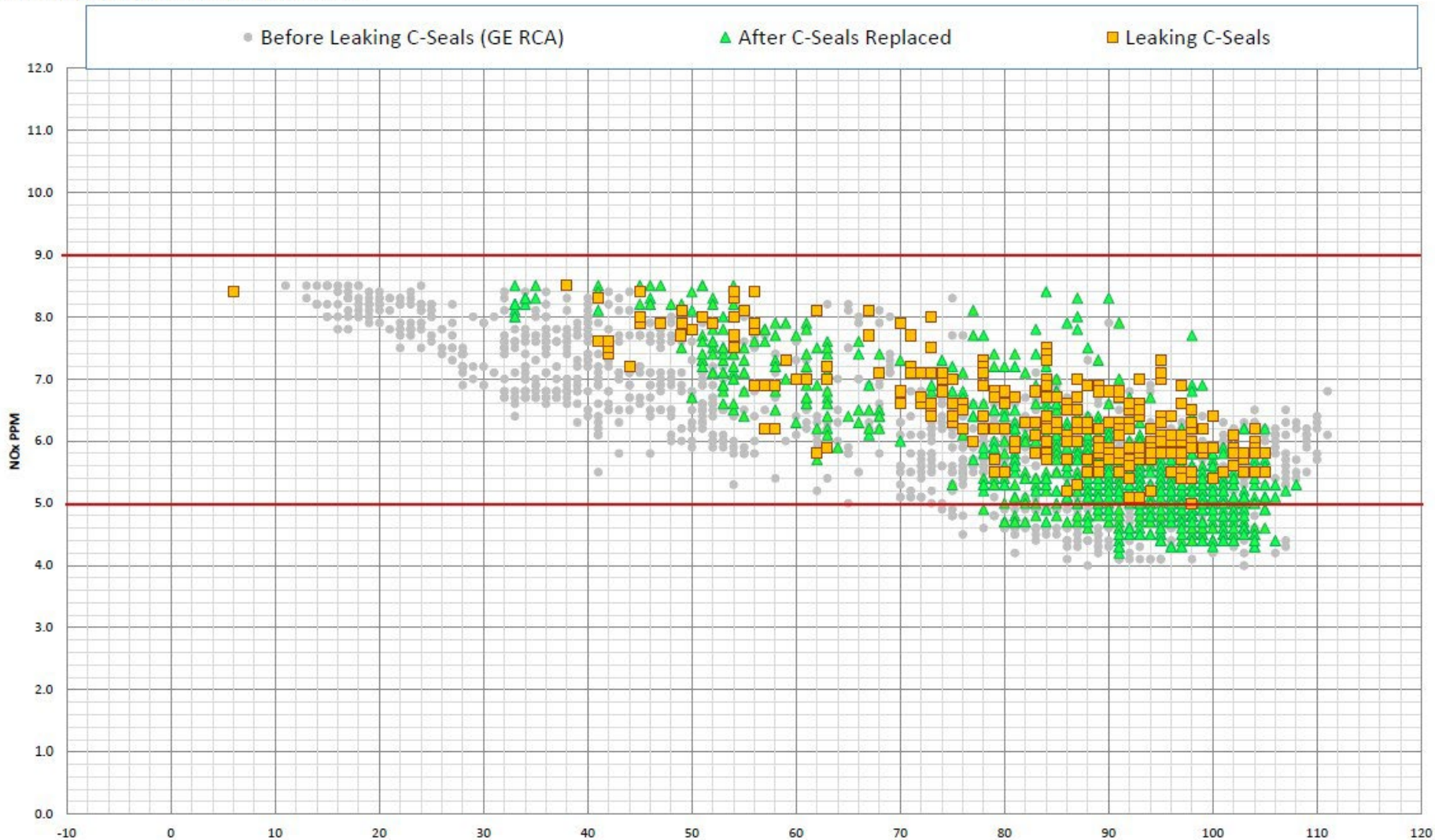
This table confirms the trend towards single digit NO<sub>x</sub> emissions. For certain gas turbines, NO<sub>x</sub> emission rates  $\geq 9$  ppm can be met using LPM combustors. Permit limits less than 9 ppm require the application of post combustion controls.

EPAs RACT/BACT/LAER Clearinghouse data from 2005



Hourly data  
Filtered for: Natural Gas Operation and MW > 50  
Removed Bad (very low) NOx data in 2009, 2010 and 2011

### CT4 NOx vs Ambient Temp 2008-2023

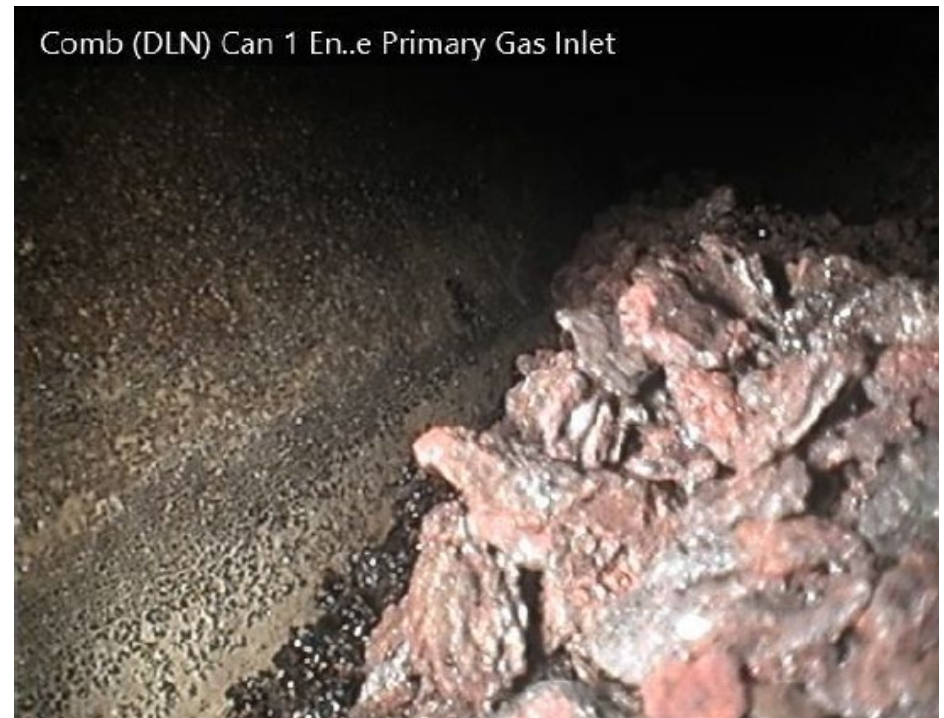


# CT4 Combustion Problems History

- Fall 2015 – CT4 Combustion Inspection
- Fall 2017 – Began to see CT4 Emissions problems
  - NOx ~ 1ppm higher than normal & Exhaust Temperature Spreads ~ 40°F higher than normal
- Fall 2018 – CT4 Fuel Nozzle Refurbishment
  - High NOx and Exhaust Temperature Spreads persisted
- Fall 2018 – Notified from GE that a fleet-wide RCA was underway.
- Fall 2019 to 2020 – CT4 Fuel Nozzle Refurbishment
  - GE Refurbished Nozzles according to new, corrected shop methods that resulted from the RCA.
  - Causes of problems above since 2017:
    - Primary Fuel Nozzle C-seals Over-crushed
    - Primary Fuel Nozzle Metering Orifices Chamfered

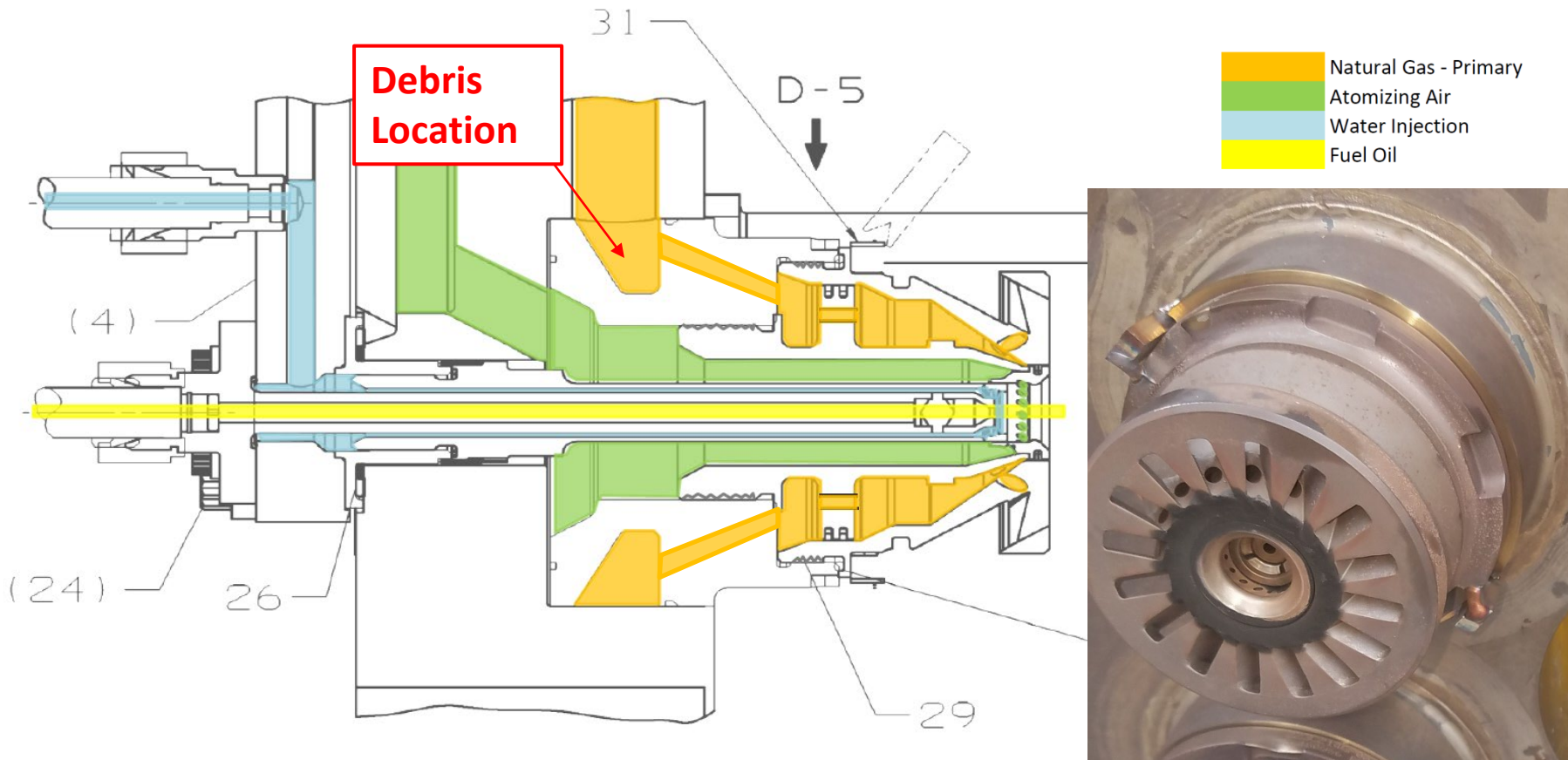
# Present CT4 Combustion Problems

- Fall 2022 – High Exhaust Temperatures Spreads, Debris found in Primary Nozzles. Examples below:



# CT4 Combustion Problems

## Best-effort Fuel Nozzle Cleaning Onsite





# CT4 Options for Debris Removal

- CT4 Shop Fuel Nozzle Cleaning
  - Estimates:
    - \$500,000
    - 11 week outage
- CT4 Purchase New Primary & Secondary Fuel Nozzles
  - Future capital request FY 2025/2024 for new Fuel Nozzles
  - Investigating option for combustion can modifications to support instrumentation upgrade to utilize Auto Tune. (investigating benefits with other Auto Tune type DLN users)
  - 52 week lead time

# Questions?

# BPU / WaterOne Emergency Interconnect Overview

March 15, 2023

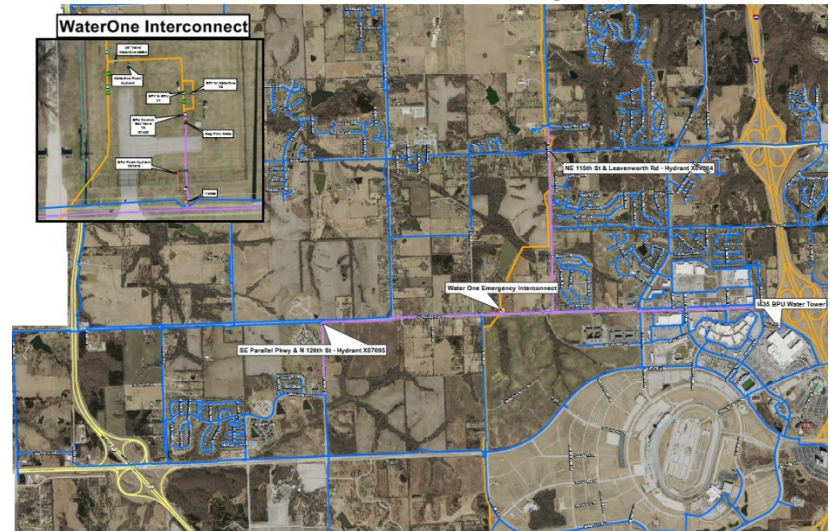
# Objectives:

- Provide answers to: When, Why, What, & How
- Construction work & upgrades
- Discuss testing & the exercise
- Summary & Questions?



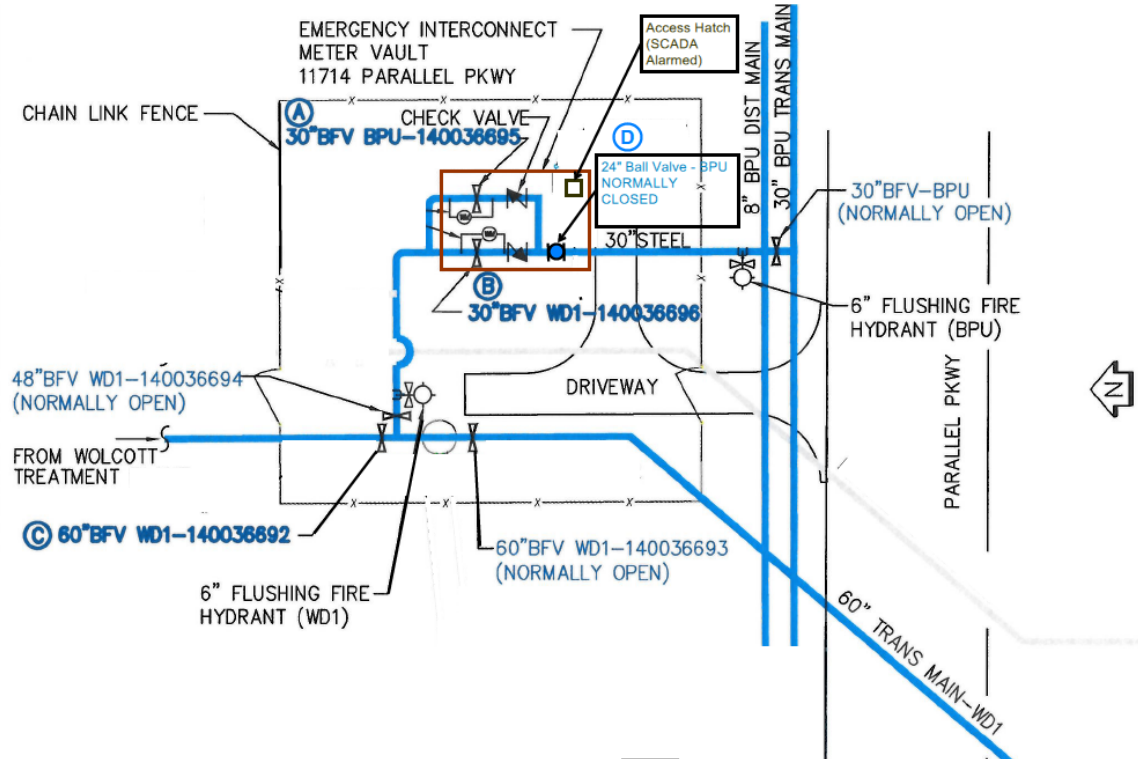
# 30 inch Emergency Interconnect

- Shared Interconnect
- Built 2010
- 117<sup>th</sup> St & Parallel Pkwy
- Receive up to 20 MGD to Parallel & Central systems
- Monitor & Control from either NWTP or locally





# Interconnection Schematic





# Beginning Excavation





# Lid Removal





# Before

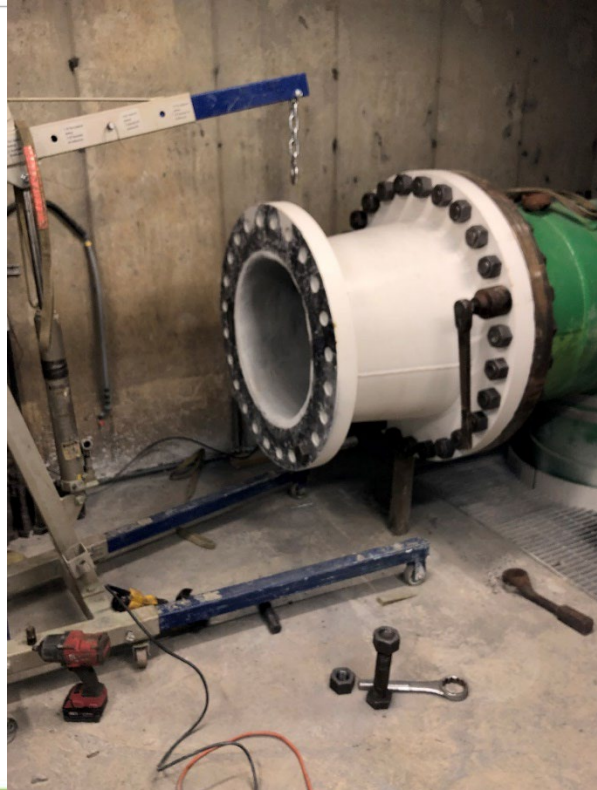








# Installation of 24" Ball Valve







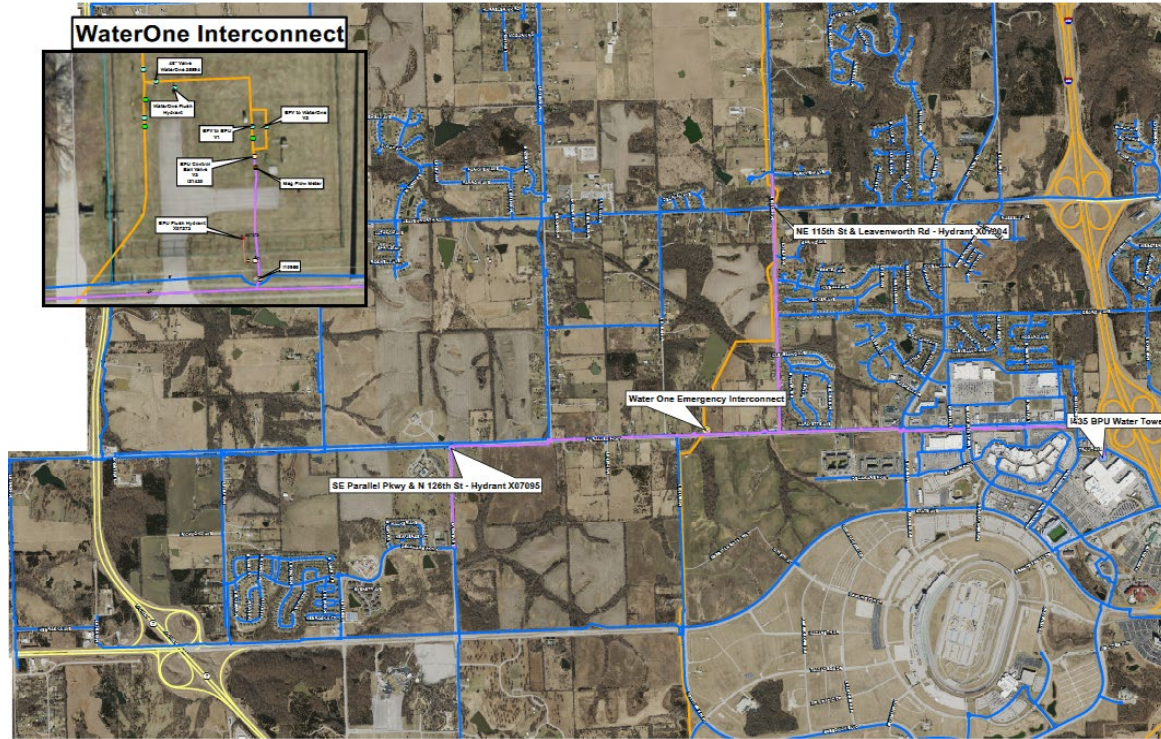


# Testing Considerations

- Time of year best for BPU & WaterOne
  - Demands
  - Other project
  - Staffing
- Communication with regulatory authorities
- Customer Considerations
- What flow rate(s) to use
- What is the total volume
- Communication during the testing



# Water Samples Collected

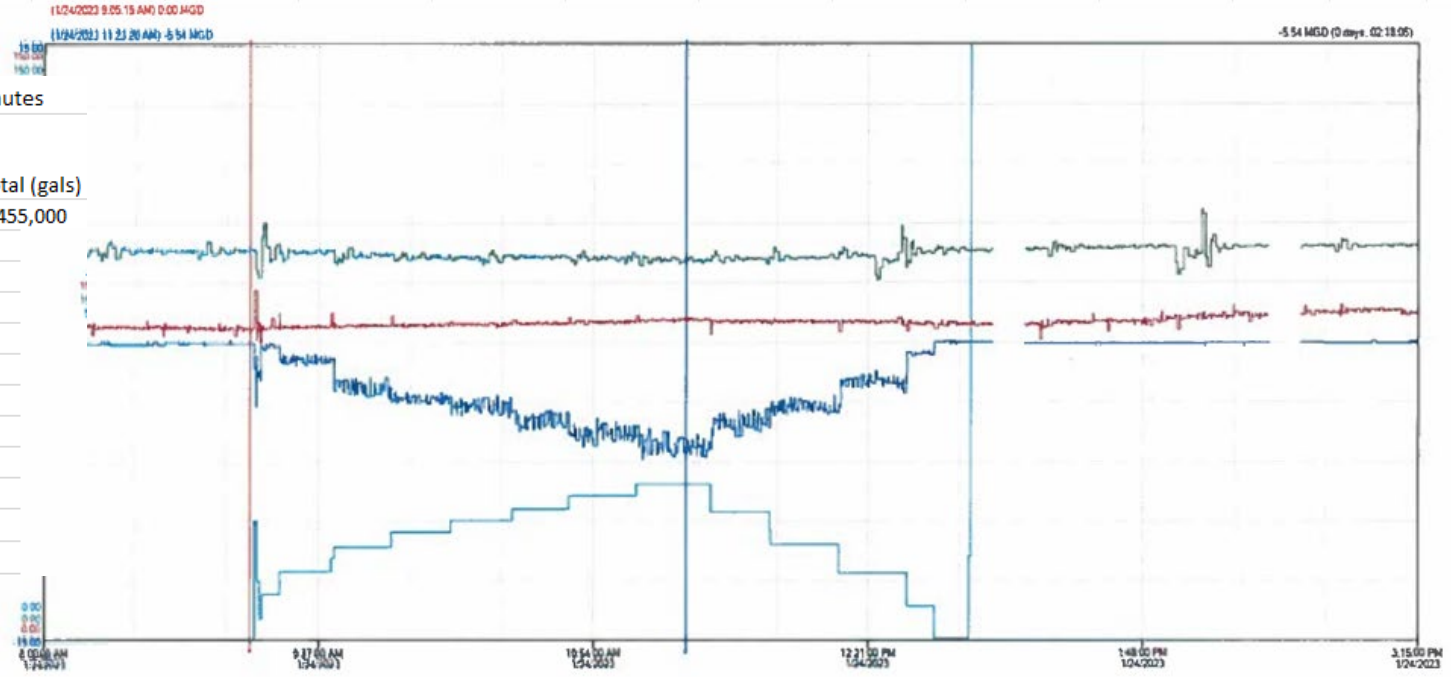




# Process Data

Operators adjusted ball valve every 20 minutes

Time	Ball vlv Position	Flow MGD	Total (gals)
9:00	2.9	0.25	455,000
9:30	8	2	
9:50	9	3	
10:10	10	3.6	
10:30	11	4	
10:50	12	4.5	
11:10	13	5	
11:30	10.5	3.8	
11:50	8	2.3	
12:10	5.5	1.3	
12:30	0	0	





# Summary Points

- Interconnect testing was successful
- Operators gained experience controlling and monitoring
- Coordination and communication were successful
- No short term Water Quality concerns

Questions ?