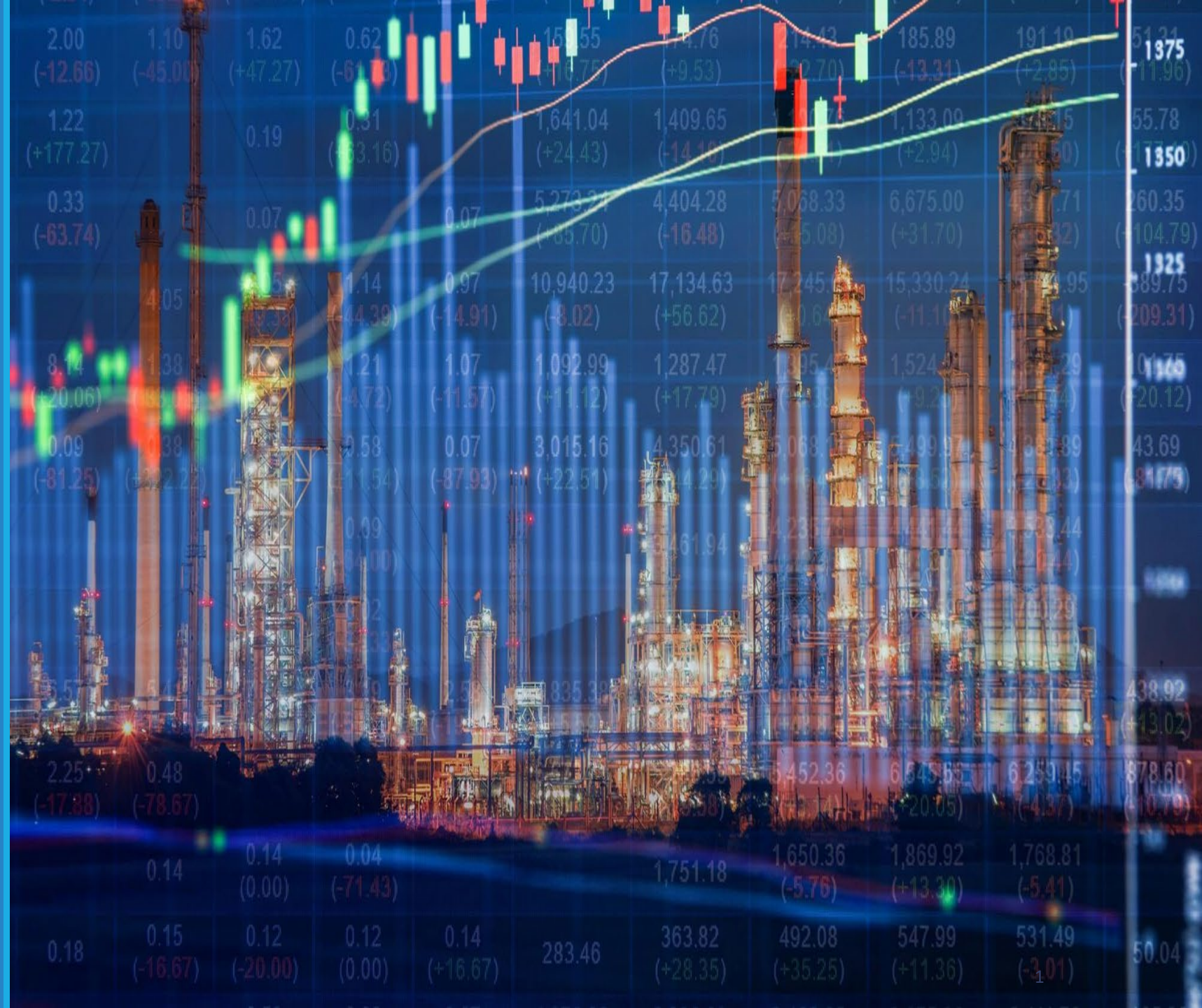


# Retail Supplier Option for a Municipal Utility in Northern IL

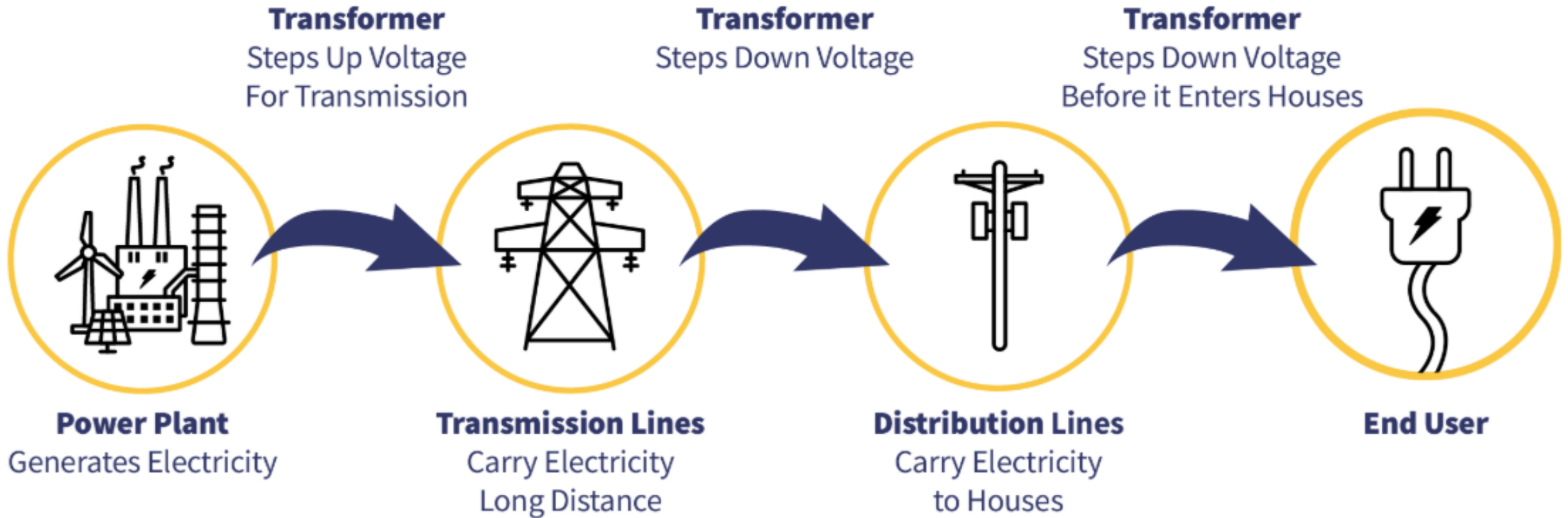
May 29, 2025

The Power Bureau

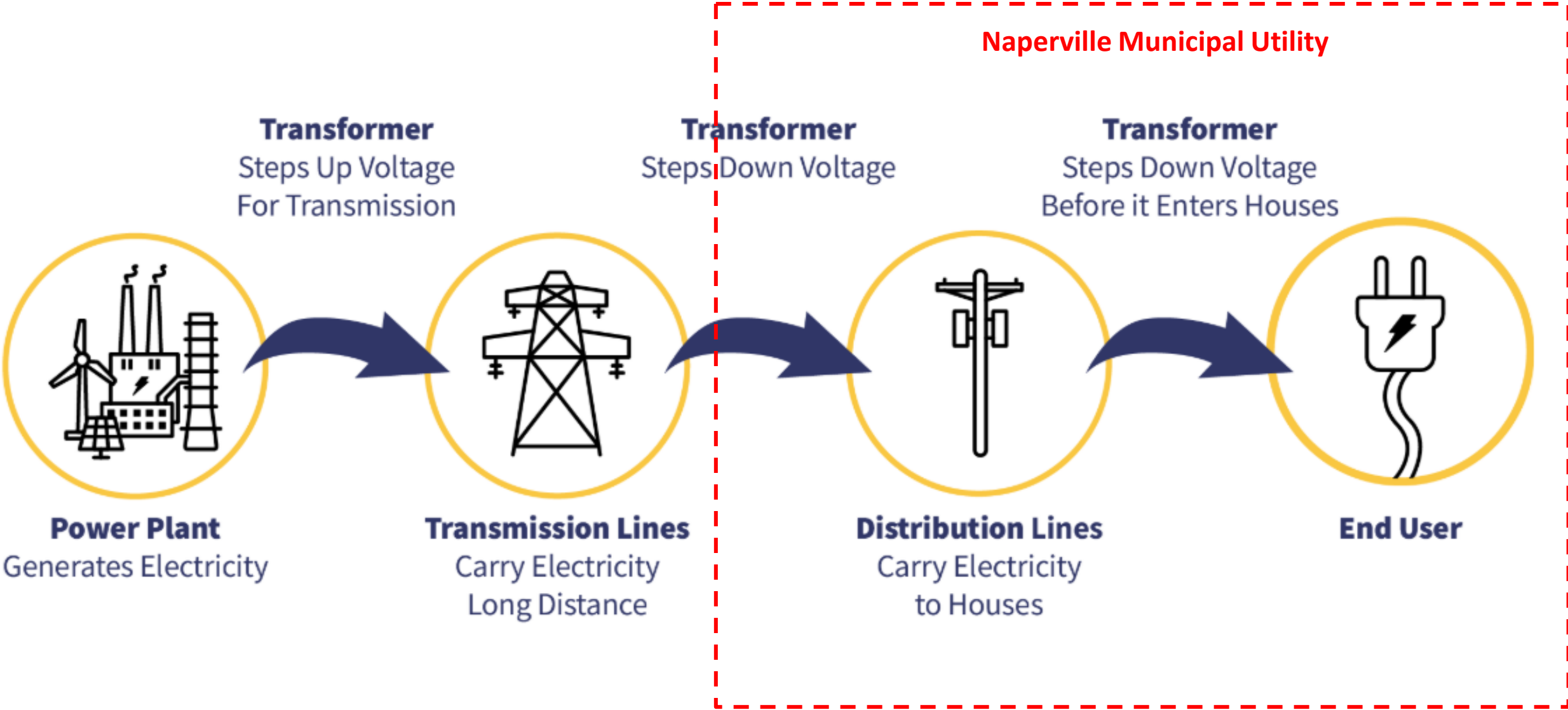
Presentation to the  
City of Naperville



# WHOLESALE MARKET: Basics of the electric system

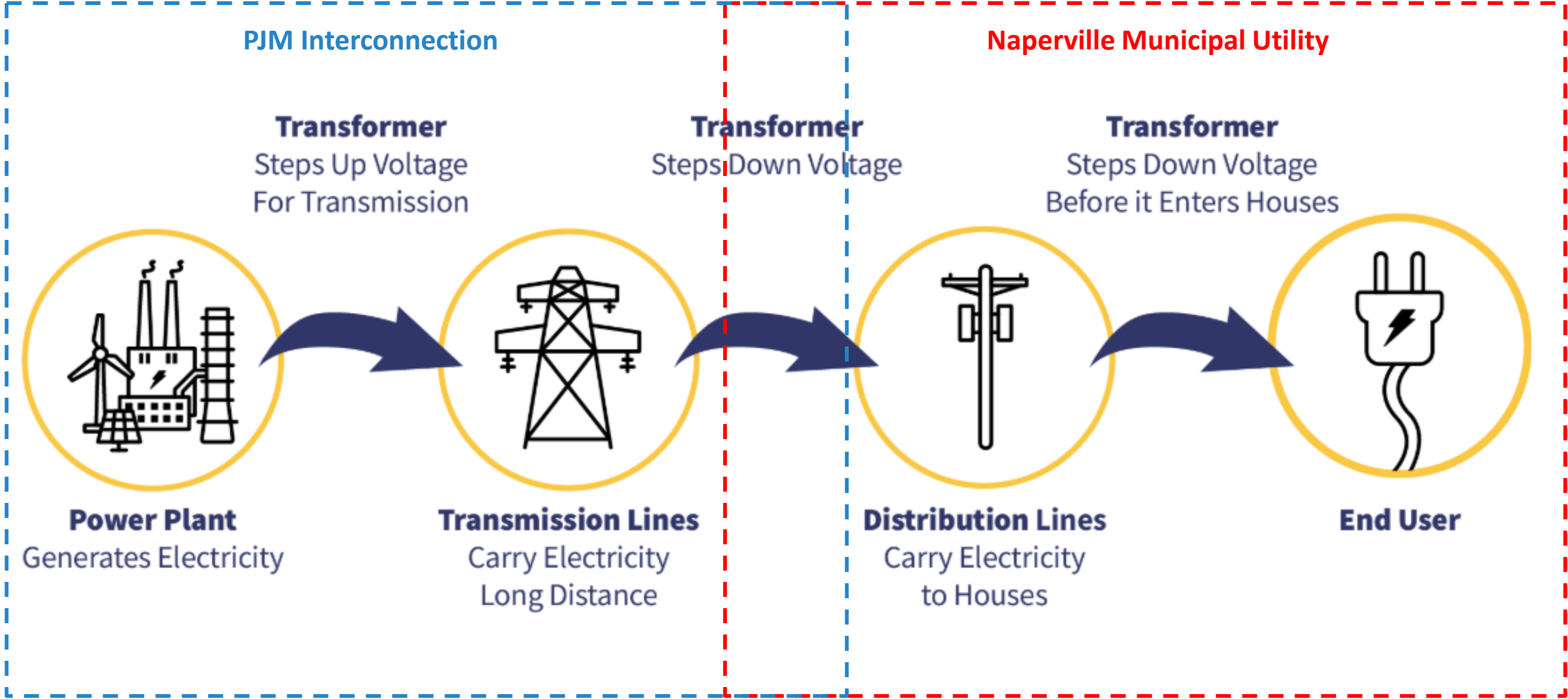


# WHOLESALE MARKET: Basics of the electric system

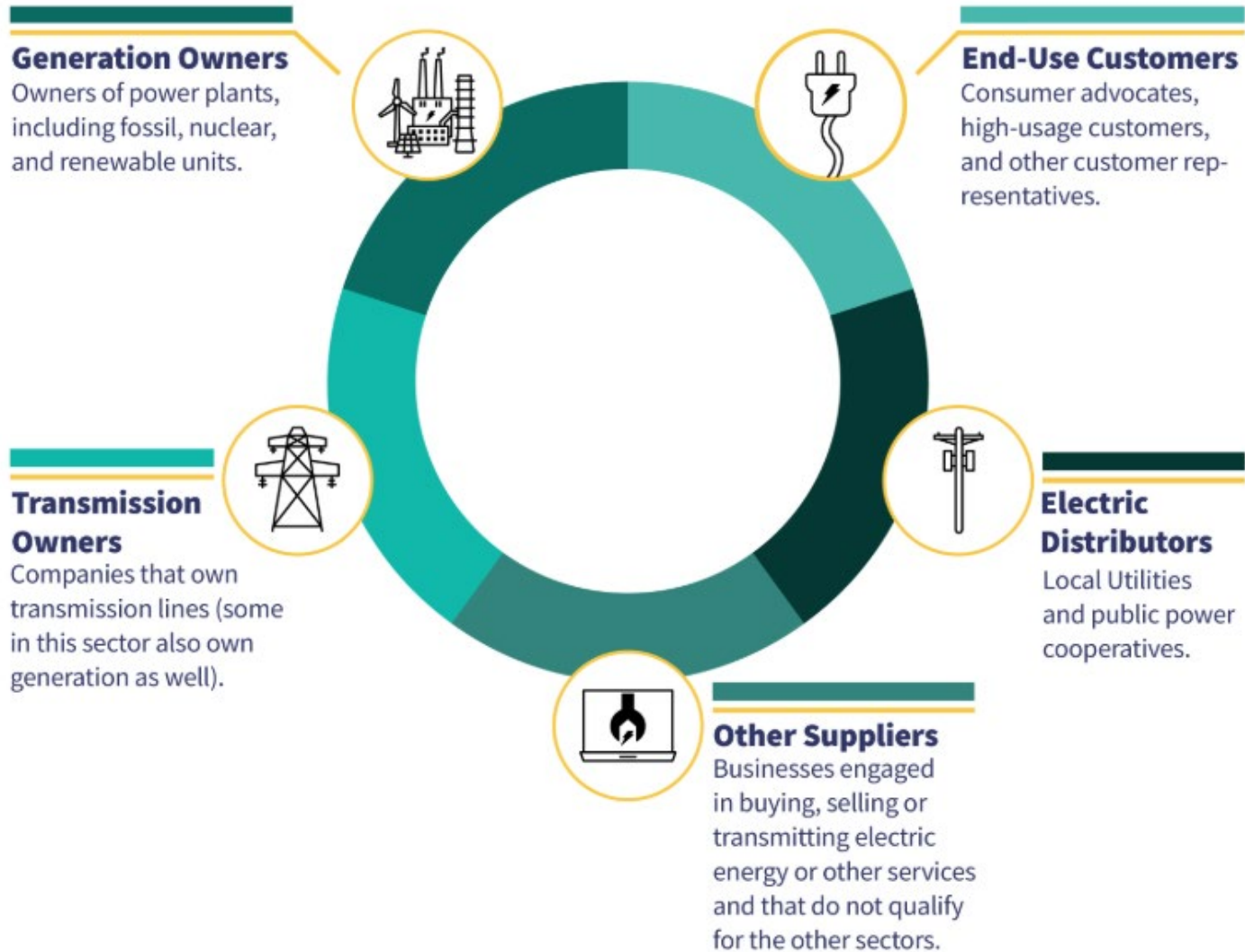




# WHOLESALE MARKET: Basics of the electric system



# WHOLESALE MARKET: PJM Operates the Wholesale Market



- **Voting Members.** Participate in the competitive wholesale electricity market and vote at Members Committee and Markets and Reliability Committee meetings.
- **Affiliate Members.** Participate in the competitive wholesale electricity market and vote at senior task force and lower-level standing committee meetings, but not at Members Committee and Markets and Reliability Committee meetings.
- **Associate Members.** Do not participate in PJM's markets and have no voting rights.
- **Special Members.** Participating in the Emergency Customer Load Reduction Program and do not have voting rights.
- **Ex Officio Participants.** Include Consumer Advocate Representatives and Regulatory Representatives on the Standing Committees and have limited voting rights.

# PJM Member Requirements for Electric Distributors

Member Requirements	Market Operations	Load Management
Apply Requirements Agreements Network Transmission Load Response Credit Requirement	Day-Ahead Markets Capacity Requirements Ancillary Services Congestion & Losses Metering & Settlement	Scheduling <ul style="list-style-type: none"><li>- Load</li><li>- Capacity</li><li>- Ancillary Services Scheduling</li></ul> Settlement & Billing

General Planning	Legal Activities	General Transaction
Load Forecasting <ul style="list-style-type: none"><li>- Near term</li><li>- Long term</li></ul> Supply Source Management	Compliance Internal/External Audit Admin and Compliance Costs Special Rules Stakeholder Engagement Proceedings (FERC, PJM)	Procurement Hedging Environmental Attributes

# PJM Member Requirements for Electric Distributors

## Functions Currently Provided by IMEA

Member Requirements	Market Operations	Load Management
Apply Requirements Agreements Network Transmission Load Response Credit Requirement	Day-Ahead Markets Capacity Requirements Ancillary Services Congestion & Losses Metering & Settlement	Scheduling - Load - Capacity - Ancillary Services Scheduling Settlement & Billing

24/7 Operations

General Planning	Legal Activities	General Transaction
Load Forecasting - Near term - Long term Supply Source Management	Compliance Internal/External Audit Admin and Compliance Costs Special Rules Stakeholder Engagement Proceedings (FERC, PJM)	Procurement Hedging Environmental Attributes

## Can Individual Municipal Utilities Operate Independently in PJM? Yes, but few choose to

STATE	PJM MUNICIPAL MEMBER		GROUP AFFILIATION
DE	City of Dover, Delaware		<a href="#"><u>Delaware Municipal Electric Corp.</u></a>
IL	City of Batavia, Illinois City of Rochelle, Illinois	The City of Geneva	<a href="#"><u>NIMPA / Avant Energy</u></a>
IN	City of Auburn	Town of Williamsport (The)	Not known at this time
MD	Easton Utilities Commission Hagerstown Light Department	Town of Berlin Town of Thurmont	Not known at this time
NJ	Borough of Butler Borough of Lavallette Borough of Madison Borough of Milltown Borough of Park Ridge	Borough of Pemberton Borough of Seaside Heights Borough of South River Vineland Municipal Electric Utility	<a href="#"><u>New Jersey Public Power Authority</u></a>
OH	City of Cleveland, DPU	City of Hamilton, Ohio	<a href="#"><u>American Municipal Power</u></a>
PA	Borough of Chambersburg Borough of Mont Alto	Borough of Pitcairn Wellsboro Electric Company	<a href="#"><u>Pennsylvania Municipal Electric Association</u></a>



## PJM Member Requirements

### Operating Area for Alternative Providers

Member Requirements	Market Operations	Load Management
Apply Requirements Agreements Network Transmission Load Response Credit Requirement	Day-Ahead Markets Capacity Requirements Ancillary Services Congestion & Losses Metering & Settlement	Scheduling <ul style="list-style-type: none"><li>- Load</li><li>- Capacity</li><li>- Ancillary Services Scheduling</li></ul> Settlement & Billing
General Planning	Legal Activities	General Transaction
Load Forecasting <ul style="list-style-type: none"><li>- Near term</li><li>- Long term</li></ul> Supply Source Management	Compliance Internal/External Audit Admin and Compliance Costs Special Rules Stakeholder Engagement Proceedings (FERC, PJM)	Procurement Hedging Environmental Attributes

# Power Marketing Terms

Wholesale Energy	<ul style="list-style-type: none"> <li>Transactions involving parties that are <u><i>not</i></u> energy end-users</li> <li><b>Example:</b> Power sold from a generating plant to a utility</li> </ul>
Retail Energy	<ul style="list-style-type: none"> <li>Transactions involving <u><i>at least one</i></u> energy end-user</li> <li><b>Example:</b> Energy sold by a utility to a single-family home</li> </ul>
Power Marketer	<ul style="list-style-type: none"> <li>Entity that sells (or facilitates the sale) of energy between parties (wholesale or retail)</li> <li><b>Example:</b> Constellation (wholesale/retail); Shell (wholesale); MC-Squared (retail)</li> </ul>
- Reseller	<ul style="list-style-type: none"> <li>Power Marketer that <u><i>takes title to energy and then sells</i></u> the energy to another party</li> <li><b>Example:</b> Constellation (wholesale/retail); Shell (wholesale); MC-Squared (retail)</li> </ul>
- Service Bureau	<ul style="list-style-type: none"> <li>Power Marketer that facilitates sales between parties <u><i>without</i></u> taking title to the energy</li> <li><b>Example:</b> ACES (wholesale); APN (retail)</li> </ul>
- Retail Energy Supplier	<ul style="list-style-type: none"> <li>Reseller that <u><i>takes title to energy and then sells</i></u> the energy to another party</li> <li><b>Example:</b> Constellation; APN; MC-Squared</li> </ul>
Sub-Account	<ul style="list-style-type: none"> <li>Power Marketer establishes a wholesale trading account for use by a client that is still in the name of the Power Marketer that allows the client to execute wholesale power purchases.</li> <li><b>Example:</b> Large University executes purchases from wholesale parties (PJM for hourly supply; Power Marketers for fixed price supply) through the Sub-Account established by its Retail Energy Supplier</li> </ul>
“Going to Market”	<ul style="list-style-type: none"> <li>A process undertaken by an energy buyer to secure energy supplies and services (retail/wholesale)</li> </ul>

# What tasks need to be fulfilled beyond a Power Marketer?

POSITION AND PRIMARY TASKS	TYPE	Annual Cost	
		Estimated Base Salary	Benefits and Admin Cost
<b>Wholesale Energy Manager</b> - Oversee all wholesale activities - Primary contact for Utility and Board - Manage internal reporting - Supplier selection and negotiations - Budgeting and resource management - Compliance filings - Point of contact for FERC, PJM, ICC - Long term planning and hedging	Internal	\$244,000	\$97,600
<b>Energy Market Analysts (2)</b> - Price forecasting (energy, capacity, transmission) - Hedge modeling (energy capacity transmission) - Capacity sales planning, bidding strategy - PJM process participation, compliance - Contract administration/monitoring - Weekly PJM billing audit/review - Regional resource planning monitoring - Procurement/vendor selection	Internal	\$306,000	\$122,400
<b>Energy Policy Analyst</b> - Monitor federal/state energy policy proposals - Identify risk mitigation options for adverse policies - Monitor ICC, DCEO, IPA, IEPA proceedings	Internal	\$143,000	\$57,200
<b>Support</b> - Scheduling, Clerical, Project tracking	Internal	\$68,000	\$27,200
<b>Regulatory Attorney</b> - PJM Membership Contracts - FERC proceedings - Supply Contract Negotiation - Capacity Sales Contract Negotiations - PJM Stakeholder Proceedings - PJM Compliance Filings - Illinois Commerce Commission Proceedings - State Energy/Utility statute monitoring	External	\$250,000	-
<b>Lobbyist</b> - Monitor state energy legislation - Engage with state agencies - Engage with State Agencies - Develop/advocate policies	External	\$120,000	-
<b>TOTALS</b>		<b>\$1,131,000</b>	<b>\$304,400</b>
<b>GRAND TOTAL (2025 Dollars)</b>		<b>\$1,435,400</b>	

## “Bidding Out” the City's Electricity Load

- **What would the City be procuring?**
  - Wholesale electricity supply, capacity and transmission
  - Delivery commencing in 2035
  - Services?
- **Threshold issues**
  - Volumes and delivery schedule
  - Sourcing (grid, unit-contingent, other)
  - Resource types (thermal, renewable, carbon-free)
  - Product type (financial, physical)
  - Hedging objectives
  - Selection criteria (price, services, “value”)
  - Terms for post-selection contract renegotiations



## “Bidding Out” the City's Electricity Load

Bidders	Municipality
<b>Risks</b> <ul style="list-style-type: none"><li>• Bidding a price today that is too low (Market Risk)</li><li>• Committing to contract terms today without knowing future regulatory obligations (Regulatory Risk)</li><li>• Securing resources today without certainty that the City will follow through in 10 years (Counterparty Risk)</li></ul>	<b>Risks</b> <ul style="list-style-type: none"><li>• Accepting a price today that is too high (Market Risk)</li><li>• Committing to contract terms today without knowing future regulatory obligations (Regulatory Risk)</li><li>• Securing resources today without that the supplier will follow through/be in business in 10 years (Counterparty Risk)</li><li>• Supplier selected today may not be desirable in 10 years (Reputation Risk)</li></ul>
<b>Mitigations</b> <ul style="list-style-type: none"><li>• Increase price offers (Risk to muni)</li><li>• Offer an indicative price (Risk to muni)</li><li>• Terminate the contract at a later date (Risk to muni)</li><li>• Do not bid</li></ul>	<b>Mitigations</b> <ul style="list-style-type: none"><li>• Delay price locks until a future date (but prices could rise during the interim)</li><li>• Maintain a backup supplier in case a selected supplier ceases operations, terminates agreement, etc.</li><li>• Spread purchases across multiple counterparties</li></ul>

## Conclusions

- **Replacing IMEA will require the Utility to fully engage as a PJM Member (Electric Distribution)**
  - Timeline dependent upon available resources
  - Extended period of time to secure Alternative Provider
- **Apparently, no “One-Stop-Shop” among Alternative Providers to support all PJM requirements**
  - No single Alternative Providers would commit to meeting all of PJM membership obligations for the Utility.
  - *Did not identify any municipal utilities of similar size to that of Naperville that participated on its own in the wholesale energy markets by utilizing only the services of an Alternative Provider.*
- **Lack of clarity regarding future costs for commodities and services**
  - *Market-based pricing for energy delivery in 2035 is not knowable today*
- **The case for the City operating as an independent PJM Member lacks the normal economic drivers usually associated with taking on the complexities of wholesale market participation**
  - Economies of scale to gain operating efficiencies and reduce costs
  - Secure access to sell resources (e.g., capacity)

# THANK YOU

**Mark Pruitt**

Principal | The Power Bureau

[markjpruitt@thepowerbureau.com](mailto:markjpruitt@thepowerbureau.com)

C: (219) 921-3828