

**CHAMPAIGN COUNTY BOARD
DATA CENTER ACTIVITIES TASK FORCE**

County of Champaign, Urbana, Illinois
Monday, June 22, 2026 - 6:30 p.m.

Shields-Carter Meeting Room
Bennett Administrative Center
102 E. Main St., Urbana

Committee Members:

Aaron Esry – Vice Chair
Carly McCrory-McKay
Andrew Rehn
Dirk Rice
Dennise Arres

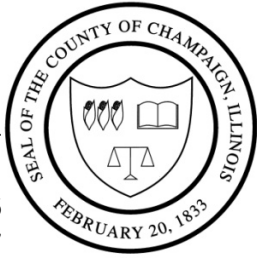
Emily Rodriguez - Chair
Kevin Sage
Deb Newell
Amy Young

Agenda Items

- I. Call to Order**
- II. Roll Call**
- III. Approval of Agenda/Addendum**
- IV. Approval of Minutes**
 - a. May 4, 2026
 - b. June 1, 2026
- V. Public Input**
- VI. Communications (discussion only)**
- VII. New Business (discussion only)**
 - a. Memorandum on Proposed requirements for energy use and impact on electrical grid for a BIG DATA CENTER, Director John Hall, Champaign County Planning and Zoning
- VIII. Other Business**
 - a. Date of next meeting (discussion only)
 - i. July 13, 2026 to focus on back-up generators, noise, vibration, and minimum separations
- IX. Chair's Report**
- X. Next Steps (discussion only)**
- XI. Adjournment**

All meetings are at Bennett Administrative Center – 102 E. Main Street in Urbana – unless otherwise noted. Champaign County will generally, upon request, provide appropriate aids and services leading to effective communication for qualified persons with disabilities. Please contact Administrative Services, 217-384-3776, as soon as possible but no later than 48 hours before the scheduled meeting.

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CHAMPAIGN COUNTY BOARD
DATA CENTER ACTIVITIES TASK FORCE AGENDA
County of Champaign, Urbana, Illinois
Monday, May 4, 2026 - 6:30 p.m.

Shields-Carter Meeting Room
Bennett Administrative Center
102 E. Main St., Urbana

10 **MINUTES – Subject to Approval**

- 11 Members Present: Emily Rodriguez, Eric Thorsland, Dirk Rice, Kevin Sage, Andrew Rehn, Deb Newell
 - 12
 - 13 Members Absent: Aaron Esry, Carly McCrory-McKay
 - 14
 - 15 Others Present: Steve Summers (County Executive), Jennifer Locke (Board Chair), Michelle Jett (Director
 - 16 of Administration), John Hall (Director of Planning and Zoning), and Kait Kuzio
 - 17 (Recording Secretary)
-

18 **Agenda Items**

19 **I. Call to Order**

20 Chair Rodriguez called the meeting to order at 6:31 p.m.

21 **II. Roll Call**

22 Roll call was taken, and a quorum was declared present.

23 **III. Approval of Agenda/Addendum**

24 **MOTION** by Mr. Sage to approve the agenda with a friendly amendment to add Mr. Thorsland to the members; seconded by Mr. Rice. Upon vote, the **MOTION CARRIED** unanimously.

25 **IV. Approval of Minutes**

- 26 A. March 23, 2026
- 27 B. April 13, 2026

28 **MOTION** by Mr. Rehn to approve both sets of minutes as an omnibus; seconded by Mr. Sage. Upon vote, the **MOTION CARRIED** unanimously.

29 **V. Public Input**

30 **VI. Communications**

31 None

32 **VII. New Business**

- 33 A. Presentation – Alison Lindburg, Director of Sustainability, and Mayor John Laesch of City of Aurora, IL (information only)

34 The City of Aurora had placed a moratorium on Data Centers to develop policy and guidelines for data centers in their City similarly to this task force. They presented their project website, which includes

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52 each step of their process, suggested policy and language throughout the process and revisions along
53 with final versions of each policy. They provided task force members with an overview of the process,
54 their wards, the challenges they faced, the things they learned throughout the process that they suggest
55 our members consider, and more.

56
57 They discussed water use efficiency, as they set a standard in their policy. They also went over data from
58 their public survey and their timeline for the entire process before answering members' questions.

59
60 Members noted that our situation is a little different than the City of Aurora's because they have home-
61 rule and Champaign County does not. Members noted that this means they have to consider their
62 limitations in terms of enforcing some types of policy.

63
64 B. Presentation – Brad Tietz, Director of State Policy, Data Center Coalition (information only)

65
66 He explained the types of data centers, including hyper-scale, micro-tenant or co-location, and edge
67 data centers and urged members to first ask what type of data center because that will inform a lot of
68 questions.

69
70 He referenced what he would say are the three over-arching priorities in building a data center.

- 71 1. Provide safe and secure space for the computer equipment.
72 2. Ensure an uninterrupted flow of electrons to the computer equipment.
73 3. Reliably release the heat generated from the equipment.

74 He explained that another concern they would have and something members should consider is the
75 modularity and the ability to move things around inside depending on tenant needs and changes in
76 efficiency.

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78 **VIII. Other Business**

79 A. **Date of next meeting:** June 1, 2026 to focus on water and wastewater

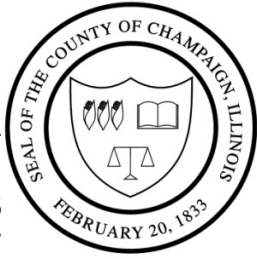
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81 **IX. Chair's Report**

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83 **X. Next Steps (discussion only)**

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85 **XI. Adjournment**

86 Chair Rodriguez adjourned the meeting at 8:59pm.

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CHAMPAIGN COUNTY BOARD
DATA CENTER ACTIVITIES TASK FORCE AGENDA
County of Champaign, Urbana, Illinois
Monday, June 1, 2026 - 6:30 p.m.

Shields-Carter Meeting Room
Bennett Administrative Center
102 E. Main St., Urbana

10 **MINUTES – Subject to Approval**

11 Members Present: Emily Rodriguez, Eric Thorsland, Dirk Rice, Kevin Sage, Andrew Rehn, Deb Newell, Aaron
12 Esry, Carly McCrory-McKay, Dennise Arres, Amy Young

13
14 Members Absent:

15
16 Others Present: Jennifer Locke (Board Chair), John Hall (Director of Planning and Zoning), and Kait Kuzio
17 (Recording Secretary)

18 **Agenda Items**

19 **I. Call to Order**

20
21 Chair Rodriguez called the meeting to order at 6:31 p.m.

22
23 **II. Roll Call**

24
25 Roll call was taken, and a quorum was declared present.

26
27 **III. Approval of Agenda/Addendum**

28
29 **MOTION** by Mr. Esry to approve the agenda; seconded by Ms. Newell. Upon vote, the **MOTION**
30 **CARRIED** unanimously.

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32 **IV. Approval of Minutes**

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34 A. May 4, 2026

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36 The minutes are not completed but will be ready for approval at the next meeting.

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38 **V. Public Input**

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40 **VI. Communications**

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42 Chair Rodriguez welcomed two new members, Dennise Arres and Amy Young. She also recapped items that
43 came up last meeting for which she’s pursuing guidance and answers, including how our non-home-rule status
44 impacts enforcement. She doesn’t have specific communications on this yet, but she is working with the State’s
45 Attorney’s Office.

46
47 **VII. New Business**

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49 A. Presentation – Senior Manager of Programs Johanna Smith, Alliance for Water Efficiency

50
51 She discussed direct and indirect water usage, reminding task force members to consider that often

52 there are multiple cooling loops involved and while one may be air cooled, it's most likely used in
53 collaboration with another system. She focused on four principal factors that influence the amount of
54 water usage in a data center facility—facility capacity, cooling technology, temperature, and humidity.
55 Their organization has developed a guidebook to assist local governments to ask the right questions
56 about water usage and consider the factors which will be free and will be available soon.

57
58 B. Presentation – Dr. Ximing Cai and Research Assistant Hari Dave, Lincoln Institute Project, Civil &
59 Environmental Engineering at University of Illinois

60
61 They presented on their recent study, Assessing the impact of data centers on water stress conditions in
62 Virginia and Arizona, covering both direct and indirect impacts and the importance of water
63 governance.

64
65 C. Presentation – Executive Director Rick Manner, Champaign Urbana Sanitary District

66
67 He presented on local water use and capabilities along with the local Sanitary District's abilities to
68 service potential data centers and to what extent. He discussed the process that would need to happen
69 at the Sanitary District for a data center to even inquire about water use and disposal, stating that it
70 could involve plans for the entity to pay to install pipelines.

71
72 D. Memorandum on Water Use and Cooling, Director John Hall, Champaign County Planning and Zoning

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74 **VIII. Other Business**

75 A. **Date of next meeting:** June 22, 2026 to focus on energy

76
77 **IX. Chair's Report**

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79 **X. Next Steps (discussion only)**

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81 **XI. Adjournment**

82 Chair Rodriguez adjourned the meeting at 8:57pm.

Champaign County
Department of

**PLANNING &
ZONING**

Bennett Administrative Center
102 East Main Street
Urbana, Illinois 61801

(217) 384-3708
zoningdept@co.champaign.il.us
www.co.champaign.il.us/zoning

TO: **Data Center Task Force**

FROM: **John Hall, Zoning Administrator**

DATE: **June 17, 2026**

RE: **Proposed requirements for energy use and impact on electrical grid for a BIG DATA CENTER**

BACKGROUND

Attachment A is a proposed standard condition for energy use and impact on electrical grid for a BIG DATA CENTER.

Attachment A is based in large part on the City of Aurora requirements which are included as Attachments B, C, and D.

Attachments D and E are copies what was provided for the CyrusOne 634 MW Data Center that was approved in Sangamon County, Illinois earlier this year.

ATTACHMENTS

- A Proposed Standard Condition for Energy Use and Impact on Electrical Grid**
- B City of Aurora requirement for Energy Consumption Modeling Report**
- C City of Aurora requirement for Energy Usage Standards**
- D City of Aurora requirement for On-Site Renewable Energy and Resilience Requirement**
- D Proposed Electrical Supply Narrative for CyrusOne C1 Sangamon 1 LLC 634 MW Data Center in Sangamon County, Illinois**
- E Proposed Data Center Impact Analysis for CyrusOne C1 Sangamon 1 LLC 634 MW Data Center in Sangamon County, Illinois**

Attachment A

- O. Standard Conditions for Energy Use and Impact on the Electrical Grid
- (1) Energy efficient buildings.
 - a. All BIG DATA CENTER buildings shall comply with the most recent or previous International Energy Conservation Code.
 - b. Compliance with this requirement shall be certified in writing by an Illinois Licensed Architect to be submitted prior to the issuance of a Zoning Use PERMIT.
 - (2) On-site Renewable Energy and Resilience requirements. A BIG DATA CENTER shall install and operate one of the following:
 - a. On-site Clean Energy. On-site renewable energy generation with a nameplate capacity sufficient to supply not less than 25% of the facility's peak electrical demand as demonstrated in the approved electrical load study; or
 - b. On-site Resilience Storage. On-site energy storage capable of supplying not less than 50% of the BIG DATA CENTER's peak electrical demand for a minimum duration of 15 minutes for purposes of including electrical grid stabilization, brownout mitigation, and peak-load support. Energy storage systems shall be configured to prioritize discharge during utility-declared peak events and grid emergencies to reduce localized voltage sag, transformer overload, and outage risk in the surrounding region.
 - (3) Modular nuclear reactors, small modular reactors, or any other nuclear-based on-site energy production methods are prohibited.
 - (4) The SPECIAL USE Permit application shall include a written explanation of the anticipated impacts that the proposed BIG DATA CENTER may have on electric power grid reliability and electricity pricing as follows:
 - a. The report shall be written by a third-party consultant with at least 20-years of experience in power grid management, energy project development, commodity procurement, and utility regulation.
 - b. The report shall address the following:
 - (a) Whether the local service network can accommodate the increased load arising from the BIG DATA CENTER.
 - (b) Whether in the event of a grid blackout retail customers will be prioritized for service by the local utility instead of the BIG DATA CENTER

Zoning Administrator

JUNE 17, 2026

- (c) Whether the regional power transmission grid may be overstrained by operation of the BIG DATA CENTER.
- (d) Whether there is enough power generating capacity in the region to serve the BIG DATA CENTER.
- (e) Whether existing power grid users will be forced to pay any interconnection costs related to the BIG DATA CENTER.
- (f) Whether power delivery rates for existing utility customers will likely increase because of the BIG DATA CENTER.
- (g) Whether increased demand for electricity caused by the BIG DATA CENTER will likely increase regional costs in central Illinois.

1 permitted surface discharge). The Study shall
2 evaluate potential impacts to water quality,
3 including risks of chemical contamination from
4 cooling system additives, biocides, corrosion
5 inhibitors, and other treatment chemicals;
6 risk of accidental releases or leaks; spill
7 prevention and response measures; and on-site
8 storage and handling practices for water
9 treatment chemicals. The Study shall include
10 a Water Quality Protection Plan outlining
11 secondary containment for chemical storage;
12 monitoring protocols for discharge quality;
13 and emergency response procedures for releases
14 or system failures. The study shall
15 specifically address measures to prevent
16 thermal pollution; measures to prevent
17 discharge of contaminants that may degrade
18 receiving waters; and whether any wastewater
19 pretreatment or cooling is required prior to
20 discharge.

21 i-iv. Energy Consumption Modeling Report
22 completed by a third-party engineer and
23 submitted demonstrating compliance with the

1 applicable standards to the underlying zoning
2 district.

3 b. Chillers must be designed to meet the following
4 requirements:

5 i. Evaporative chillers utilizing potable water
6 are prohibited.

7 ii. Roof-mounted chillers cannot be located
8 within one thousand five hundred (1,500') feet
9 of any residential, hospital or educational
10 use, measured from the nearest part of the
11 sound attenuation screen or parapet of the
12 building to the property line of the
13 residential, hospital or educational use. The
14 authorization of a conditional use for this
15 purpose will not be affected by subsequent
16 establishment of a residential, hospital or
17 educational use within the restricted area
18 established herein.

19 iii. Any ground-mounted chillers cannot be
20 located within one thousand (1,000') feet of
21 any residential, hospital or educational use,
22 measured from the nearest part of the
23 equipment yard to the property line of the
24 residential, hospital or educational use. The

1 ii. Vibrations Standards. Data center facilities
2 must have continuous vibration monitoring at
3 spacing of no less than 500 feet along all
4 property lines within 1,000 feet of
5 residential, hospital or educational uses.

6 iii. Energy Usage Standards.

7 1. Data center facilities must be designed
8 to maintain a Power Usage Effectiveness
9 of no more than one and two-tenths (1.2).

10 As used in this Chapter "Power Usage
11 Effectiveness" or "PUE" is defined as the
12 ratio of total building energy
13 consumption divided by the total
14 Information Technology equipment
15 (servers, switches, storage devices,
16 etc.).

17 2. Data centers must be designed to comply
18 with the energy code requirements
19 specified in whichever of the following
20 is most stringent:

21 i. The latest adopted International
22 Energy Conservation Code (IECC);

23 ii. The latest published ASHRAE
24 Standard 90.4 (Sections 6 & 8); or

1 iii. Illinois-specific data center
2 energy code requirements adopted by
3 rule, which may include more
4 detailed criteria such as
5 Mechanical Load Component (MLC) and
6 Electrical Load Component (ELC)
7 measures.

8 3. Modular nuclear reactors, small modular
9 reactors or any other nuclear-based
10 energy are prohibited.

11 iv. Water Usage Standards. Data center facilities
12 must maintain a Water Usage Effectiveness of
13 no more than two tenths (0.2). As used in this
14 Chapter, "Water Usage Effectiveness" or "WUE"
15 is defined as the ratio of total potable
16 building water consumption (liters) to
17 Information Technology equipment (kilowatt-
18 hour).

19 e. Screening. Except as expressly modified below,
20 data center facilities must be designed to comply
21 with the following requirements:

22 i. Roof-mounted mechanical equipment must be
23 fully enclosed on all sides by a sound-
24 attenuating screen or parapet equal in height

1 to, or taller than, the tallest roof-mounted
2 chiller or associated mechanical equipment,
3 and must be designed to blend with the
4 architectural style, materials, and color of
5 the building.

6 ii. Ground Mounted Mechanical Equipment must be
7 fully enclosed on all sides by a sound
8 attenuating wall extension or other sound
9 attenuating enclosure, subject to approval by
10 the zoning administrator, equal in height to,
11 or taller than, the tallest ground-mounted
12 chiller and generator or associated mechanical
13 equipment and must blend with the
14 architectural style, materials, and color of
15 the building.

16 f. On-Site Renewable Energy and Resilience Requirement.

17 i. All new or expanded data centers shall install
18 and operate, at a minimum, one of the
19 following:

20 1. On-Site Clean Energy: On-site renewable
21 energy generation with a nameplate
22 capacity sufficient to supply not less
23 than twenty-five percent (25%) of the
24 facility's peak electrical demand, as

1 demonstrated in the approved electrical
2 load study; or

3 2. On-Site Resilience Storage: On-site
4 energy storage capable of supplying not
5 less than fifty percent (50%) of the
6 facility's peak electrical demand for a
7 minimum duration of fifteen (15) minutes,
8 for purposes including grid
9 stabilization, brownout mitigation, and
10 peak-load support. Energy storage
11 systems shall be configured to prioritize
12 discharge during utility-declared peak
13 events and grid emergencies to reduce
14 localized voltage sag, transformer
15 overload, and outage risk in surrounding
16 neighborhoods.

17 ii. Feasibility Alternative Compliance. Where the
18 applicant demonstrates, through a third-party
19 feasibility analysis approved by the City,
20 that on-site installation is infeasible due to
21 site constraints, safety limitations, or grid
22 interconnection restrictions, the applicant
23 shall comply through one or more of the

1 following off-site measures, subject to
2 approval by the City:

3 1. Procurement of new renewable energy
4 generation located within the regional
5 grid serving the municipality, under
6 long-term contract, in an amount equal to
7 the on-site requirement;

8 2. Investment in distributed energy
9 resources or community-scale battery
10 storage projects located within the
11 municipality or its utility service area.

12 (26) Pre-2026 Data Center Facility which were allowed to
13 be built as Warehouse, Distribution and storage services
14 under the then-existing Zoning Ordinance, before March
15 25, 2026, are allowed to continue to operate as Warehouse,
16 Distribution and storage services until and unless the
17 Data Center Facility undergoes wholesale re-development
18 of the property, a building, or a facility on the
19 property. For purposes of this section, "wholesale re-
20 development" means that a total of 50% or more of the
21 footprint square footage of a single building structure
22 is demolished and rebuilt as part of a planned
23 improvement to the property, whether the demolition and
24 rebuilding is done at once or over time. Wholesale re-

ELECTRIC SUPPLY

With respect to power usage, the campus will utilize up to 634 MW at full buildout. Power will be provided by Rural Electric Convenience Cooperative (RECC). RECC is served by transmission lines that are owned and maintained by Ameren. Ameren is a member of the Midcontinent ISO ("MISO") Regional Reliability Area. MISO is responsible for approving large loads within Ameren's transmission network territory and MISO has confirmed that the projected capacity can be served and will not create reliability issues for the region. The location was specifically selected due to its proximity to existing power infrastructure that can support a large load customer with minimal upgrades or impact to the electric grid. CyrusOne will pay for transmission and network upgrades that are specifically required to serve the Project. RECC has provided guidance to its members demonstrating that the Project will not increase power rates for their members and rate payers and has also provided a will-serve letter for the Project ("Exhibit I")

FIBER

The campus will require fiber optic network service from at least two separate providers. The specific providers that will serve the campus will be determined via an RFP process conducted by CyrusOne, its tenants and vendors. The extension of fiber optic networks to this area will dramatically increase the availability of high-speed internet service to those that live and conduct business in the surrounding area. The line extensions will be paid for by the Applicant and its tenants.

EMPLOYMENT AND ECONOMIC IMPACT

With respect to employment, the project will create over 100 new permanent positions and require the services of 500+ construction personnel continuously throughout the development cycle. The jobs that the Project will create provide opportunities for people with a range of backgrounds and experience with some only requiring a certification to unlock upward advancement. Other positions that are highly technical or managerial in nature will require individuals with advanced certifications and degrees that command higher salaries. Throughout the lifecycle of the construction phase, CyrusOne will leverage the local construction and labor workforce and has committed publicly to entering into Project Labor Agreements ("PLAs"). A letter demonstrating this commitment is enclosed as an attachment to this submittal for reference ("Exhibit L").

CyrusOne has stated publicly that it intends to invest a minimum of \$500 million in the development of this site. Sangamon County's tax assessor has estimated that this will generate property tax revenue of \$98,524,871 over 20 years. The Project does not create a significant need for new housing, schools or services but provides a significant infusion of funds to local governments and taxing jurisdictions that serve residents in and around the host parcels.

III. Summary

CyrusOne is proud to employ and support hundreds of workers and families in Illinois and is currently deploying over \$1 billion in capital elsewhere throughout the state, supporting thousands of construction jobs. Across the globe, the company supports hundreds of other employees and workers. We are a proven

2025

Data Center Impact Analysis

AN ASSESSMENT OF POTENTIAL ELECTRIC SYSTEM RELIABILITY AND COST IMPACTS OF DATA CENTER DEVELOPMENT IN SANGAMON COUNTY

THE POWER BUREAU, LLC

RECEIVED

FEB 25 2026

CHAMPAIGN CO. P & Z DEPARTMENT

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Executive Summary

The proposed development of a 600-megawatt data center in Sangamon County presents a major development opportunity for the region but has also raised concerns about whether hosting such a large energy user may erode the reliability of electric service and increase overall energy costs.

The County retained The Power Bureau to evaluate whether and to what extent the proposed data center increases reliability risks to the regional grid and consumers. In conducting its review, the Power Bureau considered the general scale and operation of the proposed data center, current wholesale regional energy market conditions, and then surveyed interested parties for their comments and concerns regarding the energy-related aspects of the data center project. These comments and concerns were then evaluated by the Power Bureau in the context of the policies, regulations and market functions that relate to energy reliability and costs in central Illinois.

The Power Bureau concludes that the proposed data center will not cause reductions in the reliability of the local utility network or the regional grid. Three key elements support these conclusions:

- The data center project’s local service interconnection will be separate from the existing local utility network that serves current customers;
- The local utility’s experience with the technical requirements related to delivering electricity from the regional grid to local consumers; and,
- The approval by the regional grid operator to allow the proposed data center to connect to the regional grid.

In addition, the proposed data center is unlikely to cause cost increases for either the local utility’s current customers or consumers that are served by neighboring utility providers. Three key elements support these conclusions:

- The data center developer is to pay for the costs of establishing an interconnection to the regional grid by extending the local utility network;

- The data center developer is to pay a delivery rate based on the volume of electricity delivered by the local utility that is sufficient to cover the costs of maintaining and operating the infrastructure required to serve the proposed data center;
- The data center is to pay the full cost of electricity supply that is secured by the local utility through its existing power marketer under a contract that is separate and apart from the existing supply agreements that secure supply and pricing for the local utility’s current customers; and,
- The regional averaging of wholesale capacity and energy markets will continue to insulate all consumers located in Central Illinois from electricity price volatility and increases after the proposed data center enters operation.

Based on these, the Power Bureau concludes that hosting the proposed data center in Sangamon County will have minimal – if any – impact on network system reliability or energy costs.

The Power Bureau appreciates the opportunity to participate in this process and remains available to provide additional context and background on this analysis and conclusions.

Best regards,



Mark Pruitt
Principal
The Power Bureau, LLC

Approach

This report evaluates the potential impacts on electric service reliability and costs related to the proposed development of a 600-megawatt (MW) data center in Talkington Township of Sangamon County, Illinois (the "Project"). The Power Bureau was retained to perform the evaluation and submit its findings to the County Board. The Power Bureau is an energy planning and procurement consulting firm with long-term experience in wholesale and retail energy issues in Illinois. The CV of the staff that performed this evaluation can be found in Attachment A.

The Power Bureau's activity followed the process outlined below:

1. Research baseline energy cost and reliability metrics for the Central Illinois region.
2. Interview relevant parties for specific background, observations, and concerns regarding the Project.
3. Review issues identified in the interviews in the context of energy operations in Central Illinois.
4. Evaluate concerns regarding electric service reliability raised by the parties.
5. Issue this report and be available to respond to further questions from the County Board, County Staff, and the public.

The Power Bureau engaged in interviews with representatives from the following parties:

1. CyrusOne (data center developer)
2. Swift Current Energy (solar farm operator)
3. Rural Electric Convenience Cooperative (local electric utility)
4. Springfield Sangamon Growth Alliance (development agency)
5. Coalition for Springfield's Energy Future (citizen group)
6. Sierra Club of Sangamon Valley (environmental group)

The Power Bureau also referenced publicly available information and data related to the regional grid that serves Central Illinois including:

1. Ameren Illinois (transmission asset owner)
2. Midcontinent Independent System Operator (regional grid operator)
3. Federal Energy Regulatory Commission (federal energy regulator)
4. Proprietary maps and software containing information concerning transmission and generating assets operating in Central Illinois.

Based on the above inputs, the Power Bureau identified the following key questions to serve as the structure for this project:

1. Questions Concerning Reliability:

- A. Can the local utility network manage the increased load represented by the Project?
- B. Which power plants will provide the electricity for the Project?
- C. Will residents be prioritized for service by the local utility in the event of a blackout?
- D. Will the regional transmission grid be overstrained by adding the Project?
- E. Is there enough generating capacity in the region to serve the Project?

2. Questions Concerning Cost:

- A. Who will pay for the pay for upgrades to the local utility network necessary to serve the Project?
- B. Will delivery rates for existing RECC customers increase due to the Project?
- C. Will energy supply rates for existing RECC customers increase due to Project?
- D. Will increased demand for electricity by the Project increase wholesale electricity supply and capacity costs in Central Illinois?

Context

The issues examined in this report relate to the regulatory structures that govern wholesale power markets and their operations. This section provides an overview of these structures to provide context for the later discussions concerning specific questions raised about the potential impacts on service reliability and costs resulting from the Project.

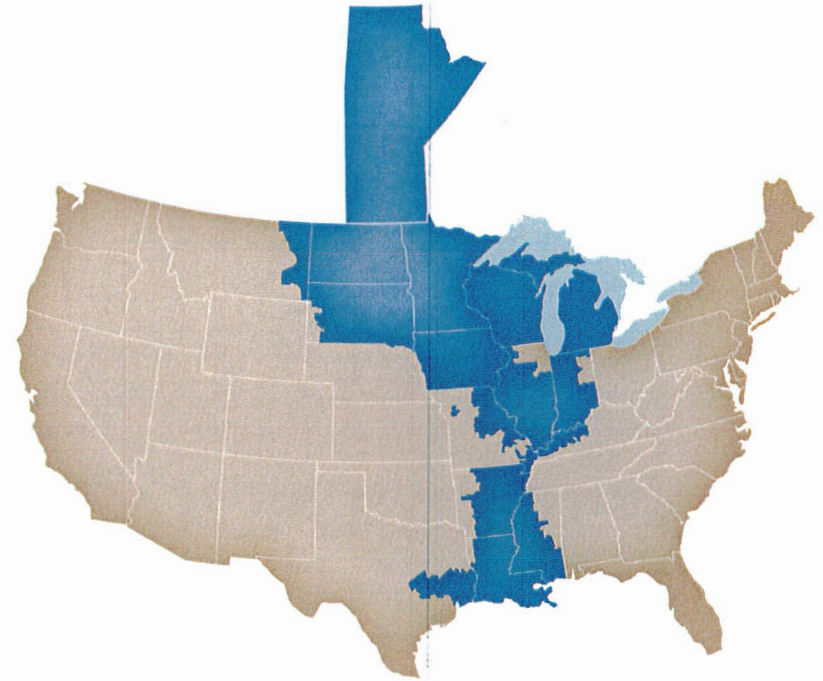
Wholesale Power Markets. The Federal Energy Regulatory Commission (FERC) regulates the transmission and sale of electricity under the authority granted by the Federal Power Act (FPA). The reliability of the bulk-power system is the highest priority under the FPA, and all rates and charges for wholesale power must be just reasonable and not unduly preferential or discriminatory.

FERC approves reliability standards for the nation's bulk-power system (i.e., the interconnected transmission grids) as developed and enforced by North American Electric Reliability Corporation (NERC). NERC reliability standards must be met by industry participants (i.e., local utilities) which operate within NERC regions. Central Illinois is included in NERC region named the Midwest Reliability Organization.

FERC requires that wholesale power costs to be set through either cost-based or market-based methods. Market-based pricing is typically used by regions served by an Independent Market Operators (ISO) or a Regional Transmission Organization (RTO). The ISOs and RTOs use auctions to establish least-cost power supply. The Midcontinent Independent System Operator (MISO) serves Central Illinois. Functionally, MISO's operations prioritize the reliability requirements set by NERC and MRO. The regions served by MISO are indicated in blue in Figure 1.

▪ **Reliability Functions.** Power system frequency – measured in Hertz (Hz) – is an indicator of the instantaneous balance between power supply and demand. In the US, a stable frequency of 60 Hz must be maintained to prevent damage to primary grid components which could lead to system collapse. Functionally, reliability for Central Illinois is managed by MISO. To

Figure 1: Midcontinent Independent System Operator (MISO)



meet its grid reliability mandates, MISO performs a range of operational functions including:

- **Resource Assessments.** MISO surveys all publicly available planning documents and reports concerning generation resource deployments, projected load growth, and energy-related policies from the electric utilities operating within the service region to develop insights into the expected resource changes and needs in the longer term ([2024 Regional Resource Assessment](#)).
- **Interconnection Management.** MISO must approve all proposed generation assets and large loads before they deliver or withdraw power from the regional grid. The interconnection approval process is designed to ensure that output from proposed generation resources (i.e., solar farms, battery storage, natural gas power plants) will not overwhelm

transmission system components or consumer demand. The interconnection process also ensures that increased demand from proposed new consumers (i.e., factories, data centers, residential housing developments) will not exceed the maximum delivery capabilities of existing generation and transmission systems.

- **Annual Planning Resource Auctions (PRA).** MISO manages annual PRA auctions each Spring to determine whether there is sufficient generating capacity to meet peak electricity demand within MISO. All generating assets connected to the transmission network managed by MISO must participate in the PRA and be able to deliver contracted capacity for the following June through May yearly period ([2024 PRA Results for Planning Year 2024-25](#)). Load serving entities (i.e., utilities, retail energy suppliers) must secure a level of capacity equal to or greater than the projected peak demand of their customers through a combination of: i) purchasing capacity from the PRA auction; ii) securing capacity bilaterally from another party; or iii) showing evidence of self-provided capacity with controlled assets.
- **Supply Scheduling.** MISO continuously matches supply with demand by controlling which generating resources deliver electricity to the regional transmission network. MISO utilizes auction processes to select which generating resources operate on a Day-Ahead and Real Time basis.
- **MISO Transmission Expansion Planning (MTEP).** MISO plans transmission system expansions and extensions under authority granted by the FERC-approved Open Access Transmission Tariff (OATT). Under MTEP, MISO plans, evaluates, and authorizes cost-effective transmission system improvements that increase regional grid reliability ([MTEP Reports](#)).
- **Cost Functions.** MISO utilizes market-based auctions to set prices for electricity capacity, supply and ancillary services and cost-based tariffs to recover costs associated with interconnection to and use of transmission assets.
- **Interconnection Costs (Transmission Access).** New generation resources and large loads may connect to the MISO transmission network only

when: i) their addition will not cause a loss of reliability; or ii) the owners of the proposed new generation resources or large loads pay for transmission system upgrades that would ensure the reliability of the grid after the connection of the new generation resources or large loads. These costs include, but are not limited to planning, engineering, procurement, and construction of transmission line extensions, reconductoring, substations, transformers, breakers, and all other elements required to ensure reliable operation of the transmission network after the introduction of the new generation resource or large load.

- **Annual Planning Resource Auctions (Capacity).** MISO's PRA auctions yield prices for capacity that must be purchased by load serving entities that have not already secured capacity from another resource or provide capacity with owned generation resources..
- **Day-Ahead and Real Time Energy Auctions (Electricity Supply).** MISO conducts Day-Ahead and Real Time auctions to set hourly and sub-hourly prices for electricity supply at local nodes as well as aggregated hubs.
- **Co-Optimized Service Market (Ancillary Services).** When the supply of ancillary services is greater than demand, the price for ancillaries is set at the marginal offer from generators (a market-based process). When supply of ancillaries is less than demand, the price is set by using the Operating Reserve Demand Curve (a tariff-based instrument).
- **Transmission Tariff.** The cost of utilizing transmission assets in MISO are based on a formula that factors investment costs to build the assets, authorized rate of return (which is set by FERC), and asset utilization.

Retail Service. The reliability standards and costs related to delivering electricity from the regional grid to the consumer through local service networks operated by load-serving entities (i.e., an investor-owned utility, a municipal utility, an electric cooperative, a retail energy supplier) are regulated through a combination of federal and state mandates. The safety and reliability of the local service network is the highest priority for load serving entities, and

all rates and charges for retail service must be just, reasonable, non-discriminatory, and filed with FERC.

▪ **Reliability Functions.** The reliability of local service networks is driven by the ability to construct and maintain multiple (and ideally redundant) connections to the regional power grid, step-down voltages to suitable levels, and then provide a secure and continuous flow of electricity to customer meters. Each stage of this delivery chain requires capital investment as well as running costs for planning, management, and operations. The reliability standards for retail services are typically identified in planning documents, filings with regulatory bodies (i.e., MISO, utility commissions) and the load serving entity's tariff.

- **Local Resource Adequacy Planning.** Load serving entities engage in either their own resource planning (e.g., an Integrated Resource Plan) or as part of regional planning through their respective RTO or ISO. These plans identify any resource gaps between projected consumer demand and available generation resources in future periods, examine options for bridging any resource gaps, and lay out a plan of action for the organization to secure additional capacity on a least-cost basis. In Illinois, electric cooperatives and municipal utilities undertake ongoing resource planning while investor-owned utilities have not actively engaged in comprehensive resource planning for over 20 years and have instead deferred to ISOs and RTOs for those functions.

- **Interconnection Management.** All proposed distributed generation assets (i.e., rooftop solar, on-site batteries, etc.) and large loads must receive permission from the local load-serving entity to connect to the local service network. Interconnection approval processes are designed to ensure that distributed generation resources will not cause operational complications or safety issues. Additionally, the interconnection process ensures that increased demand from proposed new loads can be accommodated by the existing physical resources of the local electric network. Typically, the introduction of large new loads will also cause local load-serving entities to review their resource adequacy plans.

▪ **Cost.** The costs of retail electric service by the local load-serving entity may be market-based, cost-based, or a combination of the two as determined by the load-serving entity.

- **Retail Supply Procurement.** For electric cooperatives and municipal utilities in Illinois, the cost of electricity supply for retail customers (e.g., the sum of wholesale capacity, energy, transmission and ancillaries) is set by a portfolio of long- and short-term purchases or from the operation of generation resources that are controlled by the cooperative or municipal utility. Electric cooperatives and municipal utilities in Illinois may purchase wholesale capacity, energy, transmission, and ancillaries directly from the wholesale markets operated by MISO or use third parties such as Power Marketers to perform those functions. Typically, cooperatives and municipal utilities secure long-term supply agreements to ensure resource adequacy and price stability.

Consumers served by investor-owned utilities in Illinois have the right to secure retail supply through retail electricity suppliers and have that electricity delivered through the local service network. Large consumers served by investor-owned utilities that choose not to select a retail energy supplier receive retail supply at the prevailing variable wholesale rate for capacity, energy, transmission, and ancillaries as set through the ISO/RTO. Small consumers served by investor-owned utilities that choose not to select a retail energy supplier receive retail supply at a rate established through procurement processes managed by the Illinois Power Agency. Typically, prices for retail supply for consumers served by investor-owned utilities in Illinois extend for periods as of between a few months and two to three years.

- **Interconnection Fees.** New distributed generation resources or large loads may connect to local service networks only after authorization by the load-serving entity. Typically, the load-serving entity will require that the proposed distributed generation be configured in a manner to ensure the safety and reliability of the local service network. The costs of meeting these configuration requirements are typically paid by the owner of the proposed distributed generation. Owners of new retail loads (of any size) are typically responsible for paying the costs of extending or improving the local service network to connect the new retail load.

- **Operating Costs.** Customers pay for electricity supply services through rates charged by the local load-serving entity. Consistent with FERC mandates requiring non-discriminatory pricing, most load-serving entities undertake Cost-of-Service-Studies (COSS) to establish the cost to provide electric service to distinct types of customers (i.e., residential, commercial, industrial) and to then develop tariffs that apply those costs to the appropriate customers. In so doing, the load-serving entity prevents situations where certain consumers are subsidizing the services provided to other consumers.

Figure 2: Primary Parties Responsible for Electricity Service in Central Illinois

| PARTY | RELIABILITY ACTIONS | COST ACTIONS |
|---|--|--|
| Federal Energy Regulatory Commission (FERC) | <ul style="list-style-type: none"> ▪ Requires compliance with reliability standards and practices (established and enforced by NERC under FERC authority) ▪ Requires that all generators and load-serving entities be allowed non-discriminatory access to transmission networks | <ul style="list-style-type: none"> ▪ Allows costs to be market-based or cost-based ▪ Requires that all tariffs be non-discriminatory |
| Independent System Operator (ex. MISO) | <ul style="list-style-type: none"> ▪ Schedule Supply to match Demand (continuously) ▪ Evaluate and approve interconnection of Generation and Large Loads to the regional grid while maintaining reliability ▪ Plan and approve transmission system expansions | <ul style="list-style-type: none"> ▪ Operate competitive auctions (Capacity, Day-Ahead and Real-Time) to select least-cost Supply to match Demand. ▪ Approve cost-effective transmission projects ▪ Establish cost-based tariffs for transmission |
| Generator (ex. Dynegy) | <ul style="list-style-type: none"> ▪ Own and reliably operate Generation ▪ Respond to MISO operational requests/requirements | <ul style="list-style-type: none"> ▪ Bid Generation outputs (Capacity, Electricity, Ancillary Services) into MISO-approved auctions and processes |
| Transmission (ex. Ameren Illinois) | <ul style="list-style-type: none"> ▪ Own and reliably operate Transmission Assets (>69 kV) ▪ Respond to MISO operational requests/requirements | <ul style="list-style-type: none"> ▪ Fund the operation and maintenance of transmission assets with approved funding and in accord with MISO requirements |
| Marketers (ex. NextEra) | <ul style="list-style-type: none"> ▪ Secure Capacity from Generators for Load Serving Entities ▪ Schedule Energy deliveries from the regional grid ▪ Respond to MISO operational requests/requirements | <ul style="list-style-type: none"> ▪ Hedge against market volatility (financial, physical) ▪ Secure least-cost Supply components (Capacity, Energy) |
| Load Serving Entity (ex. RECC) | <ul style="list-style-type: none"> ▪ Build and operate reliable local distribution networks that connect the regional grid to individual consumers ▪ Make / Buy electricity Supply to meet consumer demand ▪ Respond to MISO operational requests/requirements | <ul style="list-style-type: none"> ▪ Obligation to allocate the costs of building and operating the local distribution network to the cost causers via Cost-of-Service Studies (COSS) ▪ Secure stable / least-cost Capacity and Energy for consumers |

Issues and Evaluation

The representative questions identified in the 'Approach' section above were selected to serve as a framework for the following discussion concerning the potential impacts of the Project. Responses to the representative questions are intended to be as complete and thorough as possible. As such, certain graphics and other information are provided for illustrative purposes.

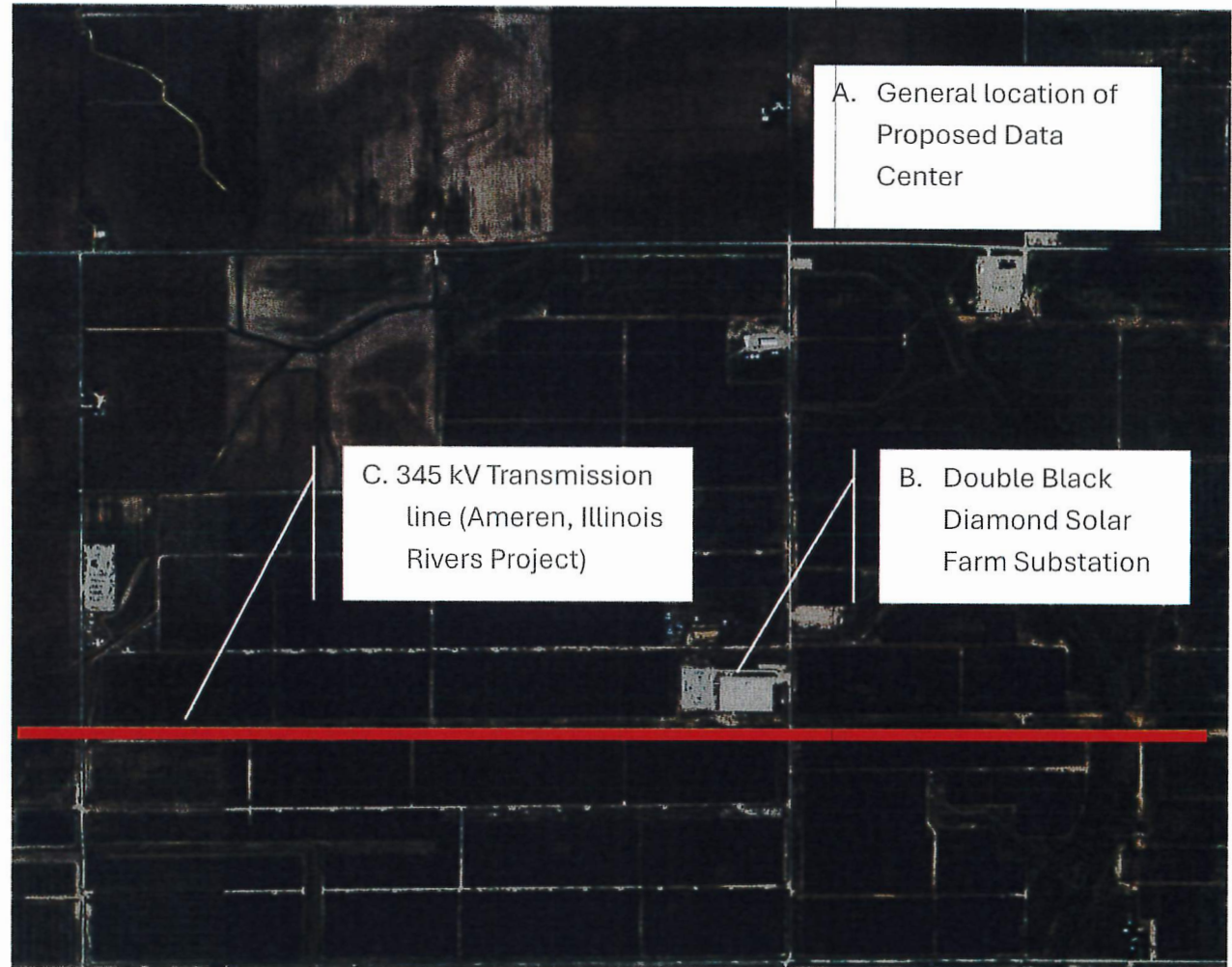
Questions Concerning Reliability. The reliability of electric service for existing consumers of RECC as well as the broader Central Illinois region was a primary issue raised by some of the parties interviewed. The following questions seek to address whether and to what extent the Project may impact local and regional system reliability.

- Can the local service network manage the increased load represented by the Project?

Yes.

Electric service for the Project (location A, Figure 3) will be provided via a new substation that currently connects the Double Black Diamond solar farm (location B, Figure 3) to an existing 345-kV transmission line (location C, Figure 3). As such, electric service to the proposed Project will not travel over any local service network assets that currently serve existing RECC customers. This isolation from the broader RECC network will simplify service delivery to the Project while

Figure 3: Location of Existing Electric Transmission Infrastructure in Talkington Township



A. General location of Proposed Data Center

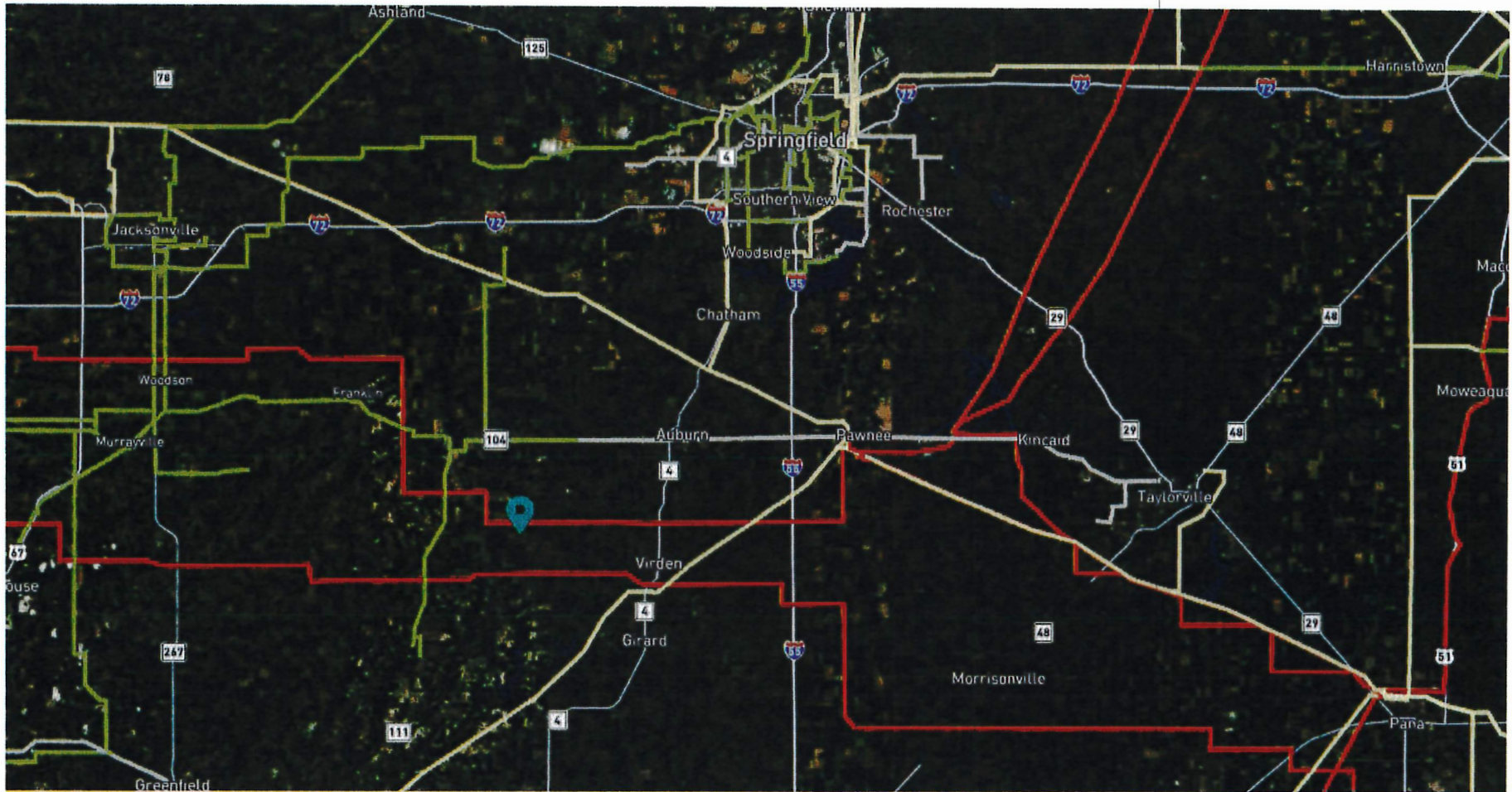
C. 345 kV Transmission line (Ameren, Illinois Rivers Project)

B. Double Black Diamond Solar Farm Substation

preventing potential complications associated with integrating the Project's large load with the loads of existing customers.

Further, the 345-kV transmission line which will serve as the primary delivery route for electricity to the Project is itself a separate portion of the

Figure 4: Separation of 345-kV Transmission serving the proposed data center site from lower voltage transmission that currently serves RECC



transmission system from the points at which RECC's local service network connects to the larger MISO grid. As shown in Figure 4, the 345 kV transmission line that will serve the Project (blue pin) runs from Meredosia (west) and Pawnee (east). According to RECC, the cooperative's local service networks connect to lower voltage transmission assets in the region including 69 kV (green transmission lines in Figure 4) and 138 kV (yellow

transmission lines in Figure 4) which are isolated from the 345 kV transmission line (red transmission line adjacent to blue pin in Figure 4) that will serve the proposed Project. Based on the physical characteristics of the local service network and the regional transmission grid, extending service to the Project will not impact existing RECC customers.

▪ Which power plants will provide the electricity for the Project?

Unknown.

RECC intends to secure and schedule wholesale power and electricity for the Project with its Power Marketer (NextEra) under an agreement that is separate from the current supply agreement which secures fixed price power and supply for RECC's existing customers through 2033.

If the contract with NextEra is consistent with prevailing practices, then the power supply for the Project would be sourced from whatever power plants are selected to operate through MISO's Day-Ahead and Real-Time auction processes. Figure 5 conveys the hourly mix of generation within MISO between 11/1/2025 and 12/1/2025. As noted, the generation during each hour can vary widely.

Additionally, MISO can import power from neighboring wholesale regions to meet its internal supply needs. Figure 6 tracks the electricity imports

Figure 5: Sources of Energy Vary Hourly in MISO

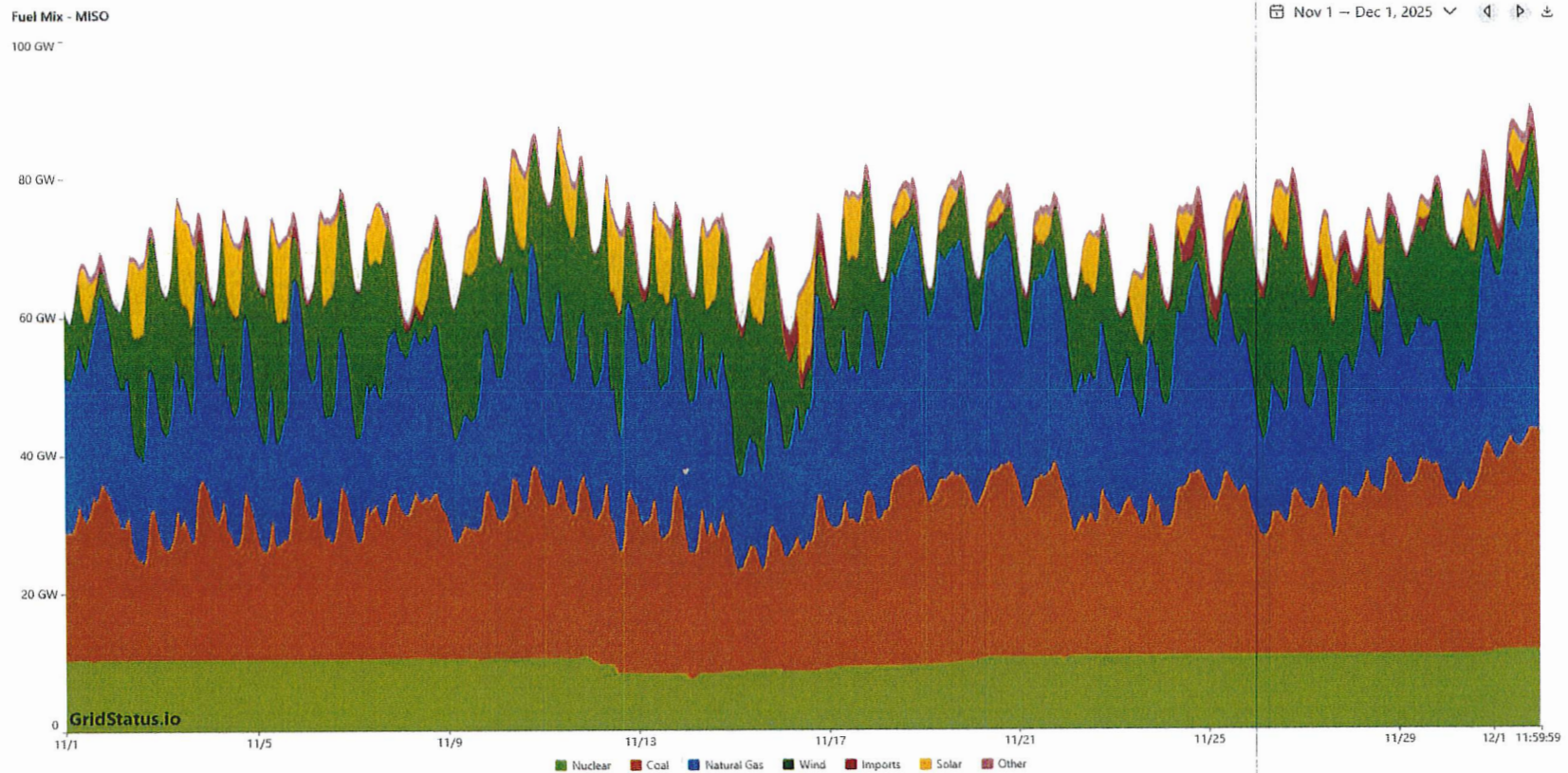
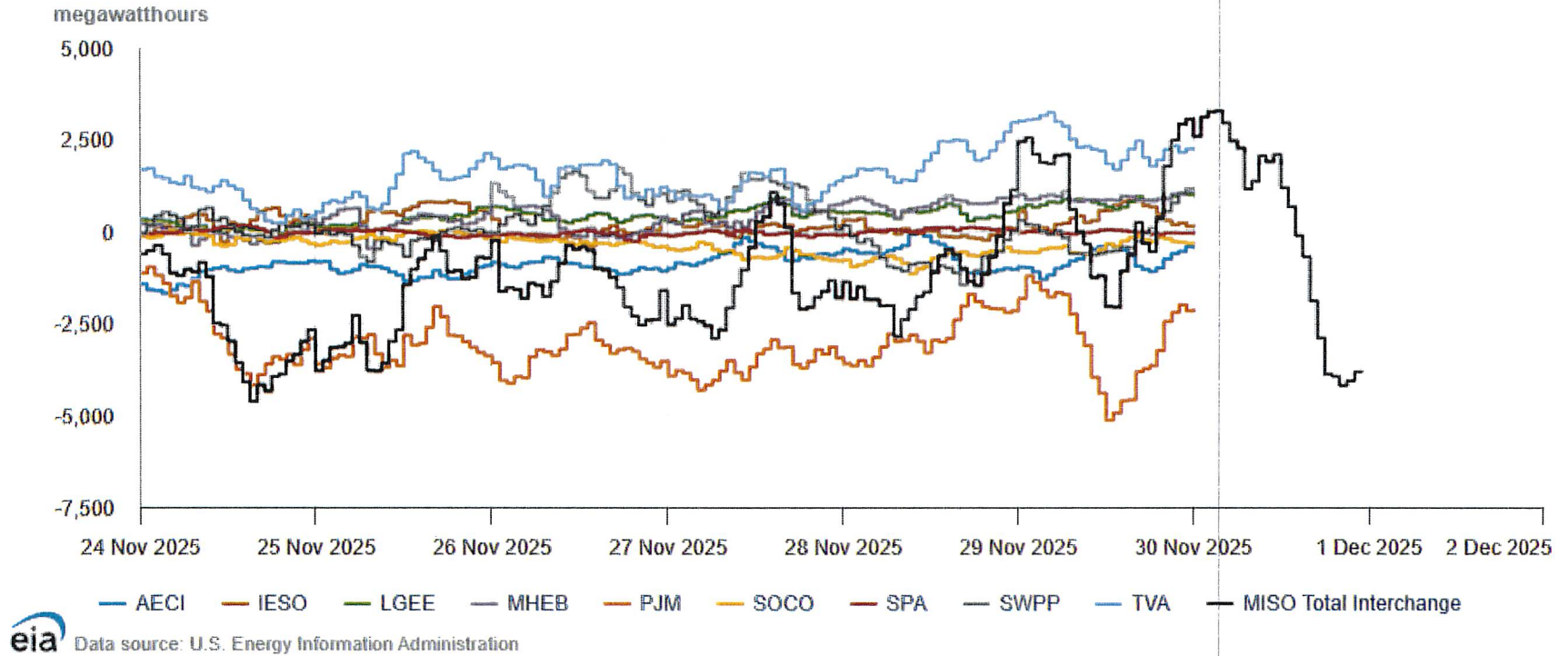


Figure 6: MISO Continuously Imports and Exports Electricity to Neighboring Regions

Midcontinent Independent System Operator, Inc. (MISO) electricity interchange with neighboring balancing authorities 11/24/2025 – 12/1/2025, Eastern Time



(negative values) and exports (positive values) between MISO and neighboring balancing authorities between 11/24/2025 and 12/1/2025.

- Will residents be prioritized for service by the local utility in the event of a blackout?

Not applicable.

As noted above, the Project will not share any portion of the RECC local service network; therefore, outages for existing RECC customers are unlikely

to coincide with an outage impacting the Project. Additionally, industry practice dictates that Project maintain redundant backup power resources to ensure continued operation in the event of an outage. Because of this, even if an outage were to impact RECC’s entire local service network, the Project could continue operating using backup power generators while RECC worked to restore service to other RECC customers.

- Will the regional transmission grid be overstrained by the Project?

No.

MISO has approved the interconnection of the Project based on its evaluation of the stability of the regional grid with the inclusion of the additional load. Additionally, the substation and 345 kV transmission line that will serve the proposed Project are both newer resources and operating well-within their rated capacities.

▪ **Is there enough generating capacity in the region to serve the Project?**

Yes.

MISO’s approval for the interconnection of the proposed Project load was also based on its evaluation of the availability of generating capacity to meet all existing regional peak demand as well as the additional load represented by the proposed Project. Moving forward, MISO will continue to improve and expand its transmission network to allow more capacity to flow through the region, and starting in 2026 the Illinois Commerce Commission will commence integrated resource planning to further evaluate the level of available capacity, specifically in Illinois.

Questions Concerning Cost. The overall cost of electric service for existing RECC customers and all consumers in Central Illinois was also raised by parties. The following questions seek to address several aspects of electricity costs for consumers considering the Project.

▪ **Who will pay for the pay the interconnection costs for the Project?**

The data center developer.

Consistent with industry practice, the data center developer will be responsible for paying the full cost for extending the local network to the Project and interconnecting with the regional grid.

▪ **Will delivery rates for existing utility customers of the local utility increase?**

No.

RECC and the data center developer will enter into a special agreement under which the data center will pay a rate designed to cover the ongoing costs of maintaining and operating the local network extension to the proposed Project. Under this structure, the costs of service for the proposed

Project (i.e., interconnection, maintenance, and operation) will also be segregated from RECC’s existing customers.

▪ **Will supply rates for existing RECC customers increase due to the Project?**

No.

RECC will structure a power supply agreement with NextEra for the power and electricity needs of the Project that will be separated from the power supply agreements that set electricity supply prices for RECC’s existing customers. Costs associated with this separate agreement with NextEra will be passed through to the data center developer. Under this structure, the energy supply costs for the Project will be segregated from RECC’s existing customers.

▪ **Will increased demand for electricity due to the Project increase regional electricity costs in Central Illinois?**

Not likely.

Energy supply prices in MISO are set through Day-Ahead and Real Time auctions which rise and fall according to the relative balance of supply and demand. This can lead to price volatility and a wide range of prices throughout MISO. Figure 7 conveys this pattern.

Some have noted that increasing demand at a specific point in the ISO regional grid could cause prices in and around that immediate area to increase (a “node”). While this is technically true, the reality is that most consumers do not pay the localized clearing price for electricity supply. Instead, industry practice is for most pricing for electricity supply to settle at regional hubs. Hub pricing refers to energy prices for a specific region, such as the Illinois Hub, and are calculated based on the actual clearing prices at the multiple nodes within that region. T

Hub prices are calculated by averaging node prices and thereby provide a single price for that area rather than requiring a unique price for every single node on the grid. MISO uses different averaging methods for peak and off-peak hours, as well as for day-ahead and real-time markets.

Because consumers in Central Illinois are exposed to Illinois Hub pricing, the localized impact of adding 600 MW of new hourly energy consumption in Sangamon County will be muted when averaged with all other nodes located throughout central and southern Illinois. Further, because most consumers (or their load serving entities) opt to hedge their energy prices into the future instead of paying the market-based hourly rate there are actually very few consumers in central and southern Illinois who would be directly exposed to immediate increases in Illinois Hub prices after the proposed Project begins operations.

A similar dynamic occurs with capacity prices within MISO where capacity shortfalls in one region do not immediately result in localized higher prices. Because the MISO regional grid allows for the movement of capacity between regions it is more likely that capacity prices will revert to an average across multiple regions. Figure 8 displays the most recent capacity auction results for MISO where this pattern can be observed.

Figure 7: Price Variations between Nodes and MISO Regional Hubs

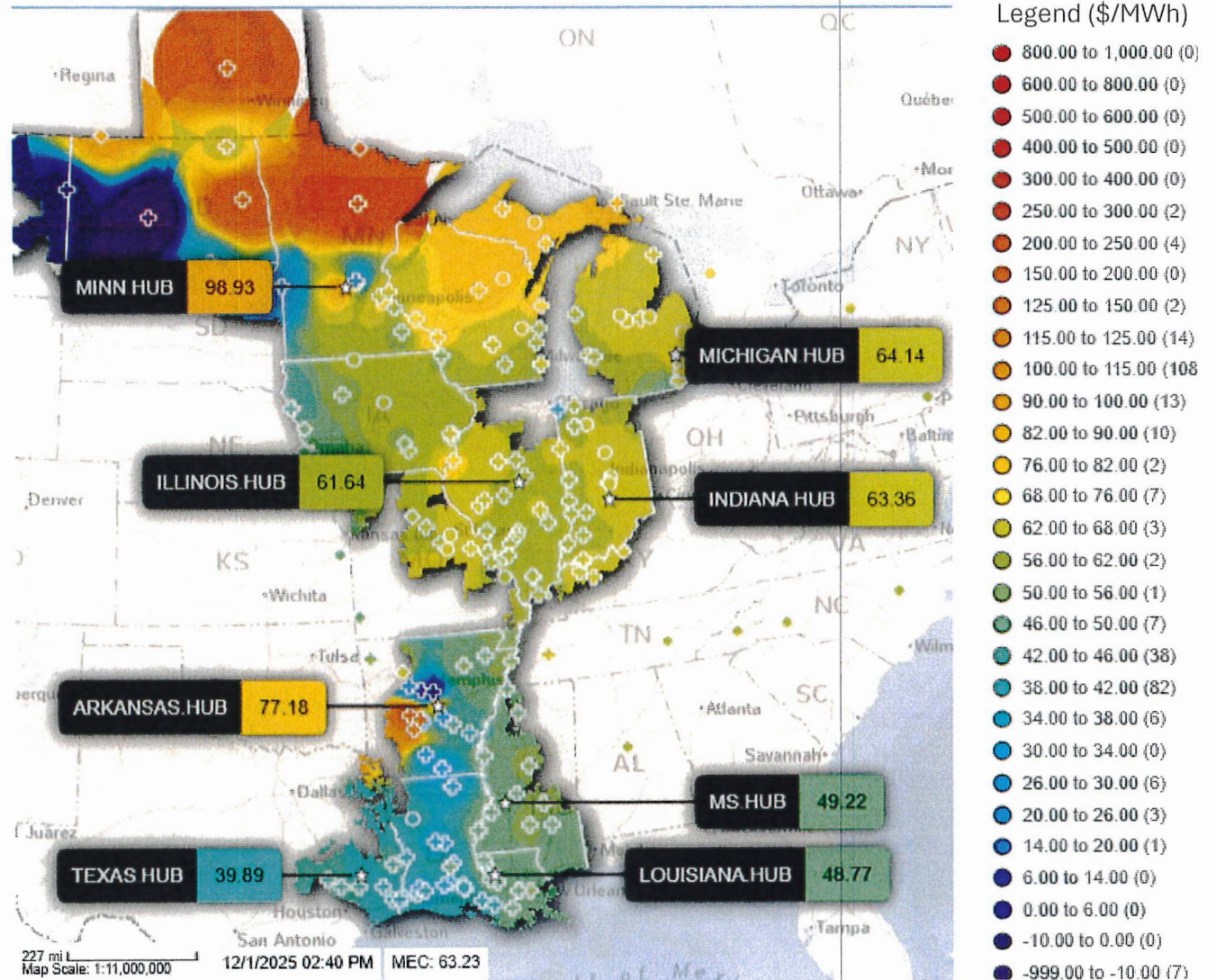


Figure 8: MISO Capacity Auction Results Demonstrate Averaging of Regional Costs Regardless of Local Supply/Demand Balances

Summer 2025 PRA Results by Zone

| | Z1 | Z2 | Z3 | Z4 | Z5 | Z6 | Z7 | Z8 | Z9 | Z10 | ERZ | North | South | System |
|----------------------------------|----------|----------|----------|----------|---------|----------|----------|----------|----------|---------|---------|-----------|----------|-----------|
| Initial PRMR | 18,459.4 | 13,190.2 | 10,889.2 | 9,237.6 | 8,281.3 | 18,484.8 | 21,228.0 | 8,487.8 | 21,812.2 | 5,142.9 | N/A | 99,770.5 | 35,442.9 | 135,213.4 |
| Final PRMR | 18,843.5 | 13,464.4 | 11,116.0 | 9,430.10 | 8,453.5 | 18,868.9 | 21,669.2 | 8,552.6 | 21,978.8 | 5,182.3 | N/A | 101,845.6 | 35,713.7 | 137,559.3 |
| Offer Submitted (Including FRAP) | 19,732.4 | 14,569.7 | 11,321.4 | 9,328.1 | 6,737.9 | 16,123.6 | 20,883.9 | 11,517.3 | 20,498.6 | 5,543.3 | 1580.1 | 99,952.6 | 37,883.7 | 137,836.3 |
| FRAP | 4,619.2 | 10,252.6 | 456.9 | 789.4 | 0.0 | 1,080.7 | 541.3 | 494.9 | 157.5 | 1,507.7 | 46.8 | 17,779.2 | 2,167.8 | 19,947.0 |
| RBDC Opt-Out | - | - | - | - | - | - | - | - | - | - | - | 0.0 | 0.0 | 0.0 |
| Self Scheduled (SS) | 4,985.3 | 3,344.1 | 10,450.2 | 7,677.2 | 6,647.8 | 11,080.3 | 20,305.5 | 10,260.6 | 17,870.6 | 3,831.3 | 1,358.8 | 65,567.6 | 32,244.1 | 97,811.7 |
| Non-SS Offer Cleared | 10,127.9 | 973.0 | 414.3 | 861.5 | 90.1 | 3,962.6 | 37.1 | 761.8 | 2,193.5 | 204.3 | 174.5 | 16,605.8 | 3,194.8 | 19,800.6 |
| Committed (Offer Cleared + FRAP) | 19,732.4 | 14,569.7 | 11,321.4 | 9,328.1 | 6,737.9 | 16,123.6 | 20,883.9 | 11,517.3 | 20,221.6 | 5,543.3 | 1,580.1 | 99,952.6 | 37,606.7 | 137,559.3 |
| LCR | 15,696.9 | 9,719.3 | 8,049.3 | 2,577.8 | 6,071.1 | 13,051.7 | 19,681.4 | 8,487.0 | 19,615.0 | 2,523.8 | - | N/A | N/A | N/A |
| CIL | 6,025 | 4,370 | 5,555 | 8,525 | 4,117 | 8,651 | 3,569 | 2,568 | 4,361 | 4,474 | - | N/A | N/A | N/A |
| ZIA | 6,023 | 4,370 | 5,460 | 7,757 | 4,117 | 8,366 | 3,569 | 2,358 | 4,361 | 4,474 | - | N/A | N/A | N/A |
| Import | 0.0 | 0.0 | 0.0 | 101.7 | 1,715.5 | 2,745.5 | 785.5 | 0.0 | 1,757.1 | 0.0 | - | 1,893.0 | 0.0 | 1,580.1 |
| CEL | 3,991 | 4,614 | 4,618 | 4,584 | 3,939 | 6,881 | 5,726 | 6,299 | 4,286 | 2,097 | - | N/A | N/A | N/A |
| Export | 888.8 | 1105.2 | 205.5 | 0.0 | 0.0 | 0.0 | 0.0 | 2964.7 | 0.0 | 360.9 | 1,580.1 | 0.0 | 1,893.0 | - |
| ACP (\$/MW-Day) | 666.50 | 666.50 | 666.50 | 666.50 | 666.50 | 666.50 | 666.50 | 666.50 | 666.50 | 666.50 | 666.50 | | | N/A |

We note that for the Summer 2025 period, central and southern Illinois (red box) required 9,243.1 MW of capacity to ensure reliability (yellow box) but only 9,328.1 MW of capacity was offered (green box). This left Zone 4 short on capacity in the amount of 101.7 MW. The solution to this shortage was to import the 101.7 MW from MISO regions outside of Illinois (purple box). Zone 4 could import as much as 8,525 MW (black box) to maintain reliability. In the end, because of the ability to import and export capacity within MISO,

the clearing price for capacity settles at the same average rate for the period at \$666.50/MW-Day (blue box).

For the immediate case, it is doubtful that the deployment of the Project in Zone 4 of MISO (central and southern Illinois) will have a noticeable impact on energy or capacity prices for other consumers.

Conclusions

Analysis indicates that deploying a 600 MW data center in Talkington Township of Sangamon County, Illinois, will not adversely impact the reliability of either the local service network (operated by RECC) or the broader regional grid (operated by MISO). Evidence in support of these conclusions includes:

- The relative isolation of the project's interconnection from the rest of the local electric network that serves RECC's current customers;
- RECC's observance of the technical requirements related to connecting to 345-kV transmission assets owned by Ameren; and,
- System impact analyses conducted by MISO under its FERC mandate to ensure the reliability of the regional grid.

Further, the project is very unlikely to cause increases in electricity supply or delivery costs to RECC customers or other consumers served by the broader regional grid. Evidence in support of these conclusions includes:

- The agreement by the Project developer to pay the costs incurred by RECC to establish a physical service connection between the proposed Project and the MISO grid;
- The commitment by the Project developer to pay a special rate to RECC for the costs of maintaining and operating the physical equipment and systems necessary to deliver electricity to the proposed Project;
- The arrangement by RECC to secure power and electric supply for the proposed Project through its current power marketer through a stand-alone contract and to pass those costs through to the Project developer without markup; and,
- The reality that any impact on wholesale capacity and energy pricing for Illinois consumers resulting from the introduction of the proposed Project

will be mitigated due to the averaging of prices within the region and the ability to import resources from surrounding regions.

As a separate issue, if the Project is not built in Talkington Township then it is almost certain that one or more data center projects of similar size will seek to proceed with interconnection to the same transmission line which spans from Palmyra Missouri to Sugar Creek Indiana. For Sangamon County, the impact of this circumstance would be two-fold:

- Development at the more distant locations would yield the same reliability and cost impacts at the regional grid level; and,
- The economic development and activity associated with the development and operation of the proposed data center would transfer to the new location.

In sum, the Power Bureau finds that the operation of the proposed Project will have minimal – if any – impact on network system reliability or energy costs.

MARK PRUITT

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ENERGY ECONOMICS AND POLICY CONSULTANT

25+ year track-record in energy project development, commodity procurement, and utility regulation. Strategic negotiator with ability to develop beneficial agreements between stakeholders with conflicting and complex agendas. Well-developed management and communication skills with a reputation for credibility and integrity.

Core Knowledge and Skill Areas

| | |
|--|---|
| Wholesale & retail energy commodity transactions | Strategy development & implementation |
| Generation & efficiency technologies | Statistical modeling & financial analysis |
| Alternative project finance structures | Negotiations & settlement fulfillment |
| Procurement & sourcing processes | Legislative and regulatory processes |
| Renewable/Sustainable Portfolio Standards | Program design and management |

PROFESSIONAL EXPERIENCE

PRINCIPAL, THE POWER BUREAU/ICCAN, CHICAGO, ILLINOIS 2011 TO PRESENT

Consultant providing energy planning and procurement services to public and private organizations.

Established specialty consulting practices focused on reducing energy costs and price risks for small and mid-sized consumers. Optimizing existing regulations and market structures to reduce costs and increase optionality. Developing new opportunities by repositioning energy commodity operations from a static cost-center to a risk-management tool that protects client interests. Advise energy generation developers entering new markets under new statutory designs. Advise energy project developers on site selection, wholesale market rate impacts, government and utility policy, project finance, client acquisition, and incentive development.

| | |
|---|---|
| Challenge | <i>Positioning developers and consumers to capture the benefits available in wholesale power markets.</i> |
| <i>Planning</i> | <ul style="list-style-type: none"> ▪ Drafting and implementing energy procurement and asset development plans to secure market value, investment returns, and organizational goals. |
| <i>Strategic Sourcing</i> | <ul style="list-style-type: none"> ▪ Maximizing benefits of Municipal Aggregation for villages, towns, and counties through procurement methods that reduce transaction premiums ▪ Positioning retail electric consumers as wholesale market participants |
| <i>Asset Leveraging</i> | <ul style="list-style-type: none"> ▪ Internal process and governance evaluation ▪ Creating alliances among existing market participants to foster development of generation, efficiency and demand response products that deliver consumer value. |
| <i>Market Analysis & Monitoring</i> | <ul style="list-style-type: none"> ▪ Intervening in regulatory proceedings and drafting state legislation ▪ Modeling market price patterns to identify purchasing and selling opportunities ▪ Developed Energy Efficiency and Renewable Energy Roadmap for Illinois Department of Commerce and Economic Development. |
| <i>Project Development</i> | <ul style="list-style-type: none"> ▪ Advised multiple wind and solar project developments in Illinois under the Future Energy Jobs Act ▪ Developed specialized project finance structures to leverage the benefits of Qualified Opportunity Zones, Investment Tax Credits, and Qualifying Facilities compensation under PURPA |



DIRECTOR, ILLINOIS POWER AGENCY, CHICAGO, ILLINOIS 2008 TO 2011

State agency Director chartered to reduce and stabilize consumer electricity costs.

Built a new state agency tasked with reversing substantial consumer price increases resulting from electric deregulation. Gained regulatory approval for statewide portfolio planning and hedging strategies valued at over \$5.3 billion in annual

ATTACHMENT A: CV OF POWER BUREAU STAFF

expenditures. Maintained responsibility for planning and oversight of statewide carbon sequestration, renewable portfolio standard compliance, and synthetic natural gas developments.

Challenge | *Satisfy competing policy interests while reducing consumer costs. Fulfill aggressive and expanding mandates during a period of severe resource restrictions.*

- Vision Planning Mission Fulfillment* |
 - Guided stakeholders in formulating new policies to repositioned default supply electricity purchasing as an actively managed portfolio with cost containment, flexibility, and stability as primary values.
 - Delivered \$1.6 billion in electricity cost reductions to Illinois consumers.
 - Introduced procurement planning techniques and adapted solutions to specific market conditions resulting in a balanced portfolio to limited year-over-year price volatility.
- Change Management* |
 - Articulated clear objectives and plans to legislators, interest groups, and regulators in public hearings and private meetings to achieve policy consensus.

- Market Positioning* |
 - Led consistent and fair negotiations that dramatically enhanced success in transaction efforts.
 - Re-established Illinois as a leading marketplace for electricity transactions by generating solutions to the consumer cost issue without undermining competitive markets.
 - Led regional developers and utilities to secure \$2.6 billion in renewable energy project funding with 20-year power purchase agreements at historically low market rates.
 - Spearheaded initiatives to support coal gasification projects valued at \$10 billion.



SENIOR PROGRAM MANAGER, UNIVERSITY OF ILLINOIS, CHICAGO, ILLINOIS 2002 TO 2008

Manager for energy commodity procurement for state agencies and municipalities.

Selected to restructure operational functions and reverse losses of small commodity procurement program; following successful achievement of immediate objectives, was promoted in 2004 to assume full P&L responsibility for the unit, overseeing marketing, development and roll-out of new services, and administrative functions.

Challenge | *Improve program value for customers while reversing program losses.*

- Bottom Line Improvements* |
 - Ramped program from net loss to profitability, increased book of business from \$2 to \$65 million, tripled net program income, and limited administrative costs to 20% total growth.
 - Secured 25% cost savings for participants while reducing price volatility by 20%.
- Operations Improvement and Expansion* |
 - Restructured procurement events around common credit terms, conditions, and metrics.
 - Expanded program from 4 to 39 state agencies and 12 municipalities.
 - Captured new customer base by expanding into deregulated electricity markets.
 - Led a comprehensive review of the University’s energy operations to evaluate competitiveness of campus power plants and utility cost allocation methods.
- Team Development* |
 - Toured customer facilities with management team to promote need for change, assure services value, and monitor key metrics.



PROJECT DEVELOPER, NICOR ENERGY SOLUTIONS. NAPERVILLE, ILLINOIS 2000 TO 2002

Developer of energy generation and management solutions and services for regional clients.

Contributed to team development of projects financed through alternative mechanisms including federal Super Energy Services Performance Contract, Utility Energy Services, and Enhanced Use Leasing.

- Revenue Growth* |
 - Standardized project evaluation and proposal formats to increase bid throughput by 15%.
 - Coordinated the successful \$14 million Phase 2 energy services contract proposal for the US Department of Energy Fermi National Laboratory.
- Process Design* |
 - Led integration of third-party vendors into project development and cross-marketing sales processes; methods developed were replicated for additional partnership initiatives.

ATTACHMENT A: CV OF POWER BUREAU STAFF

GENERAL MANAGER, MIDWESTERN ENERGY CONSULTANTS, MARYLAND HEIGHTS, MISSOURI

1994 TO 2000

Provider of energy efficiency and security glass coatings.

Converted a glazing company operating in the small-scale residential sector to a commercially oriented glass safety and security provider. Managed budget planning, sales, staffing, contract negotiations, supplier relations, project management, and administrative functions.

- Performance | ■ Increased year-over-year sales revenues by 9-20% on increased margins, countered seasonality in earnings cycle through expanded customer base and integrated scheduling.
- Positioning | ■ Redirected marketing focus from residential to commercial and institutional; supported by customer research, expanded product lines to include security and safety solutions.



DISTRIBUTION MANAGER, MIDWEST ENERGY RESOURCES, MUNDELEIN, ILLINOIS

1990 TO 1994

Distributor of 3M insulation, glazing and lighting efficiency products.

Developed and serviced a network of 3M energy product dealerships in Illinois, Indiana, Iowa, and Missouri. Drafted and evaluated business start-up and expansion plans for dealer network members.

- Financial Performance | ■ Delivered year over year revenue growth of 8-10% and increased share of market in key primary markets throughout region by guiding dealers into commercial applications.

REPRESENTATIVE CLIENTS

| | | |
|------------------------------------|--|---------------------------------------|
| Argonne National Laboratory | Building Owners and Managers Association | Archdiocese of Chicago |
| City of Chicago | The Clean Energy Trust | Illinois Retail Merchants Association |
| Illinois Green Energy Network | Illinois Dept of Commerce | Union Bank |
| Illinois Municipal Electric Agency | Midwest Renewable Energy Association | Korean Power Exchange |
| Metropolitan Mayor’s Caucus | University of Chicago | Illinois State Senate |
| Illinois Port District | Chicago Public Schools | Wind & Solar Developers |

EDUCATION

University of Illinois, Chicago, Illinois
Master of Business Administration

BRADLEY University, Peoria, Illinois
Bachelor of Arts

OTHER ACTIVITIES

- Adjunct Professor: Master of Science in Energy and Sustainability Program, Northwestern University
- Laboratory Affiliate: Argonne National Laboratory
- Judge: Clean Energy Challenge, Clean Energy Trust
- Mentor: Cleantech Open
- Past Board Member: Midwest Renewable Energy Association