State of Illinois
Office of the Auditor General

Performance Audit of the

Illinois Power Agency – Future Energy Jobs Act

May 11, 2021

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Auditor General

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OFFICE OF THE AUDITOR GENERAL
FRANK J. MAUTINO

To the Legislative Audit Commission, the Speaker and Minority Leader of the House of Representatives, the President and Minority Leader of the Senate, the members of the General Assembly, and the Governor:

This is our performance audit of the Illinois renewable portfolio standard and the Illinois Power Agency's management of the Renewable Energy Credit procurement process and Adjustable Block Program.

The audit was conducted pursuant to Legislative Audit Commission Resolution Number 153. This audit was conducted in accordance with generally accepted government auditing standards and the audit standards promulgated by the Office of the Auditor General at 74 Ill. Adm. Code 420.310.

The audit report is transmitted in conformance with Sections 3-14 and 3-15 of the Illinois State Auditing Act.

SIGNED ORIGINAL ON FILE
FRANK J. MAUTINO
Auditor General

Springfield, Illinois
May 2021

OFFICE OF THE AUDITOR GENERAL

May 11, 2021
Performance Audit
Report Highlights

Frank J. Mautino *Auditor General*
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Performance Audit of the

The Illinois Power Agency - Future Energy Jobs Act

Background:

On July 21, 2020, the Legislative Audit Commission adopted Resolution Number 153 (see Appendix A), which directed the Office of the Auditor General to conduct a performance audit of the Illinois renewable portfolio standard (RPS) and the Illinois Power Agency's (IPA) management of the Renewable Energy Credit (REC) procurement process and Adjustable Block Program.

The Illinois Power Agency was established in 2007 by Public Act 95-481. The IPA is required to ensure that the procurement of power in Illinois is conducted in an ethical and transparent manner to ensure that its mission to secure power at the best prices the market will bear is not impeded. The IPA was established to serve the people of Illinois by administering electricity and renewable resources planning and procurement processes for Ameren Illinois Company (Ameren), Commonwealth Edison Company (ComEd), and MidAmerican Energy Company (MidAmerican).

Key Findings:

- Illinois has not met the percentage-based renewable energy goals identified in the Illinois Power Agency Act (Act). IPA officials stated that procured renewable energy as a percentage of the overall energy produced would be about 10 percent for 2019. However, Section 1-75(c)(1)(B) of the Illinois Power Agency Act requires the procurement of renewable energy credits to be at least 16 percent of the overall electricity produced by June 1, 2019, which suggests that the dollars may not have been maximized. According to IPA officials, the IPA had proposed in the 2018 Long-Term Renewable Resources Procurement Plan annual procurements designed to meet the percentage-based goals; however, the ICC in approving that Plan did not approve those annual procurements. That decision shifted the focus of the IPA's authorized procurements away from meeting the percentage goals and focused only on meeting the quantitative targets for new wind and solar. However, since the percentage-based goals are not being met, it likely means that future renewable energy goals will not be able to be met timely.

- There are two ways in which renewable energy projects are procured: (1) competitively and (2) through the Adjustable Block Program. Auditors concluded the process in place was both efficient and maximized the dollars spent to increase the renewable portfolio standard in Illinois for the competitive procurement process. However, auditors could not find criteria to use to determine whether funds were maximized or whether they were spent efficiently for the Adjustable Block Program.

Key Recommendations:

The audit report contains one recommendation directed to the Illinois Power Agency:

- The Illinois Power Agency should continue to work to meet the renewable energy percentage-based procurement goals required by 20 ILCS 3855/1-75(c)(1)(B).

This performance audit was conducted by the staff of the Office of the Auditor General.

Report Digest

On July 21, 2020, the Legislative Audit Commission adopted Resolution Number 153 (see Appendix A), which directed the Office of the Auditor General to conduct a performance audit of the Illinois renewable portfolio standard (RPS) and the Illinois Power Agency's (IPA) management of the Renewable Energy Credit (REC) procurement process and Adjustable Block Program. The Resolution contained several determinations. Our assessment of these determinations is shown in **Digest Exhibit 1**. (pages 1-2)

Digest Exhibit 1
ASSESSMENT OF AUDIT DETERMINATIONS

Determination from Audit Resolution	Auditor Assessment
A determination of the average price of renewable energy credits under contract entered into by electric utilities in the state since June 1, 2017.	• The prices per renewable energy credit for utility-scale wind, utility-scale solar, and Brownfield solar projects were competitively procured, while the Adjustable Block program used a base contract price for each applicant project that was determined by the project's group, project type, project size, and the block that the project was in. (pages 23-27)
Whether the Illinois Power Agency followed established rules and regulations during the procurement process.	• Auditors found no issues with the procurements or the procurement process. (page 18-23)
Given that applications exceeded available Renewable Energy Credit awards by more than 20 times, how the Illinois Power Agency administratively determined the value of community solar Renewable Energy Credits.	• The prices set by the Adjustable Block Program can be reflected as a set value or as the product of a formula. The IPA worked with its procurement planning consultant (Levitan and Associates) to adapt the CREST (Cost of Renewable Energy Spreadsheet Tool) model for use in determining REC prices for community solar and distributed generation projects. (pages 24-27)
Whether the developers of these community solar facilities are located within or outside of Illinois.	• Developers of community solar facilities are located both within and outside of Illinois; however, the projects themselves must be located in Illinois. As of October 2020, there were 67 vendors with a renewable energy credit delivery contract developing the 111 community solar projects in Illinois. For these 67 approved vendors, auditors found that 10 (15%) were headquartered in Illinois. The remaining 57 approved vendors were headquartered in 11 other states. (pages 32-33)
If the Illinois Power Agency tracked whether the owners of the community solar facilities have changed ownership or registered in another State	• Auditors concluded that the IPA tracked changes in community solar facility ownership. (pages 33-34)

since being awarded Renewable Energy Credits under the program.	
Whether the Illinois Power Agency is able to demonstrate that the funds awarded under the program are being spent efficiently and that the vendors receiving contract awards are being fully vetted.	• Auditors could not find criteria to use to determine whether funds were maximized or whether they were spent efficiently for the **Adjustable Block Program**. IPA has an extensive vendor approval process and auditors reviewed this process and found no issues. (pages 38-47)
Whether the Illinois Power Agency is maximizing the use of these dollars to increase the Renewable Portfolio Standard for the State of Illinois.	• Auditors concluded the process in place was both efficient and maximized the dollars spent to increase the renewable portfolio standard in Illinois for the **competitive procurement process**. (38-47)
What factors the Illinois Power Agency used when selecting winning developers related to community and rooftop solar.	• IPA has an extensive vendor approval process. Vendors are required to renew their certification once a year. The process used to approve vendors include the factors used when selecting vendors for community and rooftop solar. (pages 38-47)
Whether there are any rules in the procurement process that ensure diverse companies are being utilized for solar development projects.	• There are rules and provisions designed to ensure that small, downstate vendors, as well as minority and women-owned businesses are not discriminated against when being selected for projects. Additionally, Section 1-75(c)(7) of the Illinois Power Agency Act contains a requirement that REC procurements conducted by the IPA shall provide employment opportunities for all segments of the population and workforce, including minority and female-owned business enterprises. This provision also prohibits discrimination based on race or socioeconomic status, consistent with State and federal law. (pages 35-37)

Source: OAG assessment of the audit determinations contained in Legislative Audit Commission Resolution Number 153.

Background

The Illinois Power Agency was established in 2007 by Public Act 95-481. The IPA is required to ensure that the procurement of power in Illinois is conducted in an ethical and transparent manner to ensure that its mission to secure power at the best prices the market will bear is not impeded. The IPA was established to serve the people of Illinois by administering electricity and renewable resources planning and procurement processes for Ameren Illinois Company (Ameren), Commonwealth Edison Company (ComEd), and MidAmerican Energy Company (MidAmerican).

During the audit period, the IPA was comprised of 10 employees. The Director has been in the position since March 2013. The IPA also contracts with multiple

vendors (NERA, Levitan, InClime, Elevate, and Apprise) who help with administrating the programs and procurements. (page 3)

State Agencies Involved in Electricity and Renewable Resources Procurement in Illinois

The IPA prepares electricity procurement plans on an annual basis. For renewable energy resources, the IPA developed a Long-Term Renewable Resources Procurement Plan in 2017-2018; that plan is required to be updated on a biennial basis, with initial planning and stakeholder feedback activities. The Illinois Commerce Commission (ICC) is the State agency tasked by law with regulating Illinois electric utilities and approving the IPA's Long-Term Renewable Resources Procurement Plan. (pages 4-7)

Energy in Illinois

According to the U.S. Energy Information Administration, Illinois is the fifth-largest energy-consuming state in the nation. The State's largest energy-consuming end-use sector is industry. It also notes that Illinois is the 3rd largest "net electricity exporter," with about one-fifth of the power generated being sent to other states. Since 2001, nuclear and coal together have produced as much as 97 percent of the total electricity generated in the mid-2000s dropping to 79 percent in 2019. While nuclear electricity generated in Illinois has increased since 2001, electricity generation from coal has declined as a percent of the total energy output by more than 50 percent, from 45 percent in 2001 to 22 percent in 2019. (pages 7-8)

Types of Renewable Energy Projects

There are two ways in which renewable energy projects are procured: (1) competitively and (2) through the Adjustable Block Program. Competitive procurements are processes where many sellers offer RECs from their proposed wind and solar projects at competitive prices in sealed-bid, pay-as-bid procurement processes with bids selected on the basis of price. These projects include utility-scale wind, solar, and Brownfield solar. Adjustable Block projects are based on transparent, administratively set prices and on open enrollment and include community and distributed solar. **Digest Exhibit 2** lists the type of project, the procurement method, the annual cost, and the weighted average price per REC. (pages 16-17)

Digest Exhibit 2
TYPE AND COST OF RENEWABLE ENERGY PROJECTS PROCURED PER THE FUTURE ENERGY JOBS ACT
June 1, 2017 – August 31, 2020

Type of Project	Definition	Procurement Method	Annualized 15 Year Cost	Weighted Average Price per REC
Utility-Scale Wind (>2,000 kW)	an electric generating facility that generates electricity using wind	Competitive	$9,857,488	$3.35
Utility-Scale Solar (>2,000 kW)	an electric generating facility that generates electricity using photovoltaic cells	Competitive	$14,990,471	$5.07
Brownfield Solar	renewable energy sited on land that has been or is perceived to be polluted and is now underused	Competitive	[1]	$58.10
Community Solar (≤2,000 kW)	an electric generating facility that is powered by solar cells or panels and is interconnected at the distribution system level of an electric utility	Adjustable Block Program	$21,271,305[2]	$47.56[3]
Distributed Solar (≤10 kW)	renewable energy devices that are primarily used to offset that customer's electricity load	Adjustable Block Program	$7,823,117[2]	$76.46
Distributed Solar (>10 kW)	renewable energy devices that are primarily used to offset that customer's electricity load	Adjustable Block Program	$20,660,383[2]	$45.71

[1] Since there were only two Brownfield contracts, the exact annual contracted RECs and cost are confidential.

[2] The annualized cost does not reflect the front-loaded payment schedule for these project types, even though renewable energy credits are delivered over 15 years. Thus, the impacts on annual RPS budgets are greater than these totals across the prepayment period.

[3] This does not include the community solar incentive for small subscriber participation which ranges from $0 to $32.65 per renewable energy credit.

Source: Information provided by the IPA.

Managing and Administering the Renewable Energy Credit Procurement Process

Section 16-111.5 Subsections (e) through (i) of the Public Utilities Act (220 ILCS 5) outlines the requirements for the competitive procurement of renewable energy credits (the IPA is exempt from the Illinois Procurement Code when conducting these procurements). This process is where sellers offer renewable energy credits from their proposed wind and solar projects at competitive prices in sealed-bid, pay-as-bid procurement processes with bids selected on the basis of price. No issues were identified with the procurements or the procurement process. (pages 18-23)

Prices for Renewable Energy Credits

The prices per renewable energy credit for utility-scale wind, utility-scale solar, and Brownfield solar projects were competitively procured following the guidelines delineated in the Long-Term Renewable Resources Procurement Plan. The prices per renewable energy credit for community solar and distributive generation solar projects were administratively determined through the Adjustable Block Program.

Since the passage of the Future Energy Jobs Act, the IPA has competitively procured 21 contracts for utility-scale wind, utility-scale solar, and Brownfield solar. The annual cost of these contracts was approximately $28 million. These contracts are 15 years in length. According to the data provided by the IPA, there have been 18,281 contracts processed through the Adjustable Block Program for an annual total cost of $54 million for 1,069,960 renewable energy credits. These contracts are also for 15 years. (pages 23-27)

Managing and Administering the Adjustable Block Program

The IPA's Long-Term Renewable Resources Procurement Plan described in detail how the prices for each block in the Adjustable Block Program were determined. The base contract price for each applicant project was determined by the project's group, project type, project size, and the block that the project was in. The IPA worked with its procurement planning consultant (Levitan and Associates) to adapt the CREST (Cost of Renewable Energy Spreadsheet Tool) model for use in determining REC prices for community solar and distributed generation projects. The CREST model is an economic cash flow model developed by the U.S. Department of Energy National Renewable Energy Laboratory. It takes various inputs for solar projects such as hard costs, tax policies, depreciation rates, expected rate of return, etc., and uses those inputs to determine a levelized cost of energy over a period of time.

In order to participate in the program, vendor applications were first subjected to the review and approval of the program administrator (InClime, Inc.), and only approved vendors could have projects in the program. Vendor approval was based on various legal and regulatory requirements regarding both the vendor itself and its owners. Along with the requirements that needed to be met by the vendor, the vendor also had to provide support showing that the installer it intended to use met legal and regulatory requirements. In addition, technical specifications and documentation supporting that the vendor/developer was contractually bound to the project were required for each individual project. (pages 24-31)

Community Solar Project Developers

Developers of community solar facilities are located both within and outside of Illinois; however, the projects themselves must be located in Illinois. Of the 406 total approved vendors, 67 have renewable energy credit delivery contracts for community solar projects.

Based on data provided by the IPA, auditors concluded that the IPA tracked changes in community solar facility ownership. At the time of ICC approval, there were 34 approved vendors with a renewable energy credit delivery contract developing 111 community solar projects in Illinois. For these 34 approved vendors, auditors found that five (15%) were headquartered in Illinois. The remaining 29 approved vendors were headquartered in 14 other states. Information from IPA showed the original 34 vendors sold projects to other vendors, and as of October 2020, there were now 67 vendors with a renewable energy credit delivery contract developing the 111 community solar projects in Illinois. For these 67 approved vendors, auditors found that 10 (15%) were headquartered in Illinois. The remaining 57 approved vendors were headquartered in 11 other states. (pages 32-34)

Diverse Solar Development Companies

There are rules and provisions designed to ensure that small, downstate vendors, as well as minority and women-owned businesses are not discriminated against when being selected for projects. Additionally, Section 1-75(c)(7) of the Illinois Power Agency Act contains a requirement that REC procurements conducted by the IPA shall provide employment opportunities for all segments of the population and workforce, including minority and female-owned business enterprises. This provision also prohibits discrimination based on race or socioeconomic status, consistent with State and federal law. (pages 35-37)

Efficiency and Maximization of Funds Awarded and Vendor Vetting

Auditors found that the IPA, the ICC, and their contractual program administrators and monitors operate the program in accordance with the Illinois Power Agency Act and the Long-Term Renewable Resources Procurement Plan. Auditors concluded the process in place was both efficient and maximized the dollars spent to increase the renewable portfolio standard in Illinois for the competitive procurement process. However, auditors could not find criteria to use to determine whether funds were maximized or whether they were spent efficiently for the Adjustable Block Program. While criteria could not be identified, the process of determining renewable energy credit prices for the Adjustable Block Program was subject to a public comment process and litigated proceeding before the ICC as required by the law, and the IPA's prices utilized were consistent with the Illinois Commerce Commission's Order. Therefore, prices for RECs were determined through extensive regulatory proceedings.

Illinois has not met the percentage-based renewable energy goals identified in the Illinois Power Agency Act. IPA officials stated that procured renewable energy as a percentage of the overall energy produced would be about 10 percent for 2019. However, Section 1-75(c)(1)(B) requires the procurement of renewable energy credits to be at least 16 percent of the overall electricity produced by June 1, 2019, which suggests that the dollars may not have been maximized. According to IPA officials, the IPA had proposed in the 2018 Long-Term Renewable Resources Procurement Plan annual procurements designed to meet

the percentage-based goals; however, the ICC in approving that Plan did not approve those annual procurements. That decision shifted the focus of the IPA's authorized procurements away from meeting the percentage goals and focused only on meeting the quantitative targets for new wind and solar. However, since the percentage-based goals are not being met, it likely means that future renewable energy goals will not be able to be met timely. Auditors recommended that the Illinois Power Agency should continue to work to meet the renewable energy percentage-based procurement goals required by 20 ILCS 3855/1-75(c)(1)(B).

IPA has an extensive vendor approval process. Vendors are required to renew their certification once a year. The process used to approve vendors include the same factors used when selecting vendors for community and rooftop solar. During the annual financial audits of the IPA, auditors reviewed this process and found no issues. (pages 38-47)

Audit Recommendations

The audit report contains one recommendation directed to the Illinois Power Agency. The IPA agreed with the recommendation. The complete response from the IPA is included in this report as Appendix C.

This performance audit was conducted by the staff of the Office of the Auditor General.

SIGNED ORIGINAL ON FILE

JOE BUTCHER
Division Director

This report is transmitted in accordance with Sections 3-14 and 3-15 of the Illinois State Auditing Act.

SIGNED ORIGINAL ON FILE

FRANK J. MAUTINO
Auditor General

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Contents

Glossary and Acronyms

Adjustable Block Program	Supports the development of new photovoltaic distributed generation systems and new photovoltaic community renewable generation projects in Illinois through the purchase of Renewable Energy Credits.
Approved Vendor	The entity in the Adjustable Block Program that has the renewable energy credit contract with a utility.
Brownfield Site	Renewable energy, such as wind and solar, sited on land that has been or is perceived to be polluted and is now underused.
Community Solar Facility	Also referred to as a community solar project. Means an electric generating facility that is powered by solar cells or panels and is interconnected at the distribution system level of an electric utility, a municipal utility that owns or operates electric distribution facilities, a public utility, or an electric cooperative. These projects credit the value of electricity generated by the facility to the subscribers of the facility and is limited in nameplate capacity to less than or equal to 2,000 kilowatts.
Distributed Renewable Energy Device	Renewable energy devices that are located on the customer side of the customer's electric meter and are primarily used to offset that customer's electricity load.
EIA	U.S. Energy Information Administration
Future Energy Jobs Act	Colloquial reference to Public Act 99-906, which amended the Illinois Public Utilities Act and the Illinois Power Agency Act.
Long-Term Renewable Resources Procurement Plan	A formal plan that documents the manner in which renewable energy programs will be administered, and how procurements for renewable energy credits will be conducted by the Illinois Power Agency.
Nameplate Capacity	The maximum rated output of a generator, prime mover, or other electric power production equipment. Installed generator nameplate capacity is commonly expressed in kilowatts (kW).
Photovoltaic Cells	Commonly called a solar cell, it is a non-mechanical device that converts sunlight directly into electricity. Some photovoltaic cells can convert artificial light into electricity.

Glossary and Acronyms

Renewable Energy Credit (REC)	A tradable credit that represents the environmental attributes of one megawatt hour of energy produced from a renewable energy resource.
Smart Grid	Digital technology that allows for two-way communication between the utility and its customers, and the sensing along the transmission lines is what makes the grid smart.
Utility-Scale Solar Project	An electric generating facility that generates electricity using photovoltaic cells and has a nameplate capacity that is greater than 2,000 kilowatts.
Utility-Scale Wind Project	An electric generating facility that generates electricity using wind and has a nameplate capacity that is greater than 2,000 kilowatts.
Zero Emission Facility	A facility that is fueled by nuclear power and is interconnected to the power grid.

Introduction

On July 21, 2020, the Legislative Audit Commission adopted Resolution Number 153 (see Appendix A), which directed the Office of the Auditor General to conduct a performance audit of the Illinois renewable portfolio standard (RPS) and the Illinois Power Agency's (IPA) management of the Renewable Energy Credit (REC) procurement process and Adjustable Block Program. The Resolution included the following determinations.

1. A determination of the average price of renewable energy credits under contract entered into by electric utilities in the state since June 1, 2017 for the following:
    a. Utility scale wind renewable energy credits (generates electricity using wind and has a capacity that is greater than 2,000 kilowatts);
    b. Utility scale solar renewable energy credits (generates electricity using photovoltaic cells and has a capacity that is greater than 2,000 kilowatts);
    c. Brownfield solar renewable energy credits (photovoltaic project on land that is regulated by either the U.S. or Illinois Environmental Protection Agency);
    d. Community solar renewable energy credits;
    e. Renewable energy credits from distributed solar with a nameplate capacity of no more than 10 kilowatts; and

   f. Renewable energy credits from distributed solar with a nameplate capacity of more than 10 kilowatts but no more than 2000 kilowatts.

2. Whether the Illinois Power Agency followed established rules and regulations during the procurement process.
3. Given that applications exceeded available Renewable Energy Credit awards by more than 20 times, how the Illinois Power Agency administratively determined the value of community solar Renewable Energy Credits.
4. Whether the developers of these community solar facilities are located within or outside of Illinois.
5. If the Illinois Power Agency tracked whether the owners of the community solar facilities have changed ownership or registered in another State since being awarded Renewable Energy Credits under the program.
6. Whether the Illinois Power Agency is able to demonstrate that the funds awarded under the program are being spent efficiently and that the vendors receiving contract awards are being fully vetted.
7. Whether the Illinois Power Agency is maximizing the use of these dollars to increase the Renewable Portfolio Standard for the State of Illinois.
8. What factors the Illinois Power Agency used when selecting winning developers related to community and rooftop solar.
9. Whether there are any rules in the procurement process that ensure diverse companies are being utilized for solar development projects.

Background

The Illinois Power Agency was established in 2007 by Public Act 95-481. The IPA is required to ensure that the procurement of power in Illinois is conducted in an ethical and transparent manner to ensure that its mission to secure power at the best prices the market will bear is not impeded. The IPA was established to serve the people of Illinois by administering electricity and renewable resources planning and procurement processes for Ameren Illinois Company (Ameren), Commonwealth Edison Company (ComEd), and MidAmerican Energy Company (MidAmerican).

The Illinois Power Agency Act (20 ILCS 3855) requires the IPA to develop electricity and renewable resources procurement plans and processes to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time, taking into account any benefits of price stability. The IPA updates electricity procurement plans on an annual basis, and its Long-Term Renewable Resources Procurement Plan on no less than a biennial basis. Specifically, according to the IPA webpage, its goals and objectives are to:

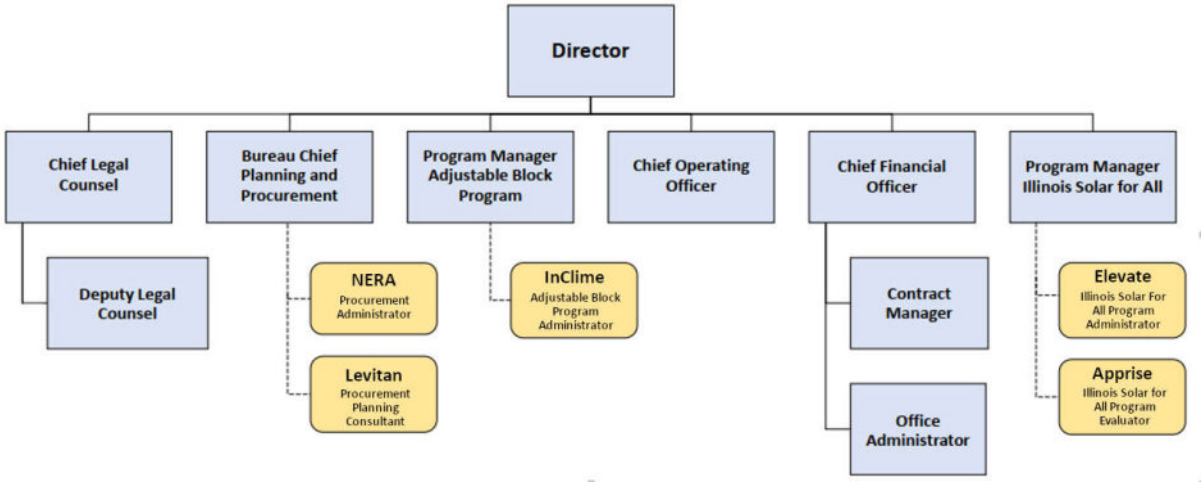
- develop **electricity procurement plans** to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time, taking into account any benefits of price stability, for residential and small commercial customers of Ameren, ComEd, and MidAmerican;
- conduct **competitive procurement processes** to procure the supply resources identified in the procurement plan;
- develop and implement a **Zero Emission Standard Procurement Plan**; and
- develop a **Long-Term Renewable Resources Procurement Plan** and implement the programs and procurements contained in the Plan, including the Adjustable Block Program and the Illinois Solar for All Program.

During the audit period, the IPA was comprised of 10 employees. The Director has been in the position since March 2013. The IPA also contracts with multiple vendors (NERA, Levitan, InClime, Elevate, and Apprise) who help with administrating the programs and procurements. **Exhibit 1** shows the organization chart for the IPA as of August 28, 2020. The duties and FY20 costs of the five contractors related to the renewable portfolio standard are as follows:

Vendor	Administrative Duties	FY20 Cost
• Elevate[1]	Illinois Solar for All Program Administrator	$2,692,619
• InClime	Adjustable Block Program Administrator	$905,795
• NERA	Procurement Administrator	$654,400
• Apprise	Illinois Solar for All Program Evaluator	$399,482
• Levitan	Procurement Planning Consultant	$70,077

[1] The Solar for All Program is not included as part of this audit.

Exhibit 1
IPA ORGANIZATIONAL CHART
As of August 28, 2020



Source: Information provided by IPA.

State Agencies Involved in Electricity and Renewable Resources Procurement in Illinois

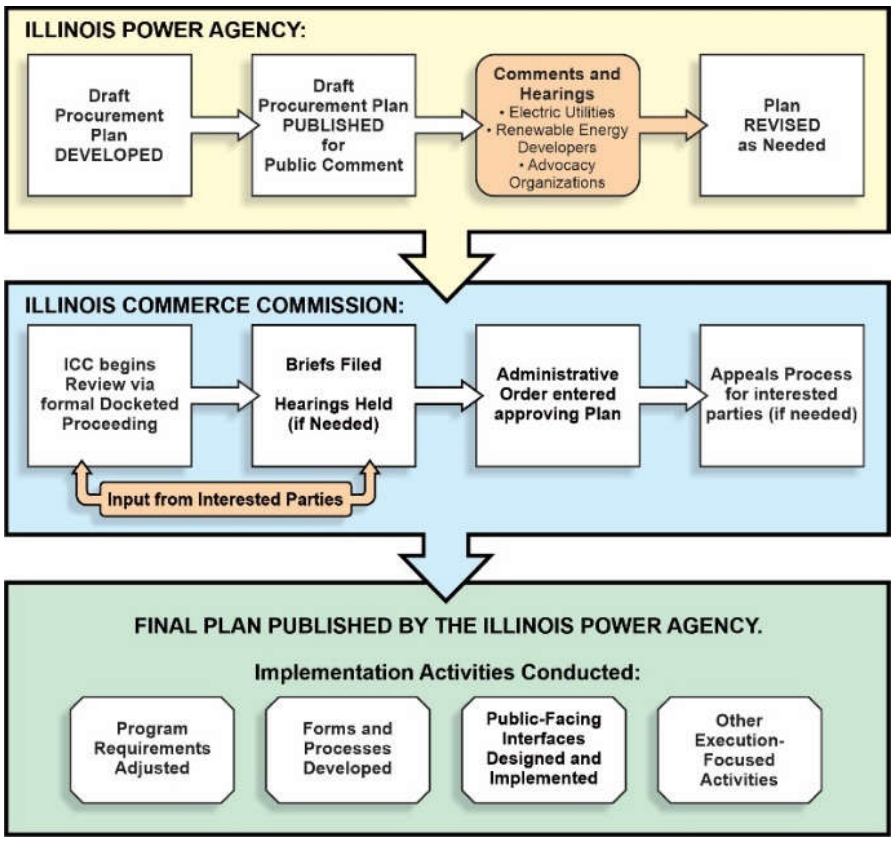
The IPA prepares electricity procurement plans on an annual basis. For renewable energy resources, the IPA developed a Long-Term Renewable Resources Procurement Plan in 2017-2018; that plan is required to be updated on a biennial basis, with initial planning and stakeholder feedback activities. The Illinois Commerce Commission (ICC) is the State agency tasked by law with regulating Illinois electric utilities and approving the IPA's Long-Term Renewable Resources Procurement Plan.

Illinois Power Agency's Role

According to IPA officials, the IPA manages the renewable portfolio standard through the following major processes:

1. The development and approval of the initial Long-Term Renewable Resources Procurement Plan and subsequent revisions (see **Exhibit 2**);
2. The solicitation and engagement of consultants, to serve the roles of procurement administrator (currently NERA) and Adjustable Block program administrator (currently InClime, Inc.);
3. The procurement of Renewable Energy Credits (RECs) from new utility-scale wind, solar, and the procurement of Brownfield site photovoltaic (solar) projects using a Request for Proposals process as outlined by the Public Utilities Act (220 ILCS 5);

Exhibit 2
DEVELOPMENT OF THE LONG-TERM RENEWABLE RESOURCES PROCUREMENT PLAN



Source: OAG summary of IPA information.

4. The procurement of RECs from distributed generation solar and community solar projects at administratively set prices via the Adjustable Block Program; and
5. The ongoing processes to manage the REC portfolio to monitor compliance with the renewable portfolio standard goals and targets, the renewable portfolio standard budget, and participation of renewable resources located in adjacent states.

Illinois Commerce Commission's Role

According to ICC staff, the ICC has two primary functions related to our audit determinations. First, the ICC reviews and approves the final Long-Term Renewable Resources Procurement Plans initially developed by the IPA. Second, the ICC approves or rejects the results of competitively bid procurements for renewable energy credits and the contracts entered into for the Adjustable Block Program.

Through discussions with ICC staff, auditors determined the following:

- The IPA released the draft Plan on September 29, 2017, and it covered the IPA's proposals for renewable resource procurements and programs to be conducted during calendar years 2018 and 2019. If interested parties had comments on the draft Plan, they had 45 days to submit them. The IPA then had 21 days to revise the Plan and prepare it for filing for with the ICC.
- The IPA filed a revised Plan with the ICC on December 4, 2017. Pursuant to the Illinois Public Utilities Act, the ICC had 120 days to review the filed Plan and enter its Order confirming or modifying this Plan. That Order was issued on April 3, 2018, and the ICC issued an Amendatory Order in response to an IPA Motion for Clarification on May 2, 2018.
- The Public Utilities Act provides that the IPA may revise the Plan at least every 2 years. On August 15, 2019, the IPA released a draft Revised Plan that contained proposals for procurements and programs for calendar years 2020 and 2021. The Revised Plan was filed with the ICC on October 21, 2019. Under the Public Utilities Act, the ICC had 120 days to review the Revised Plan and enter an Order confirming or modifying the proposed Revised Plan. That Order modifying the proposed Plan was issued on February 18, 2020.
- The ICC approved proposed benchmark methodologies for competitively bid procurements, and the ICC voted to approve or reject the recommended set of winning bids and bidders received from the procurement administrator and the ICC's procurement monitor, which described the request for proposal (RFP) and its results. These confidential benchmark methodologies were subject to ICC approval but were not docketed matters. The IPA's procurement administrator issued RFPs seeking suppliers for contracts with Ameren, ComEd, MidAmerican, or the IPA, to provide renewable energy credits. With each RFP, the ICC received confidential reports from the IPA's procurement administrator and the ICC's procurement monitor, which described the RFP and its results and recommended winning bids and bidders. As required, within two business days of receiving these reports, the ICC voted to approve or reject the recommended set of winning bids and bidders. Winning bidders and average winning prices were posted on the ICC's website.
- The procurements conducted to implement the Adjustable Block Program and many of the procurements conducted to implement the Illinois Solar for All Program were not conducted as competitive procurements. Instead, these programs featured transparent schedules of prices and quantities that were designed to provide for renewable energy credit prices that adjust at a predictable rate over time. The IPA began taking applications for participation in its Adjustable Block Program on January 30, 2019. The IPA began taking applications for participation in its Solar for All program on May 15, 2019. Contracts entered pursuant to these programs were and will continue to be submitted to the ICC for approval.
- According to ICC staff, the process is all very public. In April 2019, the ICC received a letter from an entity in the solar industry, alleging irregularities regarding the IPA's Adjustable Block Program lottery process. Shortly after

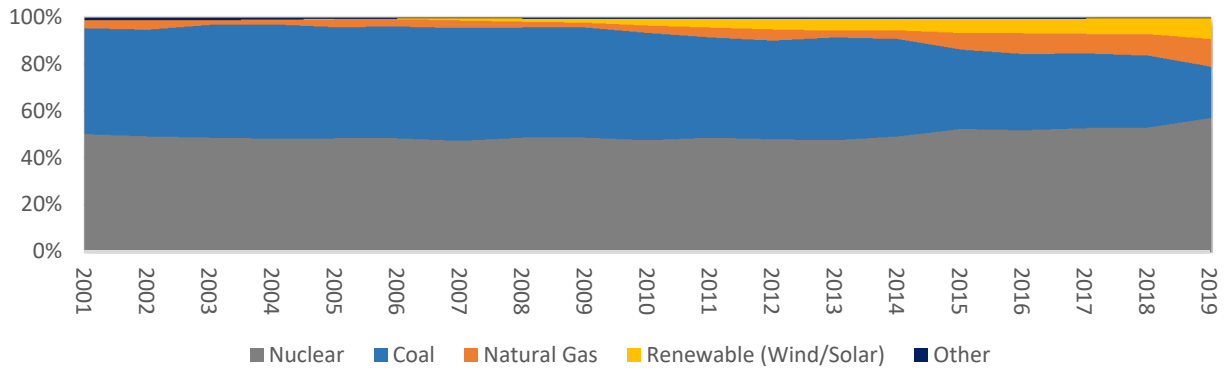
the letter to the ICC, a separate entity from the solar industry filed a formal complaint, alleging similar irregularities. The formal complaint was assigned Docket No. 19-0441 and the ICC issued a final Order on October 2, 2019. In the Order, the ICC found that the complainant failed to claim a violation of the Public Utilities Act or of the ICC's Long-Term Renewable Resources Procurement Plan Order. As a result, the ICC denied the request for an investigation and granted the IPA's Motion to Dismiss the case.

Energy in Illinois

Auditors collected and analyzed data from the U.S. Energy Information Administration (EIA) in order to get a historical perspective of sources of energy generated in Illinois. The EIA is part of the U.S. Department of Energy and is its statistical and analytical agency. According to the EIA, it collects, analyzes, and disseminates independent and impartial energy information to promote sound policymaking, efficient markets, and public understanding of energy and its interaction with the economy and the environment.

According to the EIA, Illinois is the fifth-largest energy-consuming state in the nation. The State's largest energy-consuming end-use sector is industry. It also notes that Illinois is the 3rd largest "net electricity exporter," with about one-fifth of the power generated being sent to other states. Since 2001, nuclear and coal together have produced as much as 97 percent of the total energy generated in the mid-2000s dropping to 79 percent in 2019. While nuclear energy generated in Illinois has increased since 2001, energy generation from coal has declined as a percent of the total energy output by more than 50 percent, from 45 percent in 2001 to 22 percent in 2019. **Exhibit 3** depicts the history of energy generation in Illinois from delivery year 2001 through 2019.

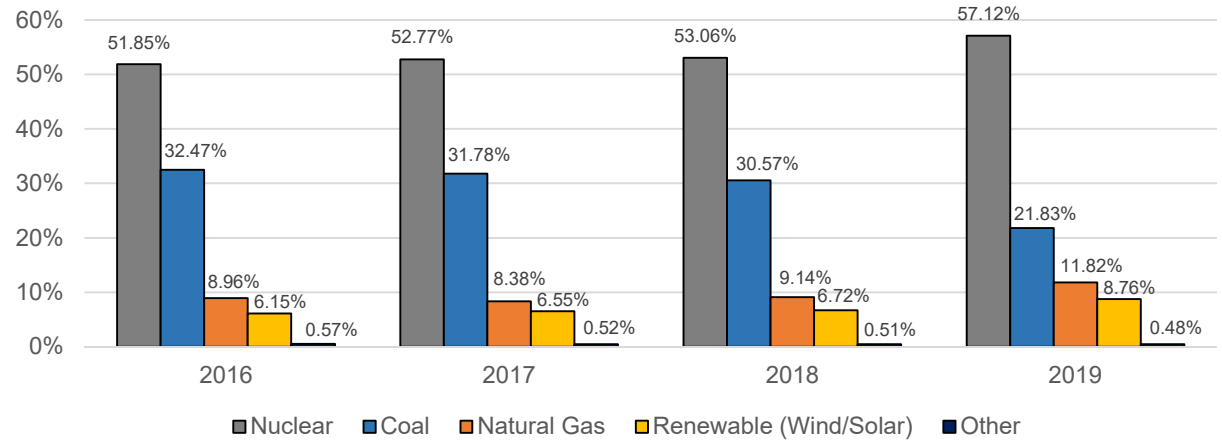
Exhibit 3
HISTORY OF POWER GENERATED BY SOURCE IN ILLINOIS
By Delivery Year (June 1 – May 31) Since June 1, 2001



Source: U.S. Energy Information Administration data summarized by the OAG.

Exhibit 4 shows that electricity generation (in megawatt hours) from renewable sources has increased since delivery year 2016. In 2016, 6.15 percent of the total electricity generated in Illinois was from wind and solar. That increased to 8.76 percent in 2019. During the same time period, electricity generated from coal decreased significantly from 32.47 percent in 2016 to 21.83 percent in 2019. The exhibit also shows that nuclear generated electricity increased from 51.85 percent in 2016 to 57.12 percent in 2019.

Exhibit 4
PERCENTAGE OF MEGAWATT HOURS GENERATED BY SOURCE
By Delivery Year (June 1 – May 31)



Source: U.S. Energy Information Administration data summarized by the OAG.

To add context to the amounts of electricity generation by various sources in Illinois, auditors selected examples from actual power stations from 2019. **Exhibit 5** shows examples of electricity generation from various power stations such as nuclear, coal, natural gas, wind, and solar. The exhibit shows that the Braidwood nuclear station generated 20 million megawatt hours (MWh) of electricity in 2019 from its two reactors, while the 41 acre Exelon City solar farm generated 14,091.

Exhibit 5
ELECTRICITY GENERATION COMPARISON FOR ILLINOIS
2019 Net Generation

Location Name and Type	Description	Plant Nameplate Capacity (MW)	2019 Net Generation (MWh)
Braidwood Nuclear	2 Generating Units	2,450	20,251,140
Prairie State Station (Coal)	2 Units	1,766	12,053,090
Kendall County (Natural Gas)	8 Units	1,256	6,605,374
Kelly Creek Wind Farm	92 2MW Turbines	184	649,255
Exelon City (Solar)	41 Acres	9	14,091

Source: U.S. Energy Information Administration data.

The Future Energy Jobs Act

Public Act 99-906, referred to as the Future Energy Jobs Act, made significant changes to the State's renewable portfolio standard. It was signed into law by Governor Rauner on December 7, 2016, and took effect on June 1, 2017. The Public Act amends sections of the Illinois Power Agency Act (20 ILCS 3855), the Public Utilities Act (220 ILCS 5), and the Energy Assistance Act (305 ILCS 20).

Zero Emission Facility – A facility that is fueled by nuclear power and is interconnected to the power grid.

The General Assembly found that reducing carbon dioxide emissions and other pollutants was critical to improving air quality in Illinois. Other pollutants include sulfur oxides, nitrogen oxides, and particulate matter. The General Assembly determined that in order to achieve the environmental goals in the existing renewable portfolio standard (policies designed to increase the use of renewable energy sources for electricity generation), Illinois must expand its commitment to zero emission energy generation. This includes a commitment above and beyond the scope of the existing renewable portfolio standard, which included nuclear power. As a result, the Future Energy Jobs Act included preserving the existing zero emission energy generation and promoting new zero emission energy generation. The Act defines a **"zero emission facility"** as a facility that is fueled by nuclear power and is interconnected to the power grid.

The General Assembly further found that the social cost of carbon is an appropriate valuation of the environmental benefits provided by zero emission facilities. As a result, it found that it was necessary to establish and implement a zero emission standard, which will increase the State's reliance on zero emission energy through the procurement of zero emission credits from zero emission facilities, in order to achieve the State's environmental objectives and reduce the adverse impact of emitted air pollutants on the health and welfare of the State's citizens.

The purpose of the Future Energy Jobs Act was to overhaul the State's renewable energy portfolio. According to the Act, efforts by the State should continue to build the smart grid (the digital technology that allows for two-way communication between the utility and its customers, and the sensing along the distribution lines is what makes the grid smart) and to maximize the impact of the State's existing energy efficiency and renewable energy portfolio standards. Specifically, per the Future Energy Jobs Act, the Generally Assembly found that:

(1) the State should encourage: the adoption and deployment of cost-effective distributed energy resource technologies and devices, such as photovoltaics (solar), which can encourage private investment in renewable energy resources, stimulate economic growth, enhance the continued diversification of Illinois' energy resource mix, and protect the Illinois environment; investment in renewable energy resources, including, but not limited to, photovoltaic distributed generation, which should benefit all citizens of the State, including low-income households; and

(2) the State's existing energy efficiency standard should be updated to ensure that customers continue to realize increased value, to incorporate and optimize measures enabled by the smart grid, including voltage optimization measures, and to provide incentives for electric utilities to achieve the energy savings goals.

Long-Term Renewable Resources Procurement Plan – Documents the manner in which programs will be administered and how procurements will be conducted by the IPA.

Community Renewable Program

The **Long-Term Renewable Resources Procurement Plan** required a community renewable generation program. The IPA is required to establish the terms, conditions, and program requirements for community renewable generation projects with a goal to expand renewable energy generating facility access to a broader group of energy consumers. The idea is to increase the participation opportunities for residential and small commercial customers and those who cannot install renewable energy on their own properties. The plan is approved by the Illinois Commerce Commission and allows subscriptions to community renewable generation projects to be portable and transferable. "Portable" means that subscriptions may be retained by the subscriber even if the subscriber relocates or changes its address within the same utility service territory; and "transferable" means that a subscriber may assign or sell subscriptions to another person within the same utility service territory. According to the Future Energy Jobs Act, electric utilities shall provide a monetary credit to a subscriber's subsequent bill for service for the proportional output of a community renewable generation project attributable to that subscriber.

Renewable Energy Credits (RECs) – Are tradable credits that represent the environmental attributes of one megawatt hour of energy produced from a renewable energy resource.

Subscribers capture the value of their community energy subscription in the form of a credit applied to their utility bill for service, in proportion to the net output of their subscription to the project. The determination of that subscriber utility bill credit is established through tariffs filed by the utilities with the Illinois Commerce Commission. According to the IPA, its role is simply in the procurement of **Renewable Energy Credits** (RECs), which helps support the development of new projects and should reduce the subscriber's subscription price.

Additionally, the General Assembly found that low-income customers should be included within the efforts to expand the use of distributed generation technologies and devices.

Procurement Goals

Section 1-75(c)(1)(B) of the Illinois Power Agency Act, as updated by the Future Energy Jobs Act states that the Long-Term Renewable Resources Procurement Plan shall include procurement programs and competitive procurement events necessary to meet certain goals. Specifically, it required:

- **for delivery year 2017**: 13 percent of each utility's load for eligible retail customers (and 13 percent of load for 50 percent of retail customers who are not eligible) to come from renewable energy;
- **for delivery year 2018**: 14.5 percent of each utility's load for eligible retail customers (and 14.5 percent of load for 75 percent of retail customers who are not eligible) to come from renewable energy; and
- **by June 1, 2019**: 16 percent of all retail customers' load to come from renewable energy, increasing by 1.5 percent per year for all retail customers' load thereafter to 25 percent by **2025**, and continuing at a minimum of 25 percent thereafter.

According to the IPA, eligible retail customers are those customers who do not take supply service from an alternative retail electric supplier or supply via hourly electricity pricing. A retail customer is any customer of the utility regardless of supplier. The electricity to serve the eligible retail customers is procured for the applicable utility by the IPA pursuant to the annual electricity procurement plan and comprises of only about a quarter of the total electricity consumed by all retail customers.

Brownfield Site – Renewable energy sited on land that has been or is perceived to be polluted and is now underused

Section 1-75(c)(1)(C) of the Illinois Power Agency Act states that by the end of the 2020 delivery year, at least 2,000,000 renewable energy credits for each delivery year shall come from new wind projects; and at least 2,000,000 renewable energy credits for each delivery year shall come from new photovoltaic (solar) projects. These renewable energy credit amounts increase to 3,000,000 credits by the end of the 2025 delivery year, and then increase to 4,000,000 credits by the end of the 2030 delivery year. Under Section 1-75(c)(1)(F) of the Illinois Power Agency Act, these targets for renewable energy credits from new wind and solar projects are considered a higher priority than the percentage-based goals for the renewable portfolio standard contained in Section 1-75(c)(1)(B) of the Illinois Power Agency Act.

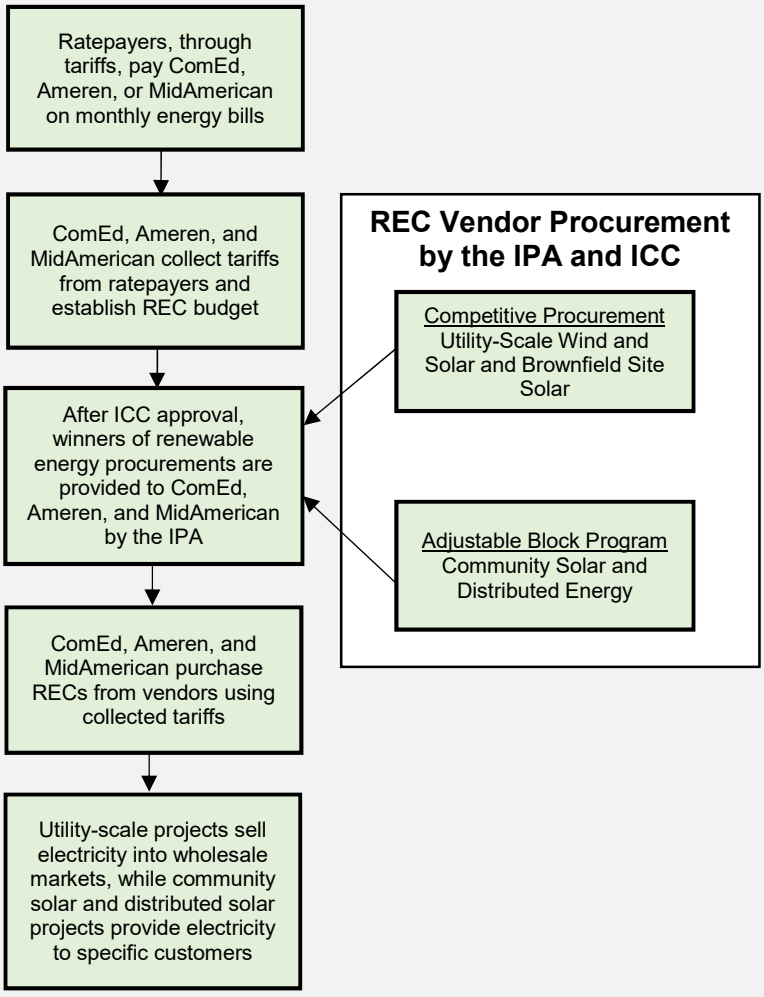
For the "new photovoltaic project" requirement, at least 50 percent must be procured from solar photovoltaic projects using the Adjustable Block Program, at least 40 percent from utility-scale solar projects, and at least 2 percent from non-community solar **Brownfield site** photovoltaic (solar) projects. Within the Adjustable Block Program, the Act requires the following:

- at least 25 percent from distributed renewable energy generation devices with a nameplate capacity of no more than 10 kilowatts;
- at least 25 percent from distributed renewable energy generation devices with a nameplate capacity of more than 10 kilowatts and no more than 2,000 kilowatts;
- at least 25 percent from photovoltaic (solar) community renewable generation projects;

- the remaining 25 percent shall be allocated as specified by the IPA in the Long-Term Renewable Resources Procurement Plan; and
- The funds to pay for these contracts were collected through ratepayer tariffs. These tariffs were added to the monthly utility bills for ComEd, Ameren, and MidAmerican customers. Illinois electric utilities collect and hold these tariffs. The electric utilities serve as the buyers for REC delivery contracts where owners/developers of renewable energy projects deliver RECs to utilities for a set price. **Exhibit 6** illustrates how the ratepayer tariffs are used by the utilities to purchase renewable energy credits.

The IPA allocated renewable energy credit contracts proportionally among ComEd (70.34%), Ameren (29.33%) and MidAmerican (0.33%) in order to meet their renewable portfolio standard obligations.

Exhibit 6
RENEWABLE ENERGY CREDITS PURCHASED FROM RATEPAYER TARIFFS



Source: Information provided by IPA.

Renewable Energy Credits Under Contract

The IPA provided auditors with the number of RECs under contract, the number of RECs planned, the number of RECs targeted, and the gap in RECs procured (see **Exhibit 7**). The data provided by the IPA was for the 15 year period following the passage of Public Act 99-906 and shows the RECs procured and to be procured as a result of the April 20, 2020 Long-Term Renewable Resources Procurement Plan. It does not include estimates for subsequent procurements that will be conducted in the future.

Exhibit 7
RENEWABLE PORTFOLIO STANDARD RECs PROCURED AND PLANNED
By Delivery Year as of April 20, 2020

Delivery Year	RECs under Contract	Planned REC Procurements	Total Procured + Planned RECs	REC Target	REC Gap
2017-2018	2,408,336	-	2,408,336	9,894,646	7,486,310
2018-2019	2,318,005	-	2,318,005	14,784,110	12,466,105
2019-2020	4,314,239	-	4,324,318	20,131,126	15,806,808
2020-2021	4,580,563	26,669	4,607,232	21,149,182	16,541,950
2021-2022	8,760,410	29,303	8,789,713	22,482,035	13,692,323
2022-2023	8,893,862	28,642	8,922,504	24,651,831	15,729,327
2023-2024	8,888,249	28,642	8,916,891	26,586,546	17,669,654
2024-2025	8,888,249	1,028,642	9,916,891	28,380,129	18,463,238
2025-2026	8,888,249	1,028,642	9,916,891	30,077,260	20,160,369
2026-2027	8,888,249	1,028,642	9,916,891	30,018,149	20,101,258
2027-2028	8,888,249	1,028,642	9,916,891	30,035,810	20,118,918
2028-2029	8,888,249	1,028,642	9,916,891	30,110,712	20,193,820
2029-2030	8,888,249	1,028,642	9,916,891	30,078,255	20,161,363
2030-2031	8,888,249	1,028,642	9,916,891	30,099,622	20,182,730
2031-2032	8,888,249	1,028,642	9,916,891	30,197,235	20,280,344

Source: Data provided by the IPA.

While RECs from utility-scale projects are paid upon delivery across a 15-year contract, the Adjustable Block Program requires prepayment for the expected stream of RECs. Specifically, Section 1-75(c)(1)(L)(i)-(iii) requires that Adjustable Block Program contracts feature a) full "prepayment" for 15 years of RECs at the time of system energization for small distributed generation projects, and b) 20 percent of the contract value paid upon energization at the time of system energization for large distributed generation and community solar projects, with the remainder paid across the subsequent 4-year period. According to IPA, this "prepayment" means that while a seller of RECs may have a 15 year obligation to deliver RECs, and the overall payment received is based on the expected quantities of REC deliveries over 15 years, actual payments are heavily frontloaded. This creates significant expenditure peaks and valleys in projected payments. As a result of this, until Adjustable Block Program payments for projects in the initial blocks are completed, and those expenditures no longer

count against the budget, the REC gap will appear to be very large outside of the time period of the "prepayment."

As a result, according to IPA officials, the IPA's budget for supporting additional program/procurement activity "basically remains exhausted until those prepaid obligations roll off, at which point the IPA can conduct additional activity to place new projects under contract and begin to start closing that REC gap." Thus, according to the IPA, it anticipates that the amount of RECs under contract will likely begin climbing again starting in 2023 or 2024, based on Long-Term Renewable Resources Procurement Plans developed for that period.

Tariffs Collected and Expenses

The IPA also provided auditors with the amount of funds collected, or are projected to be collected, by the utility companies (ComEd, Ameren, and MidAmerican) through tariffed rates. **Exhibit 8** shows the rates of the tariffs by utility company and **Exhibit 9** shows the total amount of tariffs projected to be collected. For the 15 years following passage of the Public Act 99-906, the tariffs projected to be collected are more than $3.2 billion; however, the total amount of projected expenses is approximately $1.8 billion. According to the IPA, projected expenses only reflect programs and procurements conducted under the 2018 and 2020 Long-Term Renewable Resources Procurement Plans. Since future projected funds cannot be leveraged to pay for current obligations, additional future commitments of funds will be made through future plans.

Exhibit 8
TARIFFED RATES COLLECTED BY UTILITY COMPANIES

Utility	Rate (cents/kWh)
Ameren Illinois	0.18054
ComEd	0.18917
MidAmerican	0.12415

Source: IPA Long-Term Procurement Plan.

Exhibit 9 also shows that until future procurements are conducted, collections will greatly outpace spending. This is due to the increased "prepayments" following the initial procurements. As such, the "Planned REC Spend" column means the amount of spending for RECs yet to be procured as a result of the 2020 Long-Term Renewable Resources Procurement Plan.

Exhibit 9
PROJECTED RENEWABLE PORTFOLIO STANDARD TARIFFS COLLECTED AND EXPENSES
By Delivery Year as of October 2020

Delivery Year	Collections	REC Spend Under Contract	Planned REC Spend [1]	Administrative Expenses	Excess Collections
2017-2018	$141,941,222	$32,170,648	-	$11,952,840	$97,817,734
2018-2019	190,851,303	38,768,031	-	1,872,499	$150,210,773
2019-2020	225,662,563	101,064,829	-	2,981,916	$121,615,818
2020-2021	225,236,001	184,870,264	$10,883,265	1,464,034	$28,018,438
2021-2022	220,506,553	254,164,115	15,542,879	11,433,293	($60,633,734)
2022-2023	224,130,732	212,296,397	12,516,333	1,456,850	($2,138,848)
2023-2024	225,201,259	207,955,059	12,516,333	1,463,808	$3,266,059
2024-2025	225,029,804	201,486,517	17,080,402	1,462,694	$5,000,191
2025-2026	224,171,966	164,632,855	14,852,006	11,457,118	$33,229,987
2026-2027	223,747,148	69,000,924	7,589,081	1,454,356	$145,702,787
2027-2028	223,904,089	32,485,368	5,000,000	1,455,377	$184,963,344
2028-2029	224,488,240	32,483,018	5,000,000	1,459,174	$185,546,048
2029-2030	224,253,822	32,342,894	5,000,000	1,457,650	$185,453,278
2030-2031	224,430,750	32,308,339	5,000,000	1,458,800	$185,663,611
2031-2032	225,180,196	32,265,965	5,000,000	1,463,671	$186,450,560
Totals	**$3,248,735,648**	**$1,628,295,223**	**$115,980,299**	**$54,294,080**	**$1,450,166,046**

[1] Planned REC Spend column means the amount of spending for RECs yet to be procured as a result of the 2020 Long-Term Renewable Resources Procurement Plan.

Source: Data provided by the IPA.

Types of Renewable Energy Projects

As discussed in the following sections, there are two ways in which renewable energy projects are procured: (1) competitively and (2) through the Adjustable Block Program. Competitive procurements are processes where many sellers offer RECs from their proposed wind and solar projects at competitive prices in sealed-bid, pay-as-bid procurement processes with bids selected on the basis of price. These projects include utility-scale wind, solar, and Brownfield solar. Adjustable Block Program projects are based on transparent, administratively set prices and on open enrollment and include community and distributed solar. These competitive and Adjustable Block Program projects are defined as follows:

- **Utility-Scale Wind Project** – an electric generating facility that generates electricity using wind and has a nameplate capacity that is greater than 2,000 kilowatts;
- **Utility-Scale Solar Project** – an electric generating facility that generates electricity using photovoltaic cells and has a nameplate capacity that is greater than 2,000 kilowatts;
- **Brownfield Solar Project** – renewable energy sited on land that has been or is perceived to be polluted and is now underused;
- **Community Solar Project** – an electric generating facility that is powered by solar cells or panels and is interconnected at the distribution system level of an electric utility, a municipal utility that owns or operates electric distribution facilities, a public utility, or an electric cooperative. These projects credit the value of electricity generated by the facility to the subscribers of the facility and is limited in nameplate capacity to less than or equal to 2,000 kilowatts; and
- **Distributed Solar** – energy generated by renewable energy devices that are located on the customer side of the customer's electric meter and are primarily used to offset that customer's electricity load (for example, rooftop solar panels).

Exhibit 10 lists the type of project, the procurement method, the annual cost, and the weighted average price per REC. Each of these project types will be discussed in more detail in the following sections.

Exhibit 10
TYPE AND COST OF RENEWABLE ENERGY PROJECTS PROCURED PER THE FUTURE ENERGY JOBS ACT
June 1, 2017 – August 31, 2020

Type of Project	Definition	Procurement Method	Annualized 15-Year Cost	Weighted Average Price per REC
Utility Scale Wind (>2,000 kW)	an electric generating facility that generates electricity using wind	Competitive	$9,857,488	$3.35
Utility Scale Solar (>2,000 kW)	an electric generating facility that generates electricity using photovoltaic cells	Competitive	$14,990,471	$5.07
Brownfield Solar	renewable energy sited on land that has been or is perceived to be polluted and is now underused	Competitive	[1]	$58.10
Community Solar (≤2,000 kW)	an electric generating facility that is powered by solar cells or panels and is interconnected at the distribution system level of an electric utility	Adjustable Block Program	$21,271,305[2]	$47.56[3]
Distributed Solar (≤10 kW)	renewable energy devices that are primarily used to offset that customer's electricity load	Adjustable Block Program	$7,823,117[2]	$76.46
Distributed Solar (>10 kW)	renewable energy devices that are primarily used to offset that customer's electricity load	Adjustable Block Program	$20,660,383[2]	$45.71

[1] Since there were only two Brownfield contracts, the exact annual contracted RECs and cost are confidential.

[2] The annualized cost does not reflect the front-loaded payment schedule for these project types, even though renewable energy credits are delivered over 15 years. Thus, the impacts on annual RPS budgets are greater than these totals across the prepayment period.

[3] This does not include the community solar incentive for small subscriber participation which ranges from $0 to $32.65 per renewable energy credit.

Source: Information provided by the IPA.

Managing and Administering the Renewable Energy Credit Procurement Process

Section 16-111.5 Subsections (e) through (i) of the Public Utilities Act (220 ILCS 5) outlines the requirements for the competitive procurement of renewable energy credits (the IPA is exempt from the Illinois Procurement Code when conducting these procurements). This process is where sellers offer renewable energy credits from their proposed wind and solar projects at competitive prices in sealed-bid, pay-as-bid procurement processes with bids selected on the basis of price. No issues were identified with the procurements or the procurement process.

Legislative Audit Commission Resolution Number 153 asked auditors to determine whether the IPA followed established rules and regulations during the procurement process. We determined that there were eight competitive procurement dates with contracts awarded following the effective date of Public Act 99-906. These procurements were for utility scale wind, utility scale solar, and Brownfield solar projects.

All of these procurements were reviewed as part of the Office of the Auditor General's annual financial audits of the IPA. Procurements from FY18 were reviewed by auditors from the Office of the Auditor General and the FY19 procurements were reviewed by our special assistant auditors from Plante & Moran, PLLC.

We met with auditors within our Office and auditors from our special assistant auditors to gain an understanding of the audit work performed and to determine if we could rely on the work completed. We determined the auditors' qualifications and independence to be adequate and found that the scope, quality, and timing of the audit work performed by the other auditors was relevant within the context of our audit objectives. We determined that these reviews consisted of detailed testing over the procurement process, the bidding result, and the revenue. Specifically, the other auditors tested all mandates found in the Illinois Power Agency Act (20 ILCS 3855/1-75(a)-(h)) and the Public Utilities Act (220 ILCS 5/16-111.5), which are the exact programs and procurements related to our current audit. Auditors did not find any problems or issues with the procurement events reviewed.

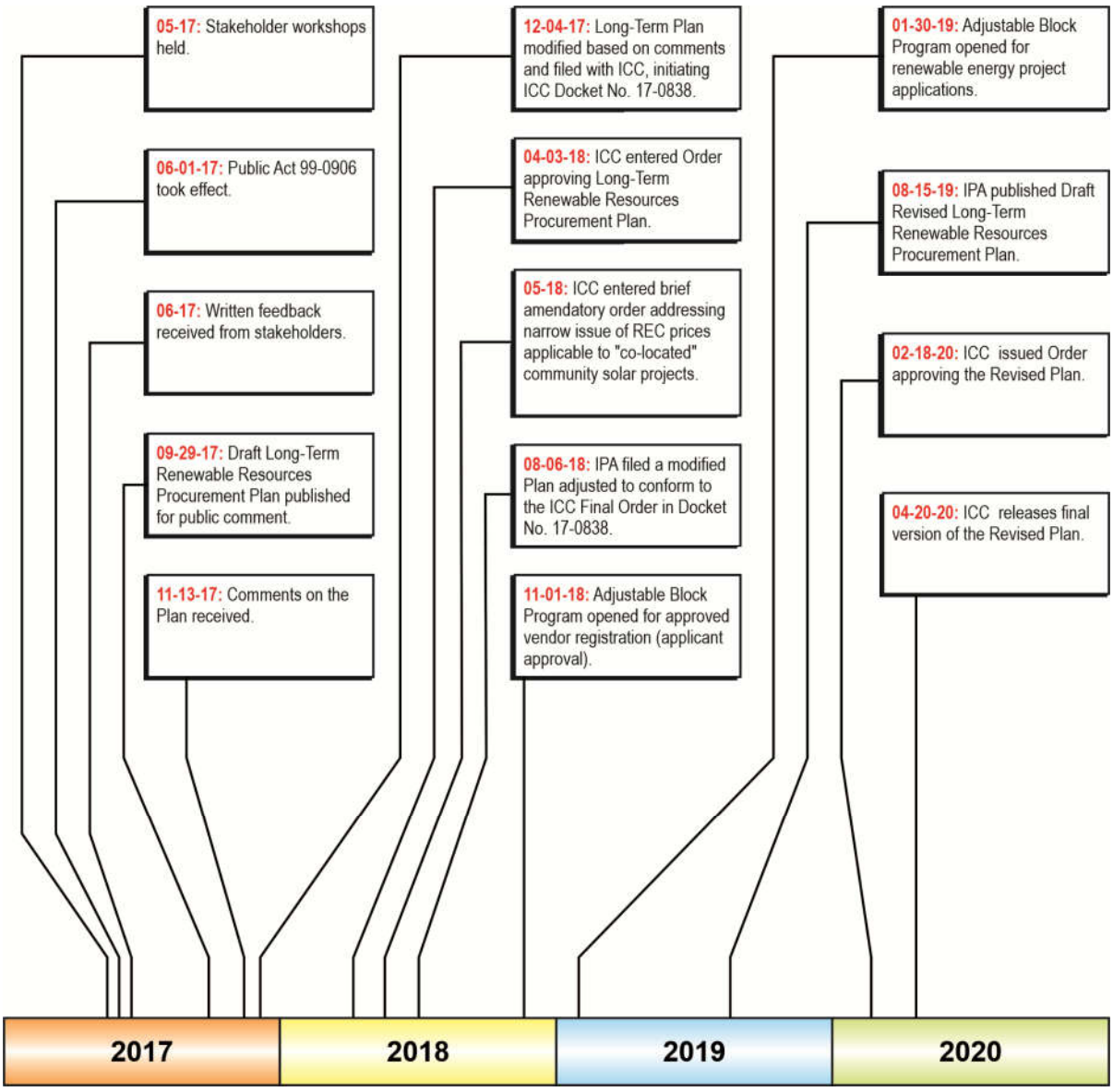
Therefore, we determined that the procurement process used for these specific procurements had already been audited by our Office, that we could rely on the work performed, and that no problems or issues had been identified.

Post Public Act 99-906 Procurements

Public Act 99-906 was signed into law on December 7, 2016 and became effective June 1, 2017. On December 4, 2017, the IPA submitted its initial Long-Term Renewable Resources Procurement Plan to the ICC pursuant to the provisions of Sections 1-56(b) and 1-75(c) of the Illinois Power Agency Act (20 ILCS 3855) and Section 16-111.5 of the Public Utilities Act (220 ILCS 5). The ICC issued an order on April 3, 2018, approving the initial Long-Term Plan with revisions and an Amendatory Order on May 2, 2018. On August 6, 2018, the IPA

filed a final version of its Long-Term Renewable Resources Procurement Plan consistent with these orders. **Exhibit 11** is a timeline of the initial and final versions of the Long-Term Renewable Resources Procurement Plans. These plans document the manner in which programs will be administered and how procurements will be conducted by the IPA.

Exhibit 11
TIMELINE FOR THE INITIAL AND FINAL RENEWABLE RESOURCES PROCUREMENT PLANS



Source: OAG summary of IPA information.

Exhibit 12 shows how the IPA develops its programs and procurements. The procurement process includes items like administratively set renewable energy credit prices, the methodology for how applicant projects will be chosen, where applicant projects are permitted to be located, qualifications for participant firms, and similar determinations.

Exhibit 12
HOW PROGRAMS AND PROCUREMENTS ARE DEVELOPED

FIRST, the IPA **develops** a draft Procurement Plan containing draft proposals for the manner in which programs will be administered and procurements will be conducted. These include an overview of statutory authority and requirements, an identification of issues needing resolution for successful implementation, and the IPA's proposals for how to resolve those issues.
SECOND, the IPA **publishes** the draft Procurement Plan and takes public comments, including public hearings in the service territory of each utility. Other parties, which include electric utilities, renewable energy developers, and advocacy organizations, submit comments seeking changes to the Plan or seeking that different proposals be adopted.
THIRD, the IPA then **revises** its Procurement Plan and files that Plan with the ICC (the agency tasked with regulating public utilities) for the ICC's review and approval. The IPA's filing initiates a formal docketed proceeding before the ICC overseen by an Administrative Law Judge in which interested parties can (and do) intervene to offer alternative proposals or support IPA proposals.
FOURTH, after briefs and (if necessary) hearings, the ICC **enters an administrative order approving** the Procurement Plan, potentially ordering modifications around contested issues. This Order constitutes the final administrative action potentially subject to appeal; if a party sought to appeal a contested issue (as has happened multiple times in the past), it would appeal the ICC's Order rather than the IPA's proposal. The IPA then publishes a final Plan to conform with the ICC's Order.
FIFTH, the IPA **conducts implementation activities** in light of the ICC's Order and associated authorizations. This may include developing more specific participation requirements, developing forms and processes for participation (including contract forms), building out a public-facing interface for participation by program or procurement participants, and similar execution- and implementation-focused activities.

Source: Summary provided by the Illinois Power Agency.

Competitive Procurement Process

The IPA uses a competitive procurement process to procure RECs primarily from utility-scale wind and solar projects (projects that are larger than 2 megawatts or 2,000 kilowatts in size), and photovoltaic (solar) Brownfield site projects, which can be any size, but must be located on a Brownfield site. The IPA is not required to follow the Illinois Procurement Code when conducting its procurements. Instead, Section 16-111.5 Subsections (e) through (i) of the Public Utilities Act (220 ILCS 5) outline the requirements for the competitive procurement of renewable energy credits. This process is where sellers offer renewable energy credits from their proposed wind and solar projects at competitive prices in a sealed-bid, pay-as-bid procurement processes with bids selected on the basis of price.

Procurement Administrator

These procurement processes are administered by the IPA's procurement administrator (NERA Economic Consulting) as required by Subsection (c) of Section 16-111.5, under the IPA's oversight and are subject to approval by the ICC, and in accordance with the approved Long-Term Renewable Resources Procurement Plan created by 220 ILCS 5/16-111.5(b)(5). The procurement administrator manages all aspects of the bid solicitation process and independently evaluates the bids based on price, subject to the procurement objectives, and priorities; identifies the winning bids; and prepares recommendations for the ICC. The procurement monitor (contracted by the ICC) observes the bidding and evaluation process and provides its own independent recommendation to the ICC. The ICC renders a decision on the results of the procurement after review of the procurement administrator's and procurement monitor's reports and recommendations. After the decision, the procurement administrator releases the aggregate results of the procurement. Other information (such as bid-specific information related to the competitive procurement) is confidential.

Below is a list of the key procurement activities and processes identified by IPA officials alongside the auditor-identified statutory citations that require them. The Office of the Auditor General's annual financial audits of the IPA from FY18 and FY19 reviewed 113 statutory requirements from the Public Utilities Act related to the procurement of renewable energy credits and found no issues.

• procurement preparation and schedule	(220 ILCS 5/16-111.5(b)(5)(ii)(B)(bb))
• comment process	(220 ILCS 5/16-111.5(b)(5)(ii)(B))
• development of procurement process and rules document	(220 ILCS 5/16-111.5(b)(5)(ii)(A) through (D))
• process for retaining the procurement administrator	(220 ILCS 5/16-111.5(b)(5)(iii))
• process for authoring and monitoring the procurement administrator's work and cost	(220 ILCS 5/16-111.5(b)(5)(iii))
• process for procuring RECs – RFP	(220 ILCS 5/16-111.5(c) and (e))
• bidder outreach process	(220 ILCS 5/16-111.5(e)(1))
• development of REC contract and credit instruments	(220 ILCS 5/16-111.5(e)(2))
• benchmark development and approval	(220 ILCS 5/16-111.5(e)(3))
• proposal processing and bid management	(220 ILCS 5/16-111.5(e)(4))
• bid evaluation process	(220 ILCS 5/16-111.5(e)(4))
• development and submission of confidential procurement report to the ICC	(220 ILCS 5/16-111.5(f))
• procurement approval by ICC	(220 ILCS 5/16-111.5(f))
• post-bid processes	(220 ILCS 5/16-111.5(g))
• public announcement	(220 ILCS 5/16-111.5(h))

Exhibit 13 shows the sub-processes for the competitive procurements and the resulting key outcomes from each step.

Exhibit 13
COMPETITIVE PROCUREMENT ACTIVITIES CONDUCTED BY THE IPA

Sub-Process	Key Outcomes
Procurement Preparation and Draft Documents	• Procurement schedule posted • Draft of standard contract • Draft of procurement process and rules • Workshop held • FAQs posted
Comment Process	• Standard contract posted • Procurement process and rules posted • Credit instruments posted
Bidder Outreach	• Announcement of procurement event posted • Direct marketing to prospective bidders • Bidder information webcast delivered • FAQs posted
Benchmarks Development and Approval	• Benchmarks developed • Benchmarks filed with the ICC for approval • Benchmarks approved by ICC
Proposal Processing and Management	• Assessment of bidder creditworthiness • List of bidders eligible to submit bids • Modified credit instruments, as needed • Pre-bid security amounts calculated and posted • Bidder training for bid submission delivered • FAQs posted
Bid Evaluation Model and Bid Form Updates in Consultation with Procurement Monitor	• Bid evaluation model updated • Bid form updated
Bid Evaluation Process	• Bids evaluated • Bid evaluation report sent to the ICC for approval • Confidential file containing bid data sent to IPA
Procurement Approval by ICC Vote	• Procurement approved by ICC
Post-bid Processes	• Bidders notified • Information to prepare contracts sent to utilities and suppliers • Information release posted • Contracts signed by counterparties • Post-bid collateral posted • Supplier fees paid

Source: Information provided by IPA.

Prices for Renewable Energy Credits

The prices per renewable energy credit for utility-scale wind, utility-scale solar, and Brownfield solar projects were competitively procured following the guidelines delineated in the Long-Term Renewable Resources Procurement Plan. The prices per renewable energy credit for community solar and distributive generation solar projects were administratively determined through the Adjustable Block Program, which is discussed in the next section.

Since the passage of the Future Energy Jobs Act, the IPA has competitively procured 21 contracts for utility wind, utility solar, and Brownfield solar. The annual cost of these contracts was approximately $28 million. These contracts are 15 years in length. **Exhibit 14** shows the annual cost of the competitive procurement process as a result of the Future Energy Jobs Act for wind - utility scale, solar photovoltaic (PV) - utility scale, and solar PV - Brownfield site.

Exhibit 14
FUTURE ENERGY JOBS ACT ANNUAL CONTRACTED AMOUNTS RESULTING FROM THE COMPETITIVE PROCUREMENT PROCESS
June 1, 2017 – August 31, 2020

System Category	Number of Projects	Annual Contracted RECs	Annual Cost	Weighted Average Price per REC
Wind - Utility Scale	6	2,944,753	$9,857,488	$3.35
Solar PV - Utility Scale	13	2,957,478	$14,990,471	$5.07
Solar PV - Brownfield Site	2	[1]	[1]	$58.10

[1] Since there were only two Brownfield contracts, the exact annual contracted RECs and cost are confidential. Compared to the other competitively bid contracts, the Brownfield contracts only totaled approximately $3 million annually.

Source: Information provided by the IPA.

Managing and Administering the Adjustable Block Program

The IPA's Long-Term Renewable Resources Procurement Plan described in detail how the prices for each block in the Adjustable Block Program were determined. The base contract price for each applicant project was determined by the project's group, project type, project size, and the block that the project was in. The IPA worked with its procurement planning consultant (Levitan and Associates) to adapt the CREST (Cost of Renewable Energy Spreadsheet Tool) model for use in determining REC prices for community solar and distributed generation projects. The CREST model is an economic cash flow model developed by the U.S. Department of Energy National Renewable Energy Laboratory. It takes various inputs for solar projects such as hard costs, tax policies, depreciation rates, expected rate of return, etc., and uses those inputs to determine a levelized cost of energy over a period of time.

In order to participate in the program, vendor applications were first subjected to the review and approval of the program administrator (InClime, Inc.), and only approved vendors could have projects in the program. Vendor approval was based on various legal and regulatory requirements regarding both the vendor itself and its owners. Along with the requirements that needed to be met by the vendor, the vendor also had to provide support showing that the installer it intended to use met legal and regulatory requirements. In addition, technical specifications and documentation supporting that the vendor/developer was contractually bound to the project was required for each individual project.

Public Act 99-0906 required the IPA to establish the Adjustable Block Program to support the development of new photovoltaic distributed generation systems (solar) and new photovoltaic community renewable generation (community solar) projects in Illinois through the procurement of renewable energy credits. Renewable energy credits are purchased by the utility companies from these projects from vendors selected through the Adjustable Block Program.

Adjustable Block Program – Supports the development of new distributed solar projects and new community solar projects in Illinois through the purchase of renewable energy credits.

The day-to-day operation of the Adjustable Block Program is performed by the IPA's program administrator, InClime, Inc., which had its contract with the IPA approved by the ICC on July 12, 2018. The program administrator's responsibilities include, but are not limited to:

- assisting the IPA with approved vendor registration and training, including developing a program manual;
- establishing an online portal for approved vendors to submit projects and for collecting application fees;
- maintaining an online dashboard to show block status;
- reviewing and approving submitted projects;
- preparing contracts for ICC review and utility execution;
- ongoing monitoring of project development status;
- verifying completion of projects and the processing of approvals for payments; and
- conducting on-site inspections for quality assurance purposes.

The IPA's Long-Term Renewable Resources Procurement Plan described in detail how the prices for each block in the Adjustable Block Program were determined. The base contract price for each applicant project was determined by the project's group, project type, project size, and the block that the project was in. **Exhibit 15** shows the number of projects, the number of annual contracted RECs, the annual cost, and the weighted average price per REC for the annual contracts for the Adjustable Block Program during the audit period.

Exhibit 15
FUTURE ENERGY JOBS ACT ANNUAL CONTRACTED AMOUNTS RESULTING FROM THE ADJUSTABLE BLOCK PROGRAM
June 1, 2017 – October 21, 2020

System Category	Number of Projects	Annual Contracted RECs	Annualized Cost[1]	Weighted Average Price per REC
Community Solar[2]	111	450,808	$21,421,988	$47.52
Distributed Solar (≤10 kW)	15,827	144,275	$10,979,944	$76.10
Distributed Solar (>10 kW)	2,343	474,877	$21,819,309	$45.95
Totals	**18,281**	**1,069,960**	**$54,221,241**	

[1] The annualized cost does not reflect the front-loaded payment schedule for these project types even though renewable energy credits are delivered over 15 years. Thus, the impacts on annual RPS budgets are greater than these totals across the prepayment period.

[2] This does not include the community solar incentive for small subscriber participation which ranges from $0 to $32.65 per renewable energy credit.

Source: Information provided by the IPA.

Prices Set by the IPA for the Adjustable Block Program

Legislative Audit Commission Resolution Number 153 asked auditors to determine how the Illinois Power Agency administratively determined the value of community solar renewable energy credits. The Adjustable Block Program functions differently than the competitive procurements as it requires administratively determined prices for renewable energy credits and is open on an ongoing basis, rather than featuring discrete procurement events with competitively set, pay-as-bid prices.

The Adjustable Block Program was designed to provide a transparent schedule of prices and quantities to enable the photovoltaic (solar) market to scale up and for renewable energy credit prices to adjust at a predictable rate over time. The prices set by the Adjustable Block Program can be reflected as a set value or as the product of a formula. According to the data provided by the IPA, there have been 18,281 contracts processed through the Adjustable Block Program for an annual total cost of $54 million for 1,069,960 renewable energy credits. These contracts are for 15 years.

The IPA worked with its procurement planning consultant (Levitan and Associates) to adapt the CREST (Cost of Renewable Energy Spreadsheet Tool) model for use in determining REC prices for community solar and distributed generation projects. This approach (including a detailed description of the

methodology and supporting Excel spreadsheets) was included as exhibits to the IPA's Long-Term Renewable Resources Procurement Plan, and was litigated before and ultimately approved by the ICC. The final version of the REC pricing model, and the resulting REC prices reflect the ICC's determinations made in that proceeding. Through both the initial publishing of the Long-Term Renewable Resources Procurement Plan for public comment and that Plan's approval process before the ICC, all interested parties had the opportunity to provide feedback on both the model and the specific prices it produced.

According to IPA officials:

> *The CREST model is an economic cash flow model developed by the US Department of Energy National Renewable Energy Laboratory. It takes various inputs for solar projects such as hard costs, tax policies, depreciation rates, expected rate of return, etc., and uses those inputs to determine a levelized cost of energy over a period of time. This model included determining inputs for the model (such as cost of solar panels, installations costs, costs for interconnecting to the utility grid, federal tax credits). Hard costs were derived from several industry studies, including the US Department of Energy Lawrence Berkeley Laboratory's annual Tracking the Sun report and the Solar Energy Industries Alliance/Greentech Media US Solar Insight reports. Also included in the REC pricing model were modeling of the net present value of net metering credits that a customer would receive from the utility over the life of the system. REC prices were determined by 1) netting the net present value of the results of the CREST model against the net present value of the net metering credits, and 2) translating that amount into a payment per REC for the first 15 years of expected energy production from the system (because one REC is generated for every megawatt-hour of electricity generated by the system). Different models were developed for community solar and distributed generation. REC prices were determined separately for different ranges of project sizes and for two areas of Illinois (with one group, Group A, covering the service territory of Ameren Illinois and downstate rural electric cooperatives and municipal electric utilities, and the other, Group B, covering the service territory of ComEd and northern Illinois rural electric cooperatives and municipal electric utilities.)*

As noted above, participation in the Adjustable Block Program was assessed across two project groups (Group A, covering the service territory of Ameren Illinois and downstate rural electric cooperatives and municipal electric utilities, and Group B, covering the service territory of ComEd and northern Illinois rural electric cooperatives and municipal electric utilities). There were three block categories within each block group which included: (1) **small** distributed generation up to 10kW; (2) **large** distributed generation from over 10 kW up to 2,000 kW; and (3) **community solar** up to 2,000 kW.

Each block has a set renewable energy credit price, and upon or shortly after a block's capacity becoming filled, the next block for that category opens at a price approximately four percent lower than the previous block. However, the base

REC price that a specific project receives is subject to adjustment based on system size, the proportion of entities served that are considered small subscribers and potentially the effects on costs due to net metering, smart inverter rebates, and federal tax credits.

Per the Long-Term Renewable Resources Procurement Plan, if the quantity of applications in a Group/category received in the first 14 days after Block 1 opened was at least 100 percent but under 200 percent of Block 1 capacity (in megawatts), then all of those projects would receive Block 1 pricing, and Block 1 for that Group/category would be considered closed. Then, Block 2 would open for the next projects received, with those projects receiving Block 2 pricing. If the capacity of applications received in the first 14 days was exactly 200 percent of Block 1, then both Blocks 1 and 2 for that Group/category would be considered closed, and Block 3 would then open. If the megawatt capacity of applications received was greater than 200 percent of Block 1 capacity, then a lottery process could be conducted to select the recipients of REC delivery contracts. Ultimately, the total megawatts of applications received by the IPA for the Adjustable Block Program exceeded 200 percent of Block 1 capacity for both Group A and Group B community solar, along with Group A large distributed generation, and a lottery was held. **Exhibit 16** shows the base price per renewable energy credit for each block, project size, project type, and project group.

Exhibit 16
BLOCK GROUP REC PRICES ($/REC)

Block Group	Block Category		Block 1	Block 2	Block 3	Block 4	Block 5
Group A (Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Cooperatives, and Municipal Utilities)	Small	≤10 kW	$85.10	$81.70	$78.43	n/a	n/a
	Large	>10-25 kW	$78.70	$75.55	$72.53	$69.63	n/a
		>25-100 kW	$64.41	$61.83	$59.36	$56.99	n/a
		>100-200 kW	$52.54	$50.44	$48.42	$46.48	n/a
		>200-500 kW	$46.85	$44.98	$43.18	$41.45	n/a
		>500-2,000 kW	$43.42	$41.68	$40.02	$38.42	n/a
	Community Solar	≤10 kW	$96.12	$92.28	$88.58	$85.04	n/a
		>10-25 kW	$87.07	$83.59	$80.24	$77.03	n/a
		>25-100 kW	$70.95	$68.11	$65.39	$62.77	n/a
		>100-200 kW	$60.47	$58.05	$55.73	$53.50	n/a
		>200-500 kW	$55.46	$53.24	$51.11	$49.07	n/a
		>500-2,000 kW	$52.28	$50.19	$48.18	$46.25	n/a
		Co-located systems > 2 MW in aggregate size	$47.03	$45.15	$43.34	$41.61	n/a
Group B (ComEd, and Rural Electric Cooperatives and Municipal Utilities)	Small	≤10 kW	$72.97	$70.05	$67.25	n/a	n/a
	Large	>10-25 kW	$73.23	$70.30	$67.49	$64.79	n/a
		>25-100 kW	$65.61	$62.99	$60.47	$58.05	n/a
		>100-200 kW	$53.75	$51.60	$49.54	$47.56	n/a
		>200-500 kW	$48.07	$46.15	$44.30	$42.53	n/a
		>500-2,000 kW	$44.64	$42.85	$41.14	$39.49	n/a
	Community Solar	≤10 kW	$91.89	$88.21	$84.69	$81.30	n/a
		>10-25 kW	$82.82	$79.51	$76.33	$73.28	n/a
		>25-100 kW	$66.65	$63.98	$61.42	$58.96	n/a
		>100-200 kW	$56.12	$53.88	$51.72	$49.65	n/a
		>200-500 kW	$51.09	$49.05	$47.08	$45.20	n/a
		>500-2,000 kW	$47.88	$45.96	$44.13	$42.36	n/a
		Co-located systems > 2 MW in aggregate size	$42.59	$40.89	$39.25	$37.68	n/a

Source: IPA Long-Term Renewable Resources Procurement Plan.

Number of Winning Developers (Vendors) for the Adjustable Block Program

Legislative Audit Commission Resolution Number 153 asked auditors to determine what factors were used by the Illinois Power Agency in selecting the winning developers for community and rooftop solar, which due to the use of the lottery as a method of selection became a question of how a developer first qualified to participate in the lottery, and then how the lottery itself was conducted. As described below, the lottery was only used for the selection of community solar projects and for one group/category of distributed generation projects; other group/category combinations did not feature over 200 percent of

Block 1 capacity through initial applications. Although auditors were asked to make a determination regarding the selection of "developers," the method of developer selection was indirect due to the lottery being conducted based on individual project selection, and the criteria to participate in the lottery was primarily centered on the vendor approval, with the vendors representing the developers and installers.

In order to participate in the lottery, vendor applications were first subjected to the review and approval of the program administrator (InClime, Inc.), and only approved vendors could have projects in the lottery. Vendor approval was based on various legal and regulatory requirements regarding both the vendor itself and its owners. Along with the requirements that needed to be met by the vendor, the vendor also had to provide support showing that the installer it intended to use met legal and regulatory requirements. In addition, technical specifications and documentation supporting that the vendor/developer was contractually bound to the project was required for each individual project.

According to the IPA, approved vendors were required to have the legal authority to conduct business in Illinois and have an account with a renewable energy credit tracking system. Additionally, certain legal requirements had to be met along with being current on their taxes. Each individual project was required to submit proof of a shading study (an analysis conducted regarding how the shade from nearby objects could affect energy output), proof that it had control of the project site, and, if the project was over 25 kW, a signed interconnection agreement with the utility. The vendor also had to attest to having all the necessary permits for the project, and provide a listing of all such permits for sampling and verification by the program administrator. If these criteria was met, the project was then eligible to be included in the lottery process.

The online portal for project submission opened on January 30, 2019, with the initial window for submission being 14 days long. The initial review of the applications was completed on March 26, 2019, with an additional 14 days being afforded for vendors to make corrections and requested clarifications. As specified in the Long-Term Renewable Resources Procurement Plan, after that 14 day period if the applications exceeded the available capacity, a random selection process (or "lottery") would be conducted across qualified, eligible applicant projects for project selection.

As a result of initial applications, a lottery was required for community solar projects in both Group A and Group B. A lottery was also held for the large distributed generation category for Group A, although due to the IPA's allocation of discretionary capacity, that lottery assigned those projects to blocks 1 through 3 (and additional project applications were subsequently accepted in block 4). Small distributed generation projects in both Groups A and B and large distributed generation projects in Group B were not subject to a lottery.

On March 27, 2019, the IPA announced the time and place of the lottery, which would publicly take place in the James R. Thompson Center auditorium on April 10, 2019. The lottery was conducted via the remote execution of a program that

was stored on a remote server external to the Illinois Power Agency, with the database used by the program also being stored remotely. The projects the procurement administrator had verified were entered into the database along with the project's application ID number. The core of the program was based around the utilization of SQL's RAND function, with the seed fed to it being based on the microsecond timing that the button that executed the code was pressed. The program would then create an ordinal rank based on this random function's interaction with project application ID. The generated seed value was provided alongside the results, and communication between the local lottery computer and the remote server was SSL encrypted. Beyond this core function there was an additional process that automatically bumped any projects that the lottery program selected to the next block or waiting list should the developer for that project have already reached its 20 percent cap for the block. However, the day following the lottery the IPA publicly announced that this specific process did not execute for block 3, allowing a developer to initially be allocated a capacity that exceeded the set limit. This resulted in the IPA needing to make a manual adjustment to the results where the project that exceed the developer cap was shifted from block 3 to block 4. All other projects that would have exceeded the total capacity of the blocks were then placed on a waitlist in the order created by the lottery program. The ultimate effect of this manual adjustment appeared to be minimal, resulting in the movement of one project from block 3 to block 4 (with the corresponding 4 percent reduction in REC price) without any noted complaint from the approved vendor.

Exhibit 17 shows the number of contracts awarded in each of the block categories since the passage of the Future Energy Jobs Act. A total of 11,970 of the 18,281 (65%) projects contracted through the Adjustable Block Program were assigned to Block 1. Small distributed solar projects with a nameplate capacity of less than 10 kW made up 87 percent of the projects (15,827 of 18,281). The majority of these small distributed generation projects (12,021 of 15,827) or 76 percent were in Group B, which was for ComEd, rural electric cooperatives, and municipal utilities in Northern Illinois.

Block 3 saw the least amount of contracts with 44 projects. Block 5 has not yet opened. Community solar contracts consisted only of large-scale projects with nameplate capacities ranging from 200-2,000 kW. Overall, the number of projects skewed towards small projects within Group B which is consistent with the larger population served by ComEd.

Exhibit 17
NUMBER OF PROJECTS AWARDED TO EACH BLOCK[1]
As of October 21, 2020

Block Group	Block Category		Block 1	Block 2	Block 3	Block 4	Block 5
Group A (Ameren Illinois, MidAmerican, Mt. Carmel, Rural Electric Cooperatives, and Municipal Utilities)	Small	≤10 kW	2,929	876	1	n/a	n/a
	Large	>10-25 kW	113	0	14	477	n/a
		>25-100 kW	66	0	8	217	n/a
		>100-200 kW	22	0	2	50	n/a
		>200-500 kW	19	0	4	59	n/a
		>500-2,000 kW	21	0	3	50	n/a
	Community Solar	≤10 kW	0	0	0	0	n/a
		>10-25 kW	0	0	0	0	n/a
		>25-100 kW	0	0	0	0	n/a
		>100-200 kW	0	0	0	0	n/a
		>200-500 kW	1	0	0	0	n/a
		>500-2,000 kW	22	0	3	8	n/a
		Co-located systems > 2 MW in aggregate size[2]	2	0	0	0	n/a
Group B (ComEd, and Rural Electric Cooperatives and Municipal Utilities)	Small	≤10 kW	8,427	3,594	0	n/a	n/a
	Large	>10-25 kW	119	210	0	495	n/a
		>25-100 kW	56	10	0	107	n/a
		>100-200 kW	22	4	0	31	n/a
		>200-500 kW	49	2	0	35	n/a
		>500-2,000 kW	55	6	0	17	n/a
	Community Solar	≤10 kW	0	0	0	0	n/a
		>10-25 kW	0	0	0	0	n/a
		>25-100 kW	0	0	0	0	n/a
		>100-200 kW	0	0	0	0	n/a
		>200-500 kW	0	0	0	0	n/a
		>500-2,000 kW	49	0	9	19	n/a
		Co-located systems > 2 MW in aggregate size[2]	2	0	1	1	n/a
		Totals	**11,970**	**4,702**	**44**	**1,565**	n/a

[1] If projects were 200 percent of block size in initial applications, the lottery combined two blocks into a single block. Then additional projects selected were put into the next blocks.

[2] Co-located systems > 2 MW in aggregate size are included in the totals above.

Source: Information provided by the IPA.

Community Solar Project Developers

Developers of community solar facilities are located both within and outside of Illinois; however, the projects themselves must be located in Illinois. Of the 406 total approved vendors, 67 have renewable energy credit delivery contracts for community solar projects.

Based on data provided by the IPA, auditors concluded that the IPA tracked changes in community solar facility ownership. At the time of ICC approval, there were 34 approved vendors with a renewable energy credit delivery contract developing 111 community solar projects in Illinois. For these 34 approved vendors, auditors found that five (15%) were headquartered in Illinois. The remaining 29 approved vendors were headquartered in 14 other states. Information from the IPA showed the original 34 vendors sold projects to other vendors, and as of October 2020, there were now 67 vendors with a renewable energy credit delivery contract developing the 111 community solar projects in Illinois. For these 67 approved vendors, auditors found that 10 (15%) were headquartered in Illinois. The remaining 57 approved vendors were headquartered in 11 other states.

Legislative Audit Commission Resolution Number 153 asked auditors to determine whether developers of community solar facilities are located within or outside of Illinois. The Illinois Power Agency describes actual developers as the companies who develop community solar projects, regardless of the location of the projects themselves. The IPA noted that the developers mentioned in this determination should be referred to as approved vendors. According to the IPA, companies are not required to be incorporated in or have primary business offices in any specific location. Additionally, there is no requirement in the Illinois Power Agency Act (or in the ICC's Order approving the IPA's Long-Term Renewable Resources Procurement Plan) specifying any minimum number or percentage of developers that must be based in Illinois. Thus, an out-of-state "business office" (or the state of incorporation of those firms) would not be a valid basis for rejecting a company's approved vendor application. According to the Long-Term Renewable Resources Procurement Plan, IPA officials presumed that based on the requirements found in the Illinois Power Agency Act, both distributed renewable energy devices and community renewable generation projects must be located in Illinois to be interconnected at the distribution system level to the entities prescribed.

Location of Business Headquarters

Auditors determined that developers of community solar facilities are located both within and outside of Illinois. According to approved vendor project application information provided by the IPA, as of October 2020, there were 406 total approved vendors within the IPA's Adjustable Block Program. Of the 406 total approved vendors, 67 have renewable energy credit delivery contracts for community solar projects. As shown in **Exhibit 18**, for these 67 vendors, 10 (15%) are headquartered in Illinois. The other 57 (85%) are headquartered in 11 other states.

Exhibit 18
NUMBER OF ILLINOIS COMMUNITY SOLAR APPROVED VENDORS BY STATE OF BUSINESS HEADQUARTERS
As of October 15, 2020

State	Number of Vendors
California	19
Massachusetts	12
Illinois	**10**
New Jersey	6
Connecticut	5
New York	4
Virginia	4
Maryland	2
Minnesota	2
Colorado	1
Florida	1
Pennsylvania	1
Total	**67**

Source: Data provided by the IPA.

In total, the 67 vendors are responsible for 111 community solar projects located in Illinois. The 10 vendors headquartered in Illinois are responsible for 13 community solar projects. The 57 other vendors headquartered in other states are responsible for 98 community solar projects. Vendors headquartered in California make up 28 percent of all Illinois' community solar project vendors.

Changes in Community Solar Facility Ownership

Legislative Audit Commission Resolution Number 153 also asked auditors to determine if the IPA tracked whether the owners of community solar facilities have changed ownership or registered in another state since being awarded Renewable Energy Credits under the program.

Based on data provided by the IPA, auditors concluded that the IPA tracked changes in community solar facility ownership. According to the IPA, ownership of community solar projects is tracked through the prerequisite that any community solar project developer be owned or partially owned by the approved vendor, which requires obtaining and verifying information on business registration and authority through the approved vendor application process. Renewal applications must be submitted to renew each approved vendor's status annually.

The IPA noted there are at least two ways in which ownership of a community solar project could change: 1) through an approved vendor's assignment of the project itself to another approved vendor; or 2) through a change in ownership of the approved vendor itself. In addition to the approved vendor application and annual renewal process, an approved vendor who changes ownership was

required to provide an update of its new ownership information to its approved vendor profile in the vendor portal.

Community solar projects are part of the Adjustable Block Program, which is administered by the IPA's program administrator, InClime, Inc. InClime requested documentation of changes in ownership be provided to support the updates made in the Adjustable Block Program portal. Once InClime was informed that the sale of an approved vendor took place, InClime tracked the status of recording the sale and effecting the transfer process in the Adjustable Block Program portal to ensure that documentation was obtained and noted in order.

Exhibit 19
CHANGE OF OWNERSHIP FOR ILLINOIS COMMUNITY SOLAR APPROVED VENDORS
At Time of ICC Approval vs. October 15, 2020

State	Number of Vendors at Time of Approval by the ICC	Number of Vendors as of October 2020
California	3	19
Colorado	2	1
Connecticut	2	5
Florida	2	1
Georgia	1	0
Illinois	**5**	**10**
Massachusetts	3	12
Maryland	4	2
Minnesota	3	2
Nebraska	1	0
New Jersey	1	6
New York	0	4
Ohio	2	0
Pennsylvania	2	1
Virginia	2	4
Washington	1	0
Totals	**34**	**67**

Source: Data provided by the IPA.

The IPA provided auditors with data related to whether the owners of community solar facilities have changed ownership or are now registered in another state. According to the IPA, at the time of ICC approval, there were 34 approved vendors with a renewable energy credit delivery contract developing 111 community solar projects in Illinois. As shown in **Exhibit 19**, for these 34 approved vendors, auditors found that 5 (15%) were headquartered in Illinois. The remaining 29 approved vendors were headquartered in 14 other states.

Information from IPA showed the original 34 vendors sold projects to other vendors, and as of October 2020, there were now 67 vendors with a renewable energy credit delivery contract developing the 111 community solar projects in Illinois. For these 67 approved vendors, auditors found that 10 (15%) were headquartered in Illinois. The remaining 57 approved vendors were headquartered in 11 other states.

Diverse Solar Development Companies

There are rules and provisions designed to ensure that small, downstate vendors, as well as minority and women-owned businesses are not discriminated against when being selected for projects. Additionally, Section 1-75(c)(7) of the Illinois Power Agency Act contains a requirement that REC procurements conducted by the IPA shall provide employment opportunities for all segments of the population and workforce, including minority and female-owned business enterprises. This provision also prohibits discrimination based on race or socioeconomic status, consistent with State and federal law.

Legislative Audit Commission Resolution Number 153 asked auditors to determine whether there are any rules in the procurement process that ensure diverse companies are being utilized for solar development projects. Due to the unclear nature of the term 'diverse companies' and the nature of the discussion with the IPA surrounding the term, auditors reviewed documents related to geography, size, and minority and woman-owned businesses. There are rules and provisions designed to ensure that small, downstate vendors, as well as minority and women-owned businesses, are not discriminated against when being selected for projects.

The IPA explained in its November 28, 2018, Lottery Guidance Document that many commenters supported the introduction of a significant pre-bid collateral requirement. IPA officials noted they chose not to adopt this proposal because they were concerned that a significant pre-bid collateral requirement would be more easily managed by larger project developers with easier access to capital, while potentially unfairly penalizing smaller vendors.

Also, Section 7.3.1 of the final Long-Term Renewable Resources Procurement Plan says that no approved vendor may apply to the Adjustable Block Program for more than four megawatts (MW) of Community Solar projects on the same or contiguous parcels. This section also says that a parcel of land may not have been divided into multiple parcels in the two years prior to the project application or bid in order to circumvent this policy, and if a parcel has been divided within that time period, this requirement will apply to the boundaries of the larger parcel prior to its division. If there are multiple projects owned or developed by a single entity (or its affiliates) located on one parcel of land, or on contiguous parcels of land, any size-based adders will be based on the total size of the projects owned or developed on the contiguous parcels by that single entity or its affiliates.

According to the IPA, while these provisions are meant to encourage the selection of small vendors, there are also provisions in place to help prevent discrimination based on race, gender, and other sociocultural aspects. These include:

1. Section 1-75(c)(7) of the Illinois Power Agency Act contains a requirement that REC procurements conducted by the IPA shall provide employment opportunities for all segments of the population and workforce, including minority and female-owned business enterprises. This provision also prohibits discrimination based on race or socioeconomic status, consistent with State and federal law.

2. Section 6.14.3 of the initial Long-Term Renewable Resources Procurement Plan reduces the approved vendors' initial batch size requirement from 100 kilowatt (kW) to 50 kW for minority-owned and female-owned businesses, as well as small businesses. The 100 kW batch size requirement was included in the initial Plan to reduce the administrative burden on contracting utilities and requires that approved vendors must submit project applications in batches of at least 100 kW in total projects (a typical residential distributed generation project in Illinois is about 7 kW in size). Reducing this initial batch requirement to 50 kW is beneficial for smaller minority-owned and women-owned companies, as those companies may not be submitting vast portfolios of projects into the Program.

   The IPA also adopted a program participation model allowing for direct participation as an "approved vendor" by aggregator entities (entities that might themselves not actually develop solar projects, but that could facilitate program participation on behalf of multiple smaller entities which do develop solar projects). These entities may not individually have the resources to serve as an approved vendor and, as a result, a smaller woman or minority-owned solar installer could participate in the program by partnering with a firm that works as an aggregator.

3. Section 6.17 of the final Long-Term Renewable Resources Procurement Plan requires that approved vendors report information related to ongoing program participation, including use of graduates of job training programs and other information related to increasing the diversity of the solar workforce.

   The IPA requested this data in the form of direct and indirect employees to distinguish between employees of the approved vendor and employees of its subcontractors. This requirement was specified further to only include reporting on the Illinois-based workforce. **Exhibit 20** summarizes the results of this data collection by the IPA.

Exhibit 20
VENDOR REPORTING OF THE DIVERSITY OF THE SOLAR WORKFORCE[1]
October 2020

	Direct (FTE)	Indirect (FTE)	Total (FTE)	Direct (%)	Indirect (%)	Totals (%)
RACE						
-Black or African-American	191	345	536	10.5%	12.5%	11.6%
-Hispanic or Latinix	230	693	923	12.6%	25.1%	19.9%
-Asian	47	31	78	2.6%	1.1%	1.7%
-American Indian or Alaska Native	4	6	10	0.2%	0.2%	0.2%
-Native Hawaiian or Other Pacific Islander	9	11	20	0.5%	0.4%	0.4%
-Two or more races	28	134	162	1.5%	4.8%	3.5%
GENDER						
-Female	270	351	621	14.8%	12.7%	13.4%
-Non Binary	2	3	5	0.1%	0.1%	0.1%
DISABLED						
-All disabled	6	8	14	0.3%	0.3%	0.3%

[1] The data is self-reported by the vendors.

Source: Data provided by the IPA.

Efficiency and Maximization of Funds Awarded and Vendor Vetting

Auditors found that the IPA, the ICC, and their contractual program administrators and monitors operate the program in accordance with the Illinois Power Agency Act and the Long-Term Renewable Resources Procurement Plan. Auditors concluded the process in place was both efficient and maximized the dollars spent to increase the renewable portfolio standard in Illinois for the competitive procurement process. However, auditors could not find criteria to use to determine whether funds were maximized or whether they were spent efficiently for the Adjustable Block Program. While criteria could not be identified, the process of determining renewable energy credit prices for the Adjustable Block Program was subject to a public comment process and litigated proceeding before the ICC as required by the law, and the IPA's prices utilized were consistent with the Illinois Commerce Commission's Order. Therefore, prices for RECs were determined through extensive regulatory proceedings.

Illinois has not met the percentage-based renewable energy goals identified in the Illinois Power Agency Act (Act). IPA officials stated that procured renewable energy as a percentage of the overall energy produced would be about 10 percent for 2019. However, Section 1-75(c)(1)(B) requires the procurement of renewable energy credits to be at least 16 percent of the overall electricity produced by June 1, 2019, which suggests that the dollars may not have been maximized. According to IPA officials, the IPA had proposed in the 2018 Long-Term Renewable Resources Procurement Plan annual procurements designed to meet the percentage-based goals; however, the ICC in approving that Plan did not approve those annual procurements. That decision shifted the focus of the IPA's authorized procurements away from meeting the percentage goals and focused only on meeting the quantitative targets for new wind and solar. However, since the percentage-based goals are not being met, it likely means that future renewable energy goals will not be able to be met timely.

The IPA has an extensive vendor approval process. Vendors are required to renew their certification once a year. The process used to approve vendors includes the same factors used when selecting vendors for community and rooftop solar. The other factors used include the project's location, size, estimated REC production, equipment, and installation company. During the annual financial audits of the IPA, auditors reviewed this process and found no issues.

Efficiency and Maximization of Funds Awarded

Legislative Audit Commission Resolution Number 153 asked whether the IPA could demonstrate that the funds awarded under this program were spent efficiently, that the vendors receiving contracts were fully vetted, and whether dollars were being maximized to increase the renewable portfolio standard. Utility-scale wind, utility-scale solar, and photovoltaic Brownfield projects are awarded competitively, while the Adjustable Block Program uses administratively set renewable energy credit prices instead of a competitive bid process.

Competitive Procurement Process

Other than for Adjustable Block Program projects, projects were awarded by competitive procurement. Therefore, utility-scale wind, utility-scale solar, and photovoltaic Brownfield projects are awarded competitively. This includes a request for proposal being issued and bidders submitting projects and a bid price.

This is, by design, a process to select the lowest priced projects submitted for the quantity of renewable energy credits sought. According to the IPA, "This is inherently an efficient process of price discovery because it harnesses market and competitive forces." Auditors reviewed the process in place for the competitive procurement of renewable energy credits and found that the process was overseen by contractual administrators and monitors and final decisions were approved by the ICC. As a result, there were controls in place to monitor the competitive procurement of renewable energy credits. Auditors concluded the process in place was both efficient and maximized the dollars spent to increase the renewable portfolio standard in Illinois for the competitive procurement process.

Administratively Set Renewable Energy Credit Prices

The Adjustable Block Program uses administratively set renewable energy credit prices instead of a competitive bid process. Section 1-75(C)(1)(K) of the Illinois Power Agency Act (20 ILCS 3855) requires prices to be set administratively. According to the Act, "The Adjustable Block program shall be designed to provide a transparent schedule of prices and quantities to enable the photovoltaic market to scale up and for renewable energy credit prices to adjust at a predictable rate over time. The prices set by the Adjustable Block program can be reflected as a set value or as the product of a formula."

While criteria could not be identified, the process of determining renewable energy credit prices for the Adjustable Block Program was subject to a public comment process and litigated proceeding before the ICC as required by the law, and the IPA's prices utilized were consistent with the Illinois Commerce Commission's Order. Therefore, prices for RECs were determined through extensive regulatory proceedings.

Block prices were established through stakeholder input and ICC approval of the Long-Term Renewable Resources Procurement Plan and the methodologies for determining the block prices. The pricing methodology included a provision that the renewable energy credit prices decline by four percent between each block of capacity. The IPA believes this is a "mechanism to harness ongoing market efficiencies as the solar market in Illinois matures." IPA officials believe the process in place was an efficient way to establish block prices.

The IPA may define different block sizes, purchase prices, or other distinct terms and conditions for projects located in different utility service territories if it deems it necessary to meet its goals. According to the Public Act 99-906, the Adjustable Block Program shall be designed to ensure that renewable energy credits are procured from photovoltaic distributed renewable energy generation devices and new photovoltaic community renewable energy generation projects in diverse locations and are not concentrated in a few geographic areas.

Auditors could not identify specific criteria to evaluate how these prices were to be determined or how efficient use would be defined. Thus, it was not possible to determine whether funds were spent efficiently or whether the dollars were maximized in order to increase the renewable portfolio standard. Auditors were able to review how the prices were established. However, without specific

criteria in statute or administrative rules for determining these prices, the only way to determine whether the funds were spent efficiently would be to review whether the vendors were producing the renewable energy credits that were agreed upon in the contract. None of the Community Solar projects had been "energized" by October 2020; therefore, auditors could not determine whether these vendors were able to produce the amount of renewable energy credits agreed upon in the contract. According to the IPA, the REC delivery contracts developed for the program contain financial penalties in the case of non-delivery.

Further, Illinois has not met the percentage-based renewable energy goals identified in the Illinois Power Agency Act. Section 1-75(c)(1)(B) requires the procurement of renewable energy credits to be at least 16 percent of the overall electricity produced by June 1, 2019, which suggests that the dollars may not have been maximized. According to data from the U.S. Energy Information Administration, only 9 percent of the energy in Illinois comes from renewables as of 2019. Additionally, IPA officials stated that procured renewable energy as a percentage of the overall energy produced would be about 10 percent. IPA officials noted that there is no way for them to measure how much of the total has been procured since contracts are for 15 years and none of the Community Solar projects had been energized as of October 2020.

According to Section 1-75(c)(1)(F) of the Illinois Power Agency Act, in the event of a conflict between the percentage-based goals found in Section 1-75(c)(1)(B) and the new wind and new photovoltaic procurement requirements, the Long-Term Renewable Resources Procurement Plan shall prioritize compliance with the new wind and new photovoltaic procurement requirement over the annual percentage target for 2019 described above. According to IPA officials, while the IPA had proposed annual procurements designed to meet these percentage-based goals as part of its 2018 Long-Term Renewable Resources Procurement Plan, the ICC in approving that Plan did not approve those annual procurements. That decision shifted the focus of the IPA's authorized procurements away from meeting the percentage goals discussed above and focused only on meeting the quantitative targets for new wind and solar. Since the current percentage-based goals of Section 1-75(c)(1)(B) are not being met, it likely means that future renewable energy goals will not be able to be met timely.

Renewable Energy Percentage-Based Procurement Goals

RECOMMENDATION NUMBER 1

The Illinois Power Agency should continue to work to meet the renewable energy percentage-based procurement goals required by 20 ILCS 3855/1-75(c)(1)(B).

IPA Response: The Agency agrees with this recommendation. As explained within the audit report, the RPS portion of the Illinois Power Agency Act (20 ILCS 3855/1-75(c)) contains a variety of targets and goals. Section 1-75(c)(1)(B) of the IPA contains percentage-based goals for renewable energy credit ("REC") procurement (concluding with "25% by 2025"), while Section 1-75(c)(1)(C) of the Act contains quantitative procurement targets for RECs from "new" wind and solar projects. Under Section 1-75(c)(1)(F) of the Act, those "new" project targets take precedence over the procurement of RECs to meet Section 1-75(c)(1)(B)'s percentage-based goals, thus indicating a preference for REC delivery contracts used to ensure new renewable energy projects are developed rather than RECs simply brought under contract generally.

As required by Section 16-111.5(b)(5) of the Public Utilities Act and Section 1-75(c)(1)(A) of the IPA Act, the Agency's operational activities to support the Illinois Renewable Portfolio Standard are outlined in its Long-Term Renewable Resources Procurement Plan ("Long-Term Plan"). The Agency's Initial Long-Term Plan was initially developed in 2017 and approved by the Illinois Commerce Commission ("ICC") in 2018. By law, the Agency can only undertake procurements and programs contained within the Long-Term Plan, and thus its RPS implementation activities are subject to the determinations made by the ICC in approving that biennially-developed Plan.

In 2017, as part of its Initial Long-Term Plan filed with the Commission, the Illinois Power Agency proposed "Spot Procurements" – one-year REC procurements intended to meet the percentage-based targets of Section 1-75(c)(1)(B) of the IPA Act – as a procurement strategy. A number of intervenors in that proceeding (ICC Docket No. 17-0838) objected to the IPA's Spot Procurement proposal, arguing instead that any available RPS budget funds should be leveraged only to support new project development. While the IPA defended its Spot Procurement proposal through briefs filed with the ICC, the Commission ultimately sided with those intervenors, and thus specific procurement events targeted to meet Section 1-75(c)(1)(B)'s percentage-based targets were not authorized by the Illinois Commerce Commission.

To be clear, the ICC's determination on this proposal has merit. Ensuring that all available RPS budget resources are focused on ensuring new projects are developed may indeed constitute better public policy than simply procuring RECs from facilities already built and financed (which would provide a higher percentage of RPS compliance, but without the benefit of new projects being developed), and the Commission's decision is consistent with the spirit informing Section 1-75(c)(1)(F)'s "new project" prioritization outlined above. But because the IPA lacked administrative authority to conduct REC procurements targeted specifically to meet these percentage-based goals of Section 1-75(c)(1)(B) of the IPA Act, the IPA could not previously make progress on this recommendation.

Under Illinois law, the IPA's Long-Term Plan is to be updated biennially. In light of this recommendation, to the extent that the Agency can propose procurements in *future* Long-Term Plans to meet those percentage-based goals, the Agency will endeavor to do so to satisfy this recommendation. However, as outlined in the Agency's December 28, 2020 RPS Funding and Budget Update (and later through the IPA's March 3, 2021 Petition to Reopen ICC Docket No. 19-0995), RPS funding limitations and structural constraints present significant challenges to the viability of such procurements in the short- and medium-terms. Those challenges will first need to be addressed legislatively, and the Agency appreciates the comprehensive ongoing work of the Illinois General Assembly in crafting omnibus energy legislation this session.

Vetting of Vendors

IPA has an extensive vendor approval process. Vendors are required to renew their certification once a year. The process used to approve vendors includes the factors used when selecting vendors for community and rooftop solar. During the annual financial audits of the IPA, auditors reviewed this process and found no issues. The following information is collected on the approved vendor application:

1. Legal business entity name;
2. Any Doing Business As ("DBA") name;
3. Address of principal place of business;
4. Name, phone number, and email address of primary point of contact responsible for the company's day-to-day interaction with the Adjustable Block Program;
5. Telephone number of company;
6. Ownership structure, including any affiliated businesses either owned or partially owned by the proposed approved vendor or who have ownership of all or part of the approved vendor;
7. Employer Identification Number ("EIN");
8. Business Type (Corporation, LLC, LP, LLP, General Partnership, Nonprofit, Sole Proprietor, Other);
9. A listing of shareholders, owners, partners or proprietors with ownership interests in excess of 5 percent and the amount of their respective ownership interests (not required for public companies);
10. Business entity home state of registration;
11. Other states where entity is registered to do business;
12. Business entity date of organization/incorporation in home state;
13. Must exist as a legal entity and be authorized to do business in Illinois. Must upload an Illinois Secretary of State statement of good standing dated within the past 12 months if a corporation, LLC, or non-profit;
14. Is the company engaged in installing distributed generation projects in Illinois? If yes, provide proof of Distributed Generation Installer Certification from the Illinois Commerce Commission, in the form of the Commission's order in the certification docket granting the company's certificate;
15. Provide a printout of either PJM-GATS (Generation Attribute Tracking System) or M-RETS (Midwest Renewable Energy Tracking System) aggregator account ownership confirmation;
16. Company website;
17. Is this an application for a Single Project approved vendor;

18. Is this approved vendor an affiliate (as defined in Section 7.3.1 of the Long-Term Renewable Resources Procurement Plan) of any other approved vendor or current or intended approved vendor applicant? If yes, provide the name(s) of affiliated approved vendor or applicant;
19. Are you a minority-owned or female-owned business enterprise as specified in Section 1-75(c)(7) of the Illinois Power Agency Act (20 ILCS 3855) or a small business as defined in the Small Business Advisory Act (20 ILCS 692/5) who would like to be eligible for an initial batch size of 50 kW;
20. Within the past five (5) years, has the business; any affiliate of the business that is engaged in operations in the U.S. related to energy; or any current or former owner (not including public shareholders), partner, director, officer, principal, or any person in a position involved in the administration of funds, or currently or formerly having the authority to sign, execute or approve contracts for the business:
    (a) Been sanctioned or proposed for sanction relative to any business or professional permit or license?
    (b) Been under suspension, debarment, voluntary exclusion or determined ineligible under any federal or state statutes?
    (c) Been proposed for suspension or debarment?
    (d) Been the subject of an investigation, whether open or closed, by any government entity for a civil or criminal violation for any business-related conduct?
    (e) Been charged with a misdemeanor or felony, indicted, granted immunity, convicted of a crime, or subject to a judgment or a plea bargain for:
        i) Misappropriation of funds or property;
        ii) A criminal act that reflects adversely on the individual's honesty;
        iii) Actual loss to the company or other person; or
        iv) Dishonesty, fraud, deceit, or misrepresentation.
    (f) Been suspended, cancelled, terminated or found non-responsible on any contract, or had a surety called upon to complete an awarded contract?
21. Within the past five (5) years, has the proposed Approved vendor or any of its affiliates that are or were engaged in operations in the U.S. related to energy had any judgments filed against it which remain undischarged? If yes, provide an explanation of the issue(s), relevant dates, the Claimant's name, the amount of the judgment, and the current status of the issue(s).
22. Within the last seven (7) years, has the proposed Approved vendor or any of its affiliates initiated or been the subject of any bankruptcy proceedings,

whether or not closed, or is any bankruptcy proceeding pending? If so, provide the Bankruptcy Code chapter number, the court name, and the docket number. Indicate the current status of the proceedings as "initiated," "pending," or "closed."

23. Within the last seven (7) years, has any owner with greater than 15 percent ownership or principal of the proposed Approved vendor or any of its affiliates been the owner or a principal (with greater than 15 percent ownership) in a company subject to any bankruptcy proceedings, whether or not closed, or that is currently in any bankruptcy proceeding pending? If so, provide the Bankruptcy Code chapter number, the court name, and the docket number. Indicate the current status of the proceedings as "initiated," "pending," or "closed."
24. During the past five (5) years, has the proposed approved vendor or any of its affiliates failed to file a tax return or fully pay taxes according to deadlines required by federal, state, or local laws in the amount of $10,000 or more? If yes, provide the taxing jurisdiction, the type of tax, the liability year(s), the tax liability amount the proposed approved vendor failed to file/pay, and the current status of the tax liability.
25. During the past five (5) years, has the proposed approved vendor or any of its affiliates that are or were engaged in operations in the U.S. related to energy been audited by any government entity resulting in a negative audit finding or requirement for remedial action? If yes, provide an explanation of the issue(s) under investigation, relevant dates, the government entity involved, any remedial or corrective action(s) taken, and the current status of the issue(s).
26. During the past five (5) years, has the proposed approved vendor or any of its affiliates that are or were engaged in operations in the U.S. related to energy been the subject of any judgment or settlement as the result of by any public consumer protection authority (including but not limited to a federal/state/local attorney general's office, consumer protection bureau, or other consumer protection entity) in any jurisdiction? If yes, provide any remedial or corrective actions(s) taken and current status of the issue(s).
27. During the past five (5) years, has the proposed approved vendor or any of its affiliates that are engaged in operations in the U.S. related to energy been the subject of any unresolved Better Business Bureau complaints in any jurisdiction? If yes, provide any remedial or corrective actions(s) taken and current status of the issue(s).
28. During the past five (5) years, has the proposed approved vendor or any of its affiliates that are or were engaged in operations in the U.S. related to energy been the subject of any judgment or settlement as the result of lawsuits filed in a court of law or formal complaints filed with a regulatory agency alleging fraud, deception or unfair marketing practices, or other similar allegations? If yes, please identify the name, case number, and jurisdiction of each such lawsuit or complaint, any remedial or corrective action(s) taken, and the current status of the lawsuit or complaint.

29. During the past five (5) years, has the proposed approved vendor or its affiliates that are or were engaged in operations in the U.S. related to energy been suspended from participation or denied the ability to participate in a government or utility administered renewable energy incentive program? If yes, provide the name of the program and jurisdiction, an explanation of the issue(s), and the current status of the issue(s).
30. The utility service territory or territories in which the approved vendor seeks to operate (ComEd, Ameren Illinois, MidAmerican, municipal utility/rural electric cooperatives).
31. Type of approved vendor (may select more than one): DG Installer, Community Solar Project Developer, SREC broker/aggregator, non-profit, other.
32. Do you intend to participate in the Illinois Solar for All Program?
33. Do you consent to be contacted by representatives from solar job training programs in Illinois?
34. Do you have corporate hiring policies in place which prohibit the hiring of individuals who have been convicted of a crime?

These questions are followed by an attestation by the vendor that it is the owner or authorized agent, that the information is true and correct, and that it will meet other requirements and terms and conditions of the program.

Following the submission of the information, the following evaluation criteria are used by the program administration to make approval decisions:

1. Must demonstrate existence as a legal entity and authorization to do business in Illinois.
2. Neither the business or its affiliates that are or were engaged in operations in the U.S. related to energy, the business's principals or owners (except public shareholders), nor any business in which the current business's owners or principals were or are associated with can have:
    (a) Been sanctioned or proposed for sanction relative to any business or professional permit or license.
    (b) Been under suspension, debarment, voluntary exclusion or determined ineligible under any federal or state statutes.
    (c) Been proposed for suspension or debarment.
    (d) Been the subject of an investigation, whether open or closed, by any government entity for a civil or criminal violation for any business-related conduct.
    (e) Been charged with a misdemeanor or felony, indicted, granted immunity, convicted of a crime, or subject to a judgment or a plea bargain for:
        (i) Any business-related activity; or

(ii) Any crime the underlying conduct of which was related to truthfulness.

(f) Been suspended, cancelled, terminated or found non-responsible on any contract, or had a surety called upon to complete an awarded contract.

3. Must not have had any judgments filed against it in the past 5 years which remain undischarged, unless an explanation acceptable to the administrator and IPA is provided.
4. If the company or any of its affiliates or any principal or owner with greater than 15 percent ownership has initiated or been the subject of any bankruptcy proceedings (including for a different company where the same individual person had at least 15 percent ownership), whether or not closed, or has any bankruptcy proceeding pending, the administrator and IPA will determine if the potential approved vendor is a risk for default on future approved vendor contracts. This decision will be based on the totality of the information provided including current financial statements, the circumstances of past bankruptcies, the time since the last bankruptcy, the role of the individual involved in the past bankruptcy, recent tax payment history, and any recent or pending judgements or investigations that might impact the company's financial standing.
5. The company must be current on all required taxes, based on local, state, and federal law. Past non-payment of taxes over $10,000 will be considered in conjunction with other factors in determining an approved vendor's eligibility.
6. Any issues found during any governmental audits during the past 5 years will be considered in conjunction with other factors in determining an approved vendor's eligibility. The mere fact that an audit was conducted with no negative results will not reflect negatively on the approved vendor's application.
7. Any regulatory or consumer complaints and their remedial actions will be screened by the approved vendor and IPA to determine if there is a pattern of violations or unresolved consumer protection issues with the company. The frequency and severity of the past issues, as well as the approved vendor's explanations of resolution and any processes put in place to prevent reoccurrence will be taken into account.
8. Approved vendors will be provided the option to request confidential treatment of specific sections of their application based on exemptions listed in 5 ILCS 140 (Illinois Freedom of Information Act). Such requests may be submitted by email or mail on company letterhead and must list the exemption claimed and the reasoning behind the claim.
9. The company must demonstrate either PJM-GATS or M-RETS aggregator account ownership (platforms used to buy and sell RECs).
10. Additional information collected such as number of employees, type of company, management structure, etc. will be used by the administrator to

more thoroughly evaluate the applicant if there are any questions that arise from other parts of the approved vendor application.

11. The company must provide an initial representative sample of marketing materials for each channel of marketing the company is engaged in, as part of the initial approved vendor application (for example, but not meant to be an exhaustive list: print, website, direct mail, direct email, web ads, social media, radio, telemarketing, billboards). Random audits of marketing material will be conducted regularly, and the IPA and program administrator also reserve the right to require a copy of all marketing materials should they have concerns about an approved vendor's marketing practices.
12. The IPA and the program administrator reserve the right to conditionally approve applications from prospective approved vendors that have areas of concern. A conditional approval will require six month updates rather than the normal one year updates of the approved vendor application.

Appendix A
Legislative Audit Commission Resolution Number 153

Legislative Audit Commission

RESOLUTION NO. 153
Presented by Senator Barickman

WHEREAS, The Future Energy Jobs Act was billed as the long-awaited solution to enable Illinois to meet the Renewable Portfolio Standard; and

WHEREAS, The Future Energy Jobs Act provided the Illinois Power Agency with a healthy annual budget of approximately $230,000,000 per year to implement a plan to meet the Renewable Portfolio Standard target of 25% by 2025; and

WHEREAS, Despite committing approximately $900,000,000, to procure Renewable Energy Credits through community land rooftop solar, only 7-8% of renewable energy development is under contract today, well short of the mandated requirement of 19% for 2021; and

WHEREAS, Despite an Illinois renewable portfolio standard being in place since 2008, currently only about 2% of Illinois load is covered by renewable energy credit purchases, far short of the current renewable portfolio standard requirement of 16% for 2019; and

WHEREAS, The price for community solar Renewable Energy Credits has been more than 17 times higher than large scale Renewable Energy Credits procured from the competitive marketplace. Developer applications for community solar Renewable Energy Credits were 23 times in excess of the Renewable Energy Credits available; and

WHEREAS, Funds for renewable development under the Future Energy Jobs Act have been exhausted through 2021, with no plans for additional renewable purchases; and

WHEREAS, The Illinois Power Agency has broad authority to administer the program as it deems appropriate; and

WHEREAS, Stakeholders have expressed concerns to the Illinois Power Agency regarding the management of the community and rooftop solar (Adjustable Block) programs; therefore, be it

BE IT RESOLVED, BY THE LEGISLATIVE AUDIT COMMISSION, that the Auditor General is directed to conduct a performance audit of the Illinois renewable portfolio standard and the Illinois Power Agency's management of the Renewable Energy Credit procurement process and Adjustable Block Grant Program; and be it further

RESOLVED, that the performance audit include, but not be limited to, the following determinations:

(1) A determination of the average price of renewable energy credits under contract entered into by electric utilities in the state since June 1, 2017 for the following:
   a. Utility scale wind renewable energy credits
   b. Utility scale solar renewable energy credits
   c. Brownfield solar renewable energy credits

d. Community solar renewable energy credits
e. Renewable energy credits from distributed solar with a nameplate capacity of no more than 10 kilowatts
f. Renewable energy credits from distributed solar with a nameplate capacity of more than 10 kilowatts but no more than 2000 kilowatts

(2) Whether the Illinois Power Agency followed established rules and regulations during the procurement process;
(3) Given that applications exceeded available Renewable Energy Credit awards by more than 20 times, how the Illinois Power Agency administratively determined the value of community solar Renewable Energy Credits;
(4) Whether the developers of these community solar facilities are located within or outside of Illinois;
(5) If the Illinois Power Agency tracked whether the owners of the community solar facilities have changed ownership or registered in another State since being awarded Renewable Energy Credits under the program;
(6) Whether the Illinois Power Agency is able to demonstrate that the funds awarded under the program are being spent efficiently and that the vendors receiving contract awards are being fully vetted;
(7) Whether the Illinois Power Agency is maximizing the use of these dollars to increase the Renewable Portfolio Standard for the State of Illinois;
(8) What factors the Illinois Power Agency used when selecting winning developers related to community and rooftop solar; and
(9) Whether there are any rules in the procurement process that ensure diverse companies are being utilized for solar development projects; and be it further

RESOLVED, that the Illinois Power Agency and any other entity having information relevant to this audit cooperate fully and promptly with the Auditor General's Office in the conduct of this audit; and be it further

RESOLVED, that the Auditor General commence this audit as soon as possible and report his findings and recommendations upon completion in accordance with the provisions of Section 3-14 of the Illinois State Auditing Act.

Adopted this 21st day of July, 2020.

Senator Jason Barickman Co-Chair, Legislative Audit Commission	Representative Robert Rita Co-Chair, Legislative Audit Commission

Appendix B
Audit Scope and Methodology

This performance audit was conducted in accordance with generally accepted government auditing standards and the audit standards promulgated by the Office of the Auditor General at 74 Ill. Adm. Code 420.310. Audit standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives found in Legislative Audit Commission Resolution Number 153.

The audit objectives were delineated by Legislative Audit Commission Resolution Number 153, which directed the Office of the Auditor General to conduct a performance audit of the Illinois renewable portfolio standard and the IPA's management of the renewable energy credit procurement process and Adjustable Block Program. The Resolution contained several specific determinations (see Appendix A).

In conducting this audit, auditors reviewed applicable State statutes such as the Future Energy Jobs Act (Public Act 99-906), the Illinois Power Agency Act (20 ILCS 3855), and the Public Utilities Act (220 ILCS 5). Additionally, auditors reviewed policies and procedures and various reports produced by the IPA. These reports included the initial and final Long-Term Renewable Resources Procurement Plans, and the Illinois Power Agency Annual Report for Fiscal Year 2019.

Auditors reviewed management controls and assessed risk related to the audit's objectives. A risk assessment was conducted to identify areas that needed closer examination. We examined the five components of internal control – control environment, risk assessment, control activities, information and communication, and monitoring – along with the underlying principles. We considered all five components to be significant to the audit objectives and did not identify any significant weaknesses in those controls.

In conducting this audit, we provided questions for the IPA and reviewed specific documents and other information related to the IPA's management of the renewable energy credit procurement process and the Adjustable Block Program. These included written summaries of processes used, ICC Administrative Orders, procedure manuals, Adjustable Block Program lottery procedures and guidance, contract templates, and procurement and lottery summary results. Auditors also met with IPA officials numerous times to discuss the documentation provided.

We met with both auditors within our Office and Auditors from our special assistant auditors to gain an understanding of the audit work performed and to determine if we could rely on the work completed. Auditors determined the other

auditors' qualifications and independence to be adequate and found that the scope, quality, and timing of the audit work performed by the other auditors was relevant within the context of our audit objectives. These audits consisted of detailed testing over the procurement process, the bidding results, and the revenue. Specifically, auditors tested mandates found in the Illinois Power Agency Act (20 ILCS 3855/1-75(a)-(h)) and the Public Utilities Act (220 ILCS 5/16-111.5). Auditors did not find any problems or issues with the procurement events reviewed. Therefore, we determined that the procurement process used for these specific procurements had already been audited by our Office, that we could rely on the work performed, and that no problems or issues had been identified.

Auditors met with officials from the Illinois Commerce Commission to understand the role the ICC played in the renewable energy process. ICC officials indicated that the ICC approves the Long-Term Renewable Resources Procurement Plans and all of the actual procurements. It was also noted that the procurements were a very public process and that there have been no issues with the procurements.

The date of the Exit Conference and the principal attendees are noted below:

Exit Conference	**April 26, 2021**
Agency	**Name and Title**
Illinois Power Agency	• Anthony Star, Director • Brian Granahan, Legal Counsel • Mario Bohorquez, Bureau Chief (Planning & Procurement) • Sanjay Patel, Chief Operating Officer • Gloria Gibson, Chief Financial Officer
Illinois Office of the Auditor General	• Scott Wahlbrink, Senior Audit Manager • Geoff Piehl, Audit Supervisor • Michael Haskins, Audit Staff • Ryan Rizner, Audit Staff

Appendix C
Agency Responses

ILLINOIS POWER AGENCY

April 29, 2021

Honorable Frank J. Mautino
Auditor General
Illinois Office of the Auditor General
740 East Ash St.
Springfield, IL 62703-3154

Dear Auditor General Mautino,

Thank you for the opportunity to review the draft Report for the Performance Audit conducted by the Office of the Auditor General pursuant to Legislative Audit Commission Resolution Number 153. We appreciate the efforts your office took to understand the complexities of the Illinois Renewable Portfolio Standard ("RPS") and the Illinois Power Agency's ("IPA" or "Agency") operational activities, programs, and procurements undertaken in implementing that standard.

We are pleased to see this audit process confirm that the Agency has conducted RPS implementation activities in an open, transparent, and inclusive manner, and entirely consistent with Illinois law. In particular, the Agency wishes to highlight that while Legislative Audit Commission Resolution #153 focuses auditors' attention on REC pricing, the resulting Performance Audit contains no formal recommendations or adverse findings regarding the IPA's competitive procurement REC prices (under which prices are set by bidders' bids) or the Agency's administratively set REC prices for the Adjustable Block Program (under which the Agency establishes administratively set prices subject to stakeholder comment and Illinois Commerce Commission approval).

The Agency takes tremendous pride in the work that it performs on behalf of Illinois residents and businesses, and especially in the exhaustive stakeholder comment processes and Plan approval processes litigated before the Illinois Commerce Commission which shape its work. The incentive programs and competitive procurements that the IPA operates have generated explosive growth in renewable energy project development in Illinois—just as the Future Energy Jobs Act intended—allowing Section 1-75(c)(1)(C) of the IPA Act's "new wind project" and "new solar project" REC procurement targets to be met or exceeded in only a few years' time.

The Performance Audit contains one recommendation:

> *The Illinois Power Agency should continue to work to meet the renewable energy percentage-based procurement goals required by 20 ILCS 3855/1-75(c)(1)(B).*

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The Agency's formal response to the recommendation is as follows:

The Agency agrees with this recommendation.

As explained within the audit report, the RPS portion of the Illinois Power Agency Act (20 ILCS 3855/1-75(c)) contains a variety of targets and goals. Section 1-75(c)(1)(B) of the IPA contains percentage-based goals for renewable energy credit ("REC") procurement (concluding with "25% by 2025"), while Section 1-75(c)(1)(C) of the Act contains quantitative procurement targets for RECs from "new" wind and solar projects. Under Section 1-75(c)(1)(F) of the Act, those "new" project targets take precedence over the procurement of RECs to meet Section 1-75(c)(1)(B)'s percentage-based goals, thus indicating a preference for REC delivery contracts used to ensure new renewable energy projects are developed rather than RECs simply brought under contract generally.

As required by Section 16-111.5(b)(5) of the Public Utilities Act and Section 1-75(c)(1)(A) of the IPA Act, the Agency's operational activities to support the Illinois Renewable Portfolio Standard are outlined in its Long-Term Renewable Resources Procurement Plan ("Long-Term Plan"). The Agency's Initial Long-Term Plan was initially developed in 2017 and approved by the Illinois Commerce Commission ("ICC") in 2018. By law, the Agency can only undertake procurements and programs contained within the Long-Term Plan, and thus its RPS implementation activities are subject to the determinations made by the ICC in approving that biennially-developed Plan.

In 2017, as part of its Initial Long-Term Plan filed with the Commission, the Illinois Power Agency proposed "Spot Procurements" – one-year REC procurements intended to meet the percentage-based targets of Section 1-75(c)(1)(B) of the IPA Act – as a procurement strategy. A number of intervenors in that proceeding (ICC Docket No. 17-0838) objected to the IPA's Spot Procurement proposal, arguing instead that any available RPS budget funds should be leveraged only to support new project development. While the IPA defended its Spot Procurement proposal through briefs filed with the ICC, the Commission ultimately sided with those intervenors, and thus specific procurement events targeted to meet Section 1-75(c)(1)(B)'s percentage-based targets were not authorized by the Illinois Commerce Commission.

To be clear, the ICC's determination on this proposal has merit. Ensuring that all available RPS budget resources are focused on ensuring new projects are developed may indeed constitute better public policy than simply procuring RECs from facilities already built and financed (which would provide a higher percentage of RPS compliance, but without the benefit of new projects being developed), and the

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Commission's decision is consistent with the spirit informing Section 1-75(c)(1)(F)'s "new project" prioritization outlined above. But because the IPA lacked administrative authority to conduct REC procurements targeted specifically to meet these percentage-based goals of Section 1-75(c)(1)(B) of the IPA Act, the IPA could not previously make progress on this recommendation.

Under Illinois law, the IPA's Long-Term Plan is to be updated biennially. In light of this recommendation, to the extent that the Agency can propose procurements in *future* Long-Term Plans to meet those percentage-based goals, the Agency will endeavor to do so to satisfy this recommendation. However, as outlined in the Agency's December 28, 2020 RPS Funding and Budget Update (and later through the IPA's March 3, 2021 Petition to Reopen ICC Docket No. 19-0995), RPS funding limitations and structural constraints present significant challenges to the viability of such procurements in the short- and medium-terms. Those challenges will first need to be addressed legislatively, and the Agency appreciates the comprehensive ongoing work of the Illinois General Assembly in crafting omnibus energy legislation this session.

Please let us know if you have any additional questions or concerns.

Sincerely,

SIGNED ORIGINAL ON FILE

Anthony Star
Director

CC: Brian Granahan, Chief Legal Counsel, Illinois Power Agency
Gloria Gibson, Chief Financial Officer, Illinois Power Agency
Sanjay Patel, Chief Operating Officer, Illinois Power Agency

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