



ANNUAL REPORT

FISCAL YEAR 2022



FEBRUARY 15, 2023
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Illinois Power Agency
Annual Report
Fiscal Year 2022

(July 2021 - June 2022)

Prepared in Accordance with 20 ILCS 3855/1-125 and 220 ILCS 5/16-115D(d)(4)

February 15, 2023

About the Illinois Power Agency

The Illinois Power Agency (“IPA”) is an independent state agency established under Illinois law in 2007 through the enactment of the Illinois Power Agency Act (20 ILCS 3855). The IPA is charged with preparing annual electricity procurement plans and managing power procurement for residential and small commercial customers of Illinois electric utilities who have not switched suppliers. The IPA is also responsible for the implementation of the Illinois Renewable Portfolio Standard (“RPS”), a public policy designed to drive the development of renewables in Illinois, and other vital energy policy initiatives.

Agency Responsibilities

The Illinois Power Agency develops an annual electricity procurement plan on behalf of “eligible retail customers” – residential and small commercial customers who have not switched to alternate suppliers – to ensure they receive reliable, affordable, efficient, and environmentally sustainable electricity. As outlined within those procurement plans, the Agency conducts competitive procurements twice a year to purchase power to serve the eligible retail customers of Illinois electric utilities.

For renewable energy resources, the Agency develops a Long-Term Renewable Resources Procurement Plan (Long-Term Plan) on a biennial basis. The Long-Term Plan serves as a roadmap for renewable energy programs and procurements managed by the IPA. The Long-Term Plan is updated every two years, with a focus on incenting the development of new renewable energy generation.

Key activities that are outlined through the Long-Term Plan include:

- Competitive procurements to support the development of new utility-scale wind, utility-scale solar, and brownfield site photovoltaic projects.
- The Adjustable Block Program (also known as the Illinois Shines Program) to support the development of distributed generation solar projects for Illinois homes and businesses, and the development of community solar projects.
- The Illinois Solar for All Program to support solar for low-income households and communities.

- A large customer self-direct program through which large electric customers are eligible for bill credits through the self-directed procurement of renewable energy credits.
- Consumer protection requirements applicable to IPA incentive programs.
- The Minimum Equity Standard (“MES”) to help ensure that everyone can access the growing clean energy economy and the clean energy workforce is made up of a minimum level of equity-eligible persons.

In addition, the IPA is also responsible for the development and administration of the Carbon Mitigation Credit Procurement process and the Zero Emission Standard Procurement Plan, both of which support at-risk nuclear plants.

The Illinois Power Agency is an independent state Agency under the oversight of the Executive Ethics Commission and is committed to:

- Ensuring that the process of power procurement is conducted in an ethical and transparent fashion, immune from improper influence.
- Conducting competitive procurement processes to procure the supply resources identified in procurement plans.
- Operating in a structurally insulated, independent and transparent fashion so that nothing impedes its mission to secure power at the best prices the market will bear, provided that it meets all applicable legal requirements.
- Continuing to review its policies and practices to determine how best to meet its mission of providing the lowest cost power to the greatest number of people, at any given point in time, in accordance with applicable law.

Vision Statement

The IPA's vision is to provide a clean, reliable, equitable, and cost-effective energy future for residents and businesses across Illinois.

Mission Statement

The IPA is committed to the planning and procurement of reliable, efficient, and cost-effective electricity for residents and businesses in an ethical and objective manner, insulated from improper influence. The IPA also administers incentive programs and procurements to promote renewable and zero-carbon energy generation, while building an equitable clean energy future for all Illinoisans.



Message from the IPA Acting Director

February 15, 2023



2022 has been a landmark year for the Illinois Power Agency. Across our power procurement work, we have navigated unexpectedly high statewide wholesale energy prices and MISO capacity prices, unexpectedly low PJM capacity prices, and the unanticipated billions of dollars in utility bill credits back to ComEd customers as a consequence of carbon mitigation credit contracts. Our renewable energy programs and procurements have transitioned from exercises based largely on cost and volume to qualitative exercises informed by DEI principles and baseline labor standards; how much we do is now no more important than where, how, and with whom we do it.

As our responsibilities have grown, so has our staff. While this report generally focuses on Fiscal Year 2022, we have successfully onboarded 13 new staff members across Calendar Year 2022 and into 2023, bringing our present-day head-count to 31 employees. We have welcomed a new Program Administrator for the Adjustable Block Program (also known as Illinois Shines), and seen responsibilities expand for our Illinois Solar for All Program Administrator, Procurement & Planning Consultant, and Procurement Administrator.

As an Agency, we have grown, matured, and evolved. This growth is only possible through the hard work of our dedicated staff. Day after day, I continue to be impressed by the dedication, work ethic, and commitment to public service demonstrated by Illinois Power Agency employees. While this report features numerous statistics and metrics, no measurement tool can adequately measure the public service commitment continually demonstrated by IPA staff members in navigating countless complex new responsibilities. I am very proud to call them my colleagues, and you should be very proud of their work in service to our state.

Looking ahead, we hope to use this report in future years to provide a more fulsome status update on the growth of the clean energy economy in Illinois and progress demonstrated across other areas of the energy landscape featuring a nexus with IPA responsibilities. While Illinois law outlines certain necessary elements of our annual report, we believe we have a duty to share additional statistics, metrics, or even stories of more general public interest. Our reformatting of this year's annual report is our first step in achieving that broader purpose, and we are very open to any feedback you have on how to improve this report for future years.

Thank you for your interest in the IPA's 2022 Annual Report and we truly hope this content serves you well.

Brian P. Granahan
Acting Director
Illinois Power Agency



Key Highlights of Fiscal Year 2022

Energy Procurement

The Agency conducted energy and capacity procurements in the Fall of 2021 and Spring of 2022 to serve the load of Ameren, ComEd, and MidAmerican eligible retail customers (those customers who do not take service from an Alternative Retail Electric Supplier, or hourly pricing). Information on the results of these procurements is listed in Section 3 below.

Due to extreme volatility in energy markets across 2022 generally and on the day bids were due for the Spring procurement event (April 18, 2022), the Spring 2022 energy procurement did not meet its targeted volumes and a supplemental energy procurement was conducted on May 16, 2022 to help fill targeted volumes for the summer of 2022. This was the first time in the Agency's history that a supplemental energy procurement was conducted.

Subsequent to the 2022 Fiscal Year, the Agency conducted an energy procurement in the Fall of 2022. However, the scheduled fall capacity procurement for Ameren Illinois was cancelled in response to a decision by the Federal Energy Regulatory Commission ("FERC") on August 31, 2022 in order to change the MISO capacity market construct from an annual model to four seasonal capacity periods. The Agency has subsequently included an additional 2023 capacity procurement in February to make up for that cancelled procurement, which will incorporate changes that address the FERC decision.

Due to the volatility in energy markets observed in the spring of 2022, the Agency conducted a stakeholder feedback process in June and July of 2022 to aide in the development of the 2023 Electricity Procurement Plan. After the Agency released a draft of its 2023 Electricity Procurement Plan for stakeholder comment in August of 2022 and filed it for Illinois Commerce Commission approval in September, the Plan was approved in December. Key changes for 2023 include requirements around disclosure of fuel sources, revised Ameren capacity procurement hedging levels, and a change for ComEd eligible retail customers that lowers the hedging level to account for the price stability created by Carbon Mitigation Credits (as discussed further below).

Climate and Equitable Jobs Act Implementation

With the passage of Public Act 102-0062 (the Climate and Equitable Jobs Act or "CEJA") on September 15, 2021, Illinois became the first Midwestern state to mandate a clean energy future with an unprecedented focus on diversity, equity, and labor standards for the clean energy industry.

With the enactment of CEJA, the IPA was tasked with numerous crucial implementation activities because of new requirements for renewable energy programs and competitive procurements administered by the IPA.

Here is a snapshot of some of CEJA's new requirements for the Agency's programs and procurements and key updates from the IPA.

The Renewable Portfolio Standard (RPS)

CEJA led to a significant overhaul of the RPS by addressing issues faced under the Future Energy Jobs Act (“FEJA”). CEJA empowered the RPS by expanding renewable energy goals to 40% by 2030 and 50% by 2040 (up from 25% by 2025) and further encouraged diversity and inclusion within the renewable energy industry in Illinois. CEJA also included new targets for procurements of Renewable Energy Credits¹ (“RECs”) from new utility-scale wind and solar projects. This included a goal of 45 million Renewable Energy Credits annually by 2030. Additionally, CEJA increased annual RPS funding from approximately \$230 million to over \$580 million and provided new flexibility around how its funds are spent, allowing those collected in one year to meet expenditures over the following five years, rather than in just the same year.

Diversity, Equity, and Inclusion (“DEI”)

CEJA placed a distinct focus on equity for the renewable energy industry in Illinois. New statutory provisions direct the IPA to implement measures that ensure the building of a clean energy future for all Illinoisans.

Equity Eligible Contractor Block

CEJA created new financing resources to support Equity Eligible Contractors² participating in the Adjustable Block Program (“ABP”). An Equity Eligible Contractor can submit projects to the ABP in dedicated blocks of capacity reserved for Equity Eligible Contractors. These blocks provide an opportunity for Equity Eligible Contractors to receive advances on capital, which will help reduce barriers to participate in the Program.

Energy Workforce Equity Portal

CEJA directed the IPA and Illinois Department of Commerce and Economic Opportunity (“DCEO”) to help historically underserved communities participate in and benefit from the growing clean energy economy. One of the tools to reach that goal is through the development a public-facing portal (Energy Workforce Equity Portal), developed by the IPA and DCEO, that connects clean energy companies and developers with equity eligible job seekers looking to work in the clean energy sector in Illinois.

¹ Renewable energy credits (“RECs”) are certificates that represent the environmental benefits of electricity generated from renewable energy generation, such as solar panels or wind turbines. One REC is issued for each megawatt-hour of electricity production from a renewable resource.

² Equity Eligible Contractor means a business that is majority-owned by Equity Eligible Persons, or a nonprofit or cooperative that is majority-governed by Equity Eligible Persons or is a natural person that is an Equity Eligible Person offering personal services as an independent contractor as defined in Section 1-10 of the IPA Act.

Key updates:

- [Energy Workforce Equity Portal](#), Phase I, launched on January 31, 2022.
- Phase II to be launched in June 2023.

Minimum Equity Standard

CEJA created an equity accountability system mandating minimum equity standards for IPA-administered programs and procurements. The Minimum Equity Standard goes into effect on June 1, 2023 and will require that 10% of the work on renewable energy projects supported through certain IPA programs and procurements be performed by Equity Eligible Persons³ or contractors. That target will increase to 30% by 2030.

Key Updates:

The IPA issued the Request for Stakeholder Feedback on the waiver for Minimum Equity Standard requirements on February 8, 2023.

In 2023, the IPA will develop a Racial Disparity Study that measures the presence and impact of discrimination on minority businesses and workers in Illinois' clean energy economy.

Solar Incentive Programs

CEJA further supported the development of solar energy in Illinois by expanding the ABP, a market driven solar incentive program for the public, and Illinois Solar for All, a program benefitting income-eligible households as well as nonprofits and public facilities serving low-income communities.

Adjustable Block Program

The number of sub-programs in the ABP increased from three to six, with the new categories being:

- Public Schools Projects
- Community-Driven Community Solar
- Equity Eligible Contractor Block

³ Equity Eligible Persons mean "persons who would most benefit from equitable investments by the State designed to combat discrimination, specifically: (1) persons who graduate from or are current or former participants in the Clean Jobs Workforce Network Program, the Clean Energy Contractor Incubator Program, the Illinois Climate Works Pre-apprenticeship Program, Returning Residents Clean Jobs Training Program, or the Clean Energy Primes Contractor Accelerator Program, and the solar training pipeline and multi-cultural jobs program created [by the Future Energy Jobs Act]; (2) persons who are graduates of or currently enrolled in the foster care system; (3) persons who were formerly incarcerated; (4) persons whose primary residence is in an equity investment eligible community." 20 ILCS 3855/1-10.

The project sizes also changed, with the breakpoint between Small and Large Distributed Generation now 25 KW, up from 10 KW. The size threshold applicable to Large Distributed Generation and Community Solar projects increased from 2 MW to 5 MW.

Key Updates:

- The ABP reopened with new blocks of capacity and new program categories on December 14, 2021.
- The ABP transitioned to a new Program Administrator, Energy Solutions.
- The ABP opened for the Program Year 2022-2023 on September 1, 2022, for project applications.
- The ABP opened the Community-Driven Community Solar (CDCS) subprogram for new project applications on September 1, 2022. This category includes community solar projects that provide a more direct and tangible connection and benefit to the communities in which they operate.
- The ABP opened for Traditional Community Solar projects on November 1, 2022. A prior March 2022 re-opening supported 250 MW of community solar projects to be taken off of prior-established waitlists, while the November 2022 reopening allocated additional block of capacity of 170 MW for new community solar project applications.

Illinois Solar for All

CEJA extended the reach of Illinois Solar for All (ILSFA) primarily through increased funding and updated sub-programs. Program funding provided through utility ratepayer collections increased from \$11 million per year to \$50 million per year. This additional funding will help support expanding statewide participation, particularly in the Small Residential sub-program, encourage energy sovereignty (increased ownership of solar), and expand grassroots efforts to support general education, job training program outreach, and other activities deemed to be qualified by the Agency.

Key Updates:

- Introduced the Residential Solar Program Delivery Pilot and the Home Repairs Pilot in the 2022 Long-Term Plan to increase participation in the previously underused Distributed Generation 1-4 (Residential Solar) sub-program. These pilots will launch in 2023.
- A 25 percent carveout has been added for each sub-program for projects that promote energy sovereignty. By promoting projects that feature energy ownership, ILSFA will empower local communities to control and reap benefits of solar over and above energy bill savings.

Self-direct Renewable Portfolio Standard Compliance Program

CEJA required the IPA to develop a Self-direct Renewable Portfolio Standard Compliance Program, which encourages large Illinois electricity customers served by ComEd or Ameren Illinois to retire

RECs acquired through long-term contracts with new utility-scale wind and solar facilities. Self-direct Program participants receive an electric bill credit reducing RPS-related bill charges.

Key Updates:

- The Agency issued Requests for Information on November 30, 2022 from renewable energy project developers and owners, large commercial and industrial customers, and energy industry groups to aid in the implementation of the new Self-direct Renewable Portfolio Standard Compliance Program.
- The Program opened for applications on February 15, 2023 with a first year program size of 3 million RECs annually. The first program year will begin June 1, 2023.

Utility-scale Wind, Solar, and Brownfield Site Procurement

CEJA further incentivized the development of new utility-scale and brownfield site projects by significantly increasing overall REC delivery targets and requiring at least 47% of the solar RECs used to meet the RPS come from utility-scale solar and 3% from brownfield sites by 2030. CEJA also changed the REC pricing approach used in procurements from a fixed model to an “indexed” one, with bidders offering a “strike price” in procurement events and REC prices floating based on wholesale energy prices. This change ensures market risk is reduced for renewable developers and projects receive stable revenues.

Key Updates:

- IPA held two Indexed REC Procurements in Spring 2022 and Fall 2022.
- For Spring procurement, bids were selected for one utility scale wind project (200 MW), four utility scale solar projects (495 MW), and one brownfield site photovoltaic project (5 MW).
- For Fall procurement, bids were selected for seven utility scale solar projects (435 MW) and four brownfield site photovoltaic projects (28 MW).

Carbon Mitigation Credits Plan and Procurement

CEJA created the Carbon Mitigation Credits (“CMC”) Procurement Program, which preserves existing carbon-free, nuclear generation facilities in Illinois. To support these at risk-nuclear plants, the IPA was required to develop and implement a Carbon Mitigation Credits Procurement Plan within seven days of the effective date of the law. The procurement of CMCs is critical to keeping Illinois on a path to reach net zero emissions by 2050.

Key Updates:

- The IPA released the CMC Plan for public comment on September 17, 2021 and filed the CMC Plan with the ICC on September 29, 2021. That Plan was approved on November 10, 2021, and the resulting procurement was held on November 23, 2021, with the results approved by the ICC on December 1, 2021. The selected recipients of CMC delivery contracts

were Braidwood 1 and 2, Byron 1 and 2, and Dresden 2 and 3. CMC deliveries started in June 2022.

- CMCs provide revenue stability for selected nuclear plants by adjusting with energy market conditions—when wholesale energy prices are high, because plant energy revenues increase, the CMC prices may turn into a *credit* back to ComEd customers. While wholesale energy prices soared across 2022 and into 2023 due to the war in Ukraine, natural gas shortages, and the economic after-effects of the pandemic, CMC contracts have provided significant bill credits back to ComEd ratepayers: those bill credits are projected to total to approximately \$2 billion dollars across the 2022-2023 delivery year.

Coal to Solar

CEJA created a Coal to Solar Program that offers incentives for companies to install solar and energy storage facilities at the sites of former coal plants. To support this initiative, the IPA conducted two procurement events to procure RECs from new renewable energy facilities that are installed at or adjacent to sites of electric generating facilities that burned coal as their primary fuel source.

Key Update:

The IPA held the first coal-to-solar procurement event for RECs in spring 2022 and the results were approved by the Illinois Commerce Commission on April 29, 2022. A total of six solar projects, representing approximately 230 MW (MWac), at the sites of coal facilities owned by Vistra Corp. were selected. A storage facility, each with storage capacity of 2.24 MWdc, will be built at these sites as well. There were no participants in the second procurement event.

Stakeholder Engagement

Workshops and Meetings

Indexed REC Procurement Structure

The IPA hosted a stakeholder workshop on February 15, 2023 to discuss how the IPA can build more successful participation in Indexed REC Procurement events and maximize utility-scale wind and solar project development, following up on written comments from stakeholders. The workshop and comment process focused on what steps the Agency could take to address how the Indexed REC procurement structure could be improved to facilitate the successful development of more utility-scale wind and solar projects in Illinois.

IPA Consumer Protection Working Group

The IPA launched its expanded Consumer Protection Working Group on October 7, 2022. The expanded IPA Consumer Protection Working Group's meetings are held on the first Friday of each month, with those meetings held to discuss market trends, best practices, consumer education,

updates to Program requirements and documents, and other consumer protection issues. To date, the IPA has held five Consumer Protection Working Group meetings.

Indexed REC Procurement Workshop

The IPA hosted a stakeholder workshop on August 2, 2022 to receive feedback from stakeholders on topics related to Spring 2022 procurement and process improvements to facilitate participation in future procurement events.

Electricity and Capacity Procurement Workshop

The IPA hosted a stakeholder workshop on July 13, 2022 to receive feedback from stakeholders to assist with preparing the 2023 Electricity Procurement Plan. The workshop and associated written comment process was an opportunity to receive stakeholder feedback on the impact that the extreme energy market volatility in 2022 had on the results of the Agency's prior procurements and the resulting prices available to eligible retail customers.

Illinois Solar for All Program Evaluation

The IPA hosted an ILSFA Evaluation Stakeholder Feedback Session on July 8, 2022 to provide ILSFA Program stakeholders, including participants and organizations in environmental justice and historically underserved communities, to offer input on the criteria used for the next evaluation of the program.

IPA Long-Term Renewable Resources Procurement Plan

The IPA conducted two Long-Term Plan Stakeholder Workshops on November 18, 2021 to receive stakeholder feedback on several topics related to the development of the 2022 Long-Term Plan and the new elements of the Plan that implement new statutory provisions enacted through CEJA.

Adjustable Block Program Reopening

The IPA hosted two webinars on October 21, 2021 to receive feedback from stakeholders related to the ABP reopening. The webinars covered new Program requirements stemming from CEJA.

Educational Webinars and Presentation

Power Hour

Since the launch of the IPA Power Hour Series in October 2021, the Agency has conducted 18 Power Hour Webinars on key energy themes and policy-related topics of regional and national importance. On average, each webinar draws 80-100 participants. To watch the IPA's Power Hour Webinars, visit the [IPA events page](#).

Mid-American Carpenters Union Solar Boot Camp

On January 26, 2023, IPA Deputy Legal Counsel Sarah Duffy presented at the Mid-American Carpenters Union Solar Bootcamp in Rockford, Illinois. The presentation focused on the Illinois RPS, IPA solar programs, and prevailing wage requirements (pursuant to the Illinois Power Agency Act) for renewable energy projects and procurements. The solar bootcamp provided an opportunity for union members to engage with the Agency about the state’s renewable energy policies targeted at spurring renewable energy development and employing Equity-Eligible Persons and contractors in renewable energy projects in Illinois.

National Community Solar Summits

On January 18 and 19, 2023, ILSFA Program Manager Jennifer Schmidt presented to panels at the Coalition for Community Solar Access (CCSA) Community Solar Power Summit and the National Community Solar Partnership (NCSP) Annual Summit, organized by the Department of Energy’s Solar Energy Technologies Office. The combined summits brought together leading community solar businesses, utilities, non-profits, and policymakers for in-depth conversations on community solar’s role in providing equitable energy opportunities.

On January 18, Jennifer presented on a panel, “Energy Communities and Community Solar” which highlighted community solar programs that focus on community involvement and support low- and moderate-income subscribers. On January 19, she was a panelist for “Putting the Customer First: Expanding Equitable Access to Community Solar,” where the panelists discussed strategies and opportunities for equitable customer engagement and expanding access to community solar. In sharing how ILSFA is engaging communities and promoting equitable access to Illinois’ growing solar market, Jennifer highlighted ILSFA’s initiatives to expand access to the Program through grassroots education efforts and creating an ILSFA Advisory Group. These initiatives help the Program connect to communities to build awareness of the benefits of solar and ILSFA participation opportunities in their areas.

National Conference for State Legislators

On November 29, 2022, IPA Acting Director Brian Granahan presented as part of a panel for the National Conference of State Legislatures Nuclear Working Group on the steps Illinois has taken to support the continued operation of nuclear power plants at risk of closure. Select state legislators from all around the country, each with a defined interest in nuclear power generation, attended the panel presentation.

International Brotherhood of Electrical Workers Meeting

On December 6, 2022, IPA Agency Interim Chief Legal Counsel Kelly Turner, Deputy Legal Counsel Sarah Duffy, and Diversity, Equity, and Inclusion Manager Sharon Johnson presented at the training event for International Brotherhood of Electrical Workers Local 134. The presentation covered information on the IPA’s solar programs, CEJA’s equity requirements, prevailing wage compliance

processes, and project labor agreements for renewable energy projects participating in the IPA's programs and procurements.

IRPS Conference

On October 26, 2022, IPA Senior Advisor and Planning and Procurement Bureau Chief Anthony Star spoke on the "Update on CEJA Implementation" panel at Illinois State University's Institute for Regulatory Policy Studies' ("IRPS") annual conference alongside Illinois Commerce Commission ("ICC") Chairman Carrie Zalewski, ICC Public Utilities Bureau Chief Jim Zolnierek, and Department of Commerce and Economic Opportunity Deputy Director Jason Horwitz. During the discussion, the panelists provided a status update on their respective agencies' implementation of CEJA's requirements and provided an overview on upcoming changes.

IGEN Net Zero Fall Collaborative Meeting

On October 25, 2022, ABP Program Associate Olivia Matthews joined a solar development panel at the Illinois Green Economy Network (IGEN) Net Zero fall collaborative meeting hosted by SEDAC (Smart Energy Design Assistance Center at the University of Illinois). The meeting discussed best practices and strategies for college solar development to decrease the energy footprint of the State of Illinois and beyond.

Indiana, Illinois, Iowa Foundation for Fair Contracting Training Event

On October 13, 2022, IPA Deputy Legal Counsel Sarah Duffy and Legislative Counsel Zoe Lanier presented on renewable energy incentive programs in Illinois for the staff at the Indiana, Illinois, Iowa Foundation for Fair Contracting ("IIIFC") during their annual training event.

Chicago Urban League and Invenergy Panel Discussion

On October 13, 2022, IPA Diversity, Equity, and Inclusion Manager Sharon Johnson spoke on the "Clean Energy Opportunities in Illinois Deep Dive" panel organized by the Chicago Urban League and Invenergy. The panel was moderated by Invenergy's Senior Associate of Global Risk and Government Affairs Reine Rambert. The panel raised awareness about job training programs and contracting opportunities for job seekers and clean energy professionals, including Black-owned companies in the clean energy and Engineering, Procurement, and Construction (EPC) space. In addition, the panel discussed the importance of equity in the clean energy industry and opportunities available through CEJA.

Clean Energy State Alliance Annual Meeting

In June (June 6-8) 2022, IPA Acting Director Brian Granahan, Illinois Solar for All Program Manager Jennifer Schmidt, Interim Chief Legal Counsel Kelly Turner, Deputy Legal Counsel Sarah Duffy attended the Clean Energy State's Alliance (CESA) Annual Meeting in Washington D.C. The CESA Annual Meeting provides an opportunity for CESA members (mostly state agencies, including the IPA) to collaborate on multi-state efforts, learn from each other about emerging clean energy challenges, and learn best practices from other policy experts across the country. The 2022 CESA

Annual Meeting discussed importance of equity in clean energy programs, challenges to clean energy expansion toward 100% statewide targets, and the view of state clean energy challenges from the Federal Energy Regulatory Commission (FERC). The FERC session included a presentation from Commissioner Allison Clements, which was moderated by IPA Acting Director Brian Granahan.

Clean Energy States Alliance (“CESA”) 100% Collaborative Discussion: Exploring Equity in Illinois’ Recent Climate and Energy Legislation

On March 30, 2022, the IPA’s Anthony Star and Sharon Johnson presented at the Clean Energy States Alliance (“CESA”) 100% Collaborative Discussion: Exploring Equity in Illinois’ Recent Climate & Energy Legislation. During the meeting, Anthony and Sharon discussed the new equity focus of CEJA for the IPA's incentive programs and procurements. In addition, they provided a summary of activities that the Agency will be implementing to prioritize diversity and equity in the IPA-administered renewable energy programs and procurements.

National Regulatory Research Institute: Pathways to Successful Community Solar Programs

On March 16, 2022, IPA Acting Director Brian Granahan presented at the National Regulatory Research Institute webinar, *Pathways to Successful Community Solar Programs*, alongside national clean energy leaders.

During the webinar, presenters discussed barriers and best practices around community solar and highlighted how federal and state policies can play an integral role in community solar development. During the presentation, Brian provided an overview on how community solar fits into Illinois' RPS and discussed how the IPA-administered incentive programs support community solar developments in Illinois.

STATUTORY REPORT ORGANIZATION

20 ILCS 3855/1-125(a) requires that, by February 15 of each year, the Agency shall report annually to the Governor and the General Assembly on the operations and transactions of the Agency. The annual report shall include, but not be limited to, each of the following:

- (1) The average quantity, price, and term of all contracts for electricity procured under the procurement plans for electric utilities.
- (2) (Blank)⁴
- (3) The quantity, price, and rate impact of all energy efficiency and demand response measures purchased for electric utilities, and any measures included in the procurement plan pursuant to Section 16-111.5B of the Public Utilities Act.
- (4) The amount of power and energy produced by each Agency facility.
- (5) The quantity of electricity supplied by each Agency facility to municipal electric systems, governmental aggregators, or rural electric cooperatives in Illinois.
- (6) The revenues as allocated by the Agency to each facility.
- (7) The costs as allocated by the Agency to each facility.
- (8) The accumulated depreciation for each facility.
- (9) The status of any projects under development.
- (10) Basic financial and operating information specifically detailed for the reporting year and including, but not limited to, income and expense statements, balance sheets, and changes in financial position, all in accordance with generally accepted accounting principles, debt structure, and a summary of funds on a cash basis.
- (11) The average quantity, price, contract type and term and rate impact of all renewable resources procured under the long-term renewable resources procurement plans for electric utilities. (12) A comparison of the costs associated with the Agency's procurement of renewable energy resources to (A) the Agency's costs associated with electricity generated by other types of generation facilities and (B) the benefits associated with the Agency's procurement of renewable energy resources.
- (13) An analysis of the rate impacts associated with the Illinois Power Agency's procurement of renewable resources, including, but not limited to, any long-term contracts, on the

⁴ Previous Illinois Power Agency Annual Reports included a Section (2) that provided information on, "The quantity, price, and rate impact of all renewable resources purchased under the electricity procurement plans for electric utilities." That provision was repealed pursuant to Public Act 099-0536 through consolidating the Agency's Annual Report and its previously-required separate report on the Cost and Benefits of Renewable Resource Procurement. Information comparable to what was previously reported in Section (2) can be found in Section (11) of this Report.

eligible retail customers of electric utilities. The analysis shall include the Agency's estimate of the total dollar impact that the Agency's procurement of renewable resources has had on the annual electricity bills of the customer classes that comprise each eligible retail customer class taking service from an electric utility.

(14) (Blank).

(15) 20 ILCS 3855/1-125(b), a new provision established through Public Act 102-0662, requires that in addition to reporting on the transactions and operations of the Agency, the Agency shall also endeavor to report on the following items through its annual report, recognizing that full and accurate information may not be available for certain items:

- (1) The overall nameplate capacity amount of installed and scheduled renewable energy generation capacity physically located in Illinois.
- (2) The percentage of installed and scheduled renewable energy generation capacity as a share of overall electricity generation capacity physically located in Illinois.
- (3) The amount of megawatt hours produced by renewable energy generation capacity physically located in Illinois for the preceding delivery year.
- (4) The percentage of megawatt hours produced by renewable energy generation capacity physically located in Illinois as a share of overall electricity generation from facilities physically located in Illinois for the preceding delivery year.
- (5) The renewable portfolio standard expenditures made pursuant to paragraph (1) of subsection (c) of Section 1-75 and the total scheduled and installed renewable generation capacity expected to result from these investments. This information shall include the total cost of REC delivery contracts of the renewable portfolio standard by project category, including, but not limited to, renewable energy credits delivery contracts entered into pursuant to subparagraphs (C), (G), (K), and (R) of paragraph (1) of subsection (c) Section 1-75. The Agency shall also report on the total amount of customer load featuring renewable portfolio standard compliance obligations scheduled to be met by self-direct customers pursuant to subparagraph (R) of paragraph (1) of subsection (c) of Section 1-75, as well as the minimum annual quantities of renewable energy credits scheduled to be retired by those customers and amount of installed renewable energy generating capacity used to meet the requirements of subparagraph (R) of paragraph (1) of subsection (c) of Section 1-75.

In addition to these requirements, Section 16-115D(d)(4) of the Public Utilities Act requires that, beginning April 1, 2012 and by April 1 of each year thereafter, the Agency shall submit the following information to the General Assembly, the Commission, and alternative retail electric suppliers:

A report of the alternative compliance payment mechanism fund that shall include ...

- (A) the total amount of alternative compliance payments received in aggregate from alternative retail electric suppliers by planning year for all previous planning years in which the alternative compliance payment was in effect;
- (B) the total amount of those payments utilized to purchased [sic] renewable energy credits itemized by the date of each procurement in which the payments were utilized; and
- (C) the unused and remaining balance in the Agency Renewable Energy Resources Fund attributable to those payments.

This Annual Report for Fiscal Year 2022 addresses each of the above requirements, including reporting alternative compliance payment and expenditure information.

(1) The average quantity, price, and term of all contracts for electricity procured under the procurement plans for electric utilities.

The IPA’s 2022 Annual Procurement Plan, approved by the Illinois Commerce Commission in Docket No. 21-0717, contains a hedging strategy for the procurement of electricity under which 100% of projected eligible retail customer load is to be under contract for the upcoming (or “prompt”) delivery year (starting June 1, 2022),^{5,6} 50% for the following year (starting June 1, 2023), and 25% for the next year (starting June 1, 2024). This approach constitutes a continuation of the approach adopted in the 2015 through 2021 Procurement Plans, under which the Agency holds two energy procurement events per year. Each procurement uses an updated load forecast provided by the utilities to match procured volumes with actual demand more accurately. The Procurement Plan covers a calendar year of Agency activities, while energy deliveries are based on an industry-standard energy delivery year that starts June 1 (and thus is one month different from the State Fiscal Year). In Fiscal Year 2022, the IPA held three energy procurements: the first occurred in September 2021 pursuant to the 2021 Plan; the second took place in April 2022 pursuant to the 2022 Plan; the third procurement was the Supplemental Energy Procurement which was held in May 2022.

The Spring 2022 Energy Procurement procured only a portion of the targeted supply for Ameren and ComEd and no quantity of the targeted supply for Mid-American. The procurement was held on a day of extreme volatility in energy markets and that may have impacted supplier participation. A Supplemental Energy Procurement was held in accordance with Section 16-111.5(e)(5)(ii) of the Illinois Public Utilities Act which provides for a process for an additional procurement to be conducted after a procurement event does not meet its targets. The Supplemental Energy Procurement targeted unfilled quantities for the June 2022 through September 2022 delivery months, the unfilled target quantities for the delivery months of October 2022 through the end of the procurement period were to be added to the quantity targets for the Fall 2022 Energy Procurement.

The following tables report on the names of winning suppliers, quantity, price, and term for electricity contracts procured through the three procurement events and the two Ameren Illinois capacity procurements held during FY 2022.⁷ The specific months and quantities procured reflect the load forecasts provided by Ameren Illinois, ComEd and MidAmerican.

⁵ Delivery year is synonymous with planning year and used interchangeably in this Report.

⁶ This percentage total is 106% for July and August 2022, on-peak.

⁷ Under Section 16-111.5(h) of the Public Utilities Act, “the names of the successful bidders and the load weighted average of the winning bid prices for each contract type and for each contract term shall be made available to the public.” This information is included in the tables that follow. However, as the IPA “shall maintain the confidentiality of all other supplier and bidding information,” individual supplier contract quantities, prices, and terms may not be disclosed and have not been included in this report or in prior annual reports.

September 2021 Procurement⁸

Ameren Illinois

Winning Suppliers

AEP Energy Partners, Inc.
Exelon Generation Company, LLC
Macquarie Energy LLC
NextEra Energy Marketing, LLC
Shell Energy North America (US), L.P.
Union Electric Company d/b/a Ameren Missouri

Average Prices (\$/MWh) and MWs of Electricity Contracts

Month(s)	On-Peak		Off-Peak	
	Average Price	Quantity	Average Price	Quantity
October 2021	50.22	150	37.83	125
November 2021	49.32	125.00	38.27	125
December 2021	52.31	200	41.04	150
January 2022	67.52	200	49.87	175
February 2022	66.01	175	47.97	150
March 2022	48.73	125	35.43	150
April 2022	41.57	125	28.75	100
May 2022	42.13	125	28.73	100
June 2022	41.66	100	28.41	75
July 2022	52.12	125	33.14	75
August 2022	48.84	100	31.59	75
September 2022	42.91	100	29.51	75
October 2022	38.89	75	28.96	50
November 2022	38.06	50	28.85	75
December 2022	42.03	100	32.39	75
January 2023	51.86	100	38.24	100
February 2023	48.61	100	37.36	75
March 2023	37.45	50	27.06	75
April 2023	37.45	50	26.49	50
May 2023	36.14	75	24.79	50
June 2023	36.76	100	24.02	50

⁸ Source: <https://ipa-energyrfp.com/wp-content/uploads/2021/09/Public-Notice-of-Standard-Energy-Products-Procurement-Results-2021-09-16.pdf> and <https://ipa-energyrfp.com/wp-content/uploads/2021/09/Public-Notice-of-Fall-2021-Procurement-Results-for-Ameren-ZRCs-2021-09-15.pdf>.

Month(s)	On-Peak		Off-Peak	
	Average Price	Quantity	Average Price	Quantity
July 2023	45.73	125	29.33	75
August 2023	43.63	100	28.21	50
September 2023	38.11	75	25.46	50
October 2023	33.71	50	25.61	25
November 2023	33.43	25	25.58	25
December 2023	36.50	50	27.30	50
January 2024	49.64	75	37.82	50
February 2024	49.19	50	37.82	50
March 2024	38.72	25	28.65	50
April 2024	34.69	25	-	-
May 2024	35.27	50	25.05	25

In the September 2021 procurements, the IPA also procured capacity for a portion of the eligible retail customer load of Ameren Illinois as specified in the 2021 Procurement Plan. Although the capacity procured did not include an electricity component, this information is provided below for the benefit of completeness. The following tables report on the name of winning suppliers, quantity of capacity procured in Zonal Resource Credits (ZRCs), the average contracted price, and term.

Winning Suppliers

Dynegy Marketing and Trade, Inc.
Union Electric Company d/b/a Ameren Missouri
Voltus, Inc.

Term, Average Price (\$/MW-Day) and Quantities (in ZRCs) of Capacity Contracts

Term	# ZRCs Awarded	Zonal Resource Credits
Delivery Year		Average Price (\$/MW-Day)
June 2022 – May 2023	356	\$28.92
June 2023 – May 2024	34	\$35.62

ComEd

Winning Suppliers

AEP Energy Partners, Inc.
Dynegy Marketing and Trade, LLC
Exelon Generation Company, LLC
Macquarie Energy LLC
Morgan Stanley Capital Group Inc.
NextEra Energy Marketing, LLC
NRG Power Marketing LLC
Shell Energy North America (US), L.P.
TransAlta Energy Marketing (U.S.) Inc.

Average Prices (\$/MWh) and MWs of Electricity Contracts

Month(s)	On-Peak		Off-Peak	
	Average Price	Quantity	Average Price	Quantity
October 2021	47.82	625	34.95	525
November 2021	47.43	675	35.21	600
December 2021	49.23	800	37.43	725
January 2022	64.92	850	46.68	775
February 2022	63.31	800	44.77	750
March 2022	44.51	700	30.63	650
April 2022	40.35	625	27.43	575
May 2022	37.74	625	24.20	550
June 2022	39.69	450	25.71	400
July 2022	47.55	550	29.91	475
August 2022	46.81	500	29.33	425
September 2022	40.49	375	26.34	325
October 2022	38.83	325	27.45	300
November 2022	38.68	350	27.33	350
December 2022	39.46	425	29.17	375
January 2023	46.43	450	35.22	425
February 2023	45.78	425	33.90	375
March 2023	37.06	375	24.53	350
April 2023	36.32	325	24.06	300
May 2023	34.98	350	22.83	275
June 2023	33.96	375	20.65	300
July 2023	40.91	475	25.30	375
August 2023	40.32	475	24.82	325

Month(s)	On-Peak		Off-Peak	
	Average Price	Quantity	Average Price	Quantity
September 2023	34.94	325	21.56	275
October 2023	33.91	250	22.82	200
November 2023	33.69	275	22.78	225
December 2023	34.00	300	24.01	300
January 2024	42.67	350	33.00	300
February 2024	41.93	325	32.69	275
March 2024	34.02	250	23.92	200
April 2024	33.90	225	22.17	175
May 2024	33.23	225	20.55	200

MidAmerican

No Procurement

April 2022 Procurement⁹

Ameren Illinois

Winning Suppliers

AEP Energy Partners, Inc.
Constellation Energy Generation Company, LLC
Dynegy Marketing and Trade, LLC
Shell Energy North America (US), L.P.

Average Prices (\$/MWh) and Quantities (MW) of Electricity Contracts

Month(s)	On-Peak		Off-Peak	
	Average Price	Quantity	Average Price	Quantity
June 2022	101.52	550	74.24	500
July 2022	103.12	250	77.22	225
August 2022	103.12	250	77.22	225
September 2022	103.28	575	74.48	475
October 2022	103.12	250	77.22	225
November 2022	103.57	300	77.56	275
December 2022	104.75	375	82.38	375
January 2023	103.12	250	81.91	300
February 2023	103.12	250	81.91	300
March 2023	95.60	350	72.36	300
April 2023	100.34	275	77.22	225
May 2023	103.12	250	73.81	250
June 2023	64.77	150	41.12	150
July 2023	79.81	200	47.27	175
August 2023	76.52	200	46.09	175
September 2023	62.65	150	40.69	125
October 2023	60.14	100	41.29	100
November 2023	59.78	125	41.64	125
December 2023	60.69	150	44.14	150
January 2024	76.18	175	63.94	175
February 2024	73.97	175	62.72	150
March 2024	52.81	150	34.71	125
April 2024	52.23	100	33.47	100
May 2024	52.49	100	32.76	100

⁹ Source: <https://ipa-energyrfp.com/wp-content/uploads/2022/04/Public-Notice-of-Standard-Energy-Products-Procurement-Results-2022-04-21.pdf> and <https://ipa-energyrfp.com/wp-content/uploads/2022/04/Public-Notice-of-Spring-2022-Procurement-Results-for-Ameren-ZRCs-2022-04-27.pdf>.

Month(s)	On-Peak		Off-Peak	
	Average Price	Quantity	Average Price	Quantity
June 2024	51.85	125	33.74	100
July 2024	62.29	150	39.81	100
August 2024	60.78	150	37.74	100
September 2024	51.57	100	33.00	75
October 2024	51.77	50	34.82	25
November 2024	51.77	50	33.82	50
December 2024	51.35	100	37.71	75
January 2025	65.76	100	55.78	100
February 2025	65.18	100	55.25	75
March 2025	51.46	75	36.60	50
April 2025	50.97	50	35.20	25
May 2025	51.72	50	32.47	50

In the April 2022 procurement, the IPA also procured capacity for a portion of the eligible retail customer load of Ameren Illinois as specified in the 2022 Procurement Plan. Although the capacity procured did not include an electricity component, this information is provided below for the benefit of completeness. The following tables report on the names of winning suppliers, quantity of capacity procured - in Zonal Resource Credits (ZRCs), the average contracted price, and term.

Winning Suppliers

Dynegy Marketing and Trade, LLC
Enervise Global Technologies, LLC d/b/a CPower
Voltus, Inc.

Term, Average Price (\$/MW-Day) and Quantities (in ZRCs) of Capacity Contracts¹⁰

Term	Zonal Resource Credits	
	Average Price	Quantity
June 2023 – May 2024	\$180.40 per MW-day	807
June 2024 – May 2025	\$150.72 per MW-day	286

¹⁰ In accordance with the RFP rules and previous Commission orders, quantity information is provided where the number of successful bidders is greater than two.

ComEd

Winning Suppliers

AEP Energy Partners, Inc.
Constellation Energy Generation LLC
Dynegy Marketing and Trade, LLC
Enel Trading North America, LLC
Macquarie Energy LLC
Morgan Stanley Capital Group Inc.
NextEra Energy Marketing, LLC
NRG Power Marketing, LLC
Shell Energy North America (US), L.P.

Average Prices (\$/MWh) and Quantities (MW) of Electricity Contracts

Month(s)	On-Peak		Off-Peak	
	Average Price	Quantity	Average Price	Quantity
June 2022	98.56	75	68.50	175
September 2022	103.25	275	69.74	75
October 2022	98.43	150	74.54	175
November 2022	98.70	150	74.94	275
December 2022	100.83	300	77.78	300
March 2023	65.80	650	48.81	200
April 2023	64.50	725	-	-
May 2023	59.77	750	40.07	75
June 2023	59.55	525	37.82	425
July 2023	66.13	625	40.67	525
August 2023	64.93	575	40.00	475
September 2023	58.95	425	37.50	375
October 2023	58.17	350	39.64	325
November 2023	57.80	400	37.54	375
December 2023	58.12	475	38.81	425
January 2024	60.50	475	42.13	450
February 2024	59.91	450	41.66	425

	On-Peak		Off-Peak	
March 2024	57.37	375	35.06	375
April 2024	58.33	325	35.25	325

May 2024	57.27	350	31.74	325
June 2024	47.16	400	29.68	350
July 2024	55.03	550	32.43	425
August 2024	53.81	500	31.63	375
September 2024	46.98	325	29.21	300
October 2024	47.66	250	30.18	200
November 2024	47.22	275	29.69	250
December 2024	47.05	350	31.03	325
January 2025	52.28	375	35.23	325
February 2025	51.07	325	37.01	300
March 2025	47.68	275	30.56	250
April 2025	48.10	225	30.18	200
May 2025	47.53	250	30.18	200

MidAmerican

No Winning Suppliers

May 2022 Supplemental Procurement¹¹

Ameren Illinois

Winning Suppliers

AEP Energy Partners, Inc.
Shell Energy North America (US), LP
TransAlta Energy Marketing (US), Inc.

Average Prices (\$/MWH) and Quantities (MW) by Delivery Period

	On-Peak		Off-Peak	
Months	Average Price	Quantity	Average Price	Quantity
July 2022	173.04	650	94.96	450
August 2022	159.91	600	90.00	450

ComEd

Winning Suppliers

AEP Energy Partners, Inc.
Constellation Energy Generation, LLC
Dynegy Marketing and Trade, LLC
J. Aron & Company LLC
Macquarie Energy, LLC
Shell Energy North America (US) LP
TransAlta Energy Marketing (US), Inc.

¹¹ Source: <https://ipa-energyrfp.com/wp-content/uploads/2022/05/Public-Notice-of-Supplemental-Standard-Energy-Products-Procurement-Results-2022-05-20.pdf>.

Average Prices (\$/MWh) and Quantities (MW) of Electricity Contracts

	On-Peak		Off-Peak	
Months	Average Price	Quantity	Average Price	Quantity
June 2022	116.34	1,475	75.07	1,450
July 2022	164.34	1,550	87.85	1,725
August 2022	158.77	1,725	85.54	1,725
September 2022	115.42	1,375	67.70	1,400

MidAmerican

Winning Supplier

TransAlta Energy Marketing (US), Inc.

Average Prices (\$/MWh) and Quantities (MW) of Electricity Contracts

Months	Average Price (\$/MWH)
July 2022	161.92
August 2022	161.92

(2) (Blank)

(3) The quantity, price, and rate impact of all energy efficiency and demand response measures purchased for electric utilities, and any measures included in the procurement plan pursuant to Section 16-111.5B of the Public Utilities Act.

Consistent with prior years, the IPA did not directly purchase energy efficiency or demand response measures for ComEd or Ameren Illinois in Fiscal Year 2022.

Procurement Plans developed by the Agency for the years 2013 through 2017 included the approval of incremental energy efficiency programs pursuant to Section 16-111.5B of the Public Utilities Act. Those provisions were terminated as part of Public Act 99-0906, which took effect on June 1, 2017 and thus the IPA has not included energy efficiency in its procurement plans since that time.

Under current market and regulatory conditions, the IPA believes that a demand response procurement by the IPA could not meet the standards set forth in Section 16-111.5(b)(3) of the Public Utilities Act. Reasons for this include, for example, the statutory requirement that demand response under this provision must come from “eligible retail customers,” and as the IPA is not aware of any simple, straightforward way of definitively determining whether a non-competitive class customers take supply from the utility or an alternative retail electric supplier for purposes of any demand response aggregation, there may simply be no feasible way to ensure that only eligible retail customers participate. As a result, the IPA has not included demand response procurements in its annual electricity procurement plan and the ICC has approved that determination.

(4) The amount of power and energy produced by each Agency facility.

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2022.

(5) The quantity of electricity supplied by each Agency facility to municipal electric systems, governmental aggregators, or rural electric cooperatives in Illinois.

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2022.

(6) The revenues as allocated by the Agency to each facility.

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2022.

(7) The costs as allocated by the Agency to each facility.

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2022.

(8) The accumulated depreciation for each facility.

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2022.

(9) The status of any projects under development.

Consistent with prior years, the IPA had no Agency facilities under development during Fiscal Year 2022.

Among the Agency's goals and objectives enumerated in the Illinois Power Agency Act are the following:

- *Develop electric generation and co-generation facilities that use indigenous coal or renewable resources, or both, financed with bonds issued by the Illinois Finance Authority.*
- *Supply electricity from the Agency's facilities at cost to one or more of the following: municipal electric systems, governmental aggregators, or rural electric cooperatives in Illinois.*¹²

¹² 20 ILCS 3855/1-5(C) and (D).

The Act puts a number of restrictions on the Agency that severely limit its ability to develop the allowed facilities in the current marketplace. See, for example:

At the Agency's discretion, it may conduct feasibility studies on the construction of any facility. Funding for a study shall be assessed to municipal electric systems, governmental aggregators, units of local government, or rural electric cooperatives requesting the feasibility study; or through an appropriation from the General Assembly.

No entities have requested such a study.

The Agency may enter into contractual arrangements with private and public entities, including but not limited to municipal electric systems, governmental aggregators, and rural electric cooperatives, to plan, site, construct, improve, rehabilitate, and operate those electric generation and co-generation facilities.

No entities have requested such arrangements.

The first facility that the Agency develops, finances, or constructs shall be a facility that uses coal produced in Illinois. The Agency may, however, also develop, finance, or construct renewable energy facilities after work on the first facility has commenced.

Any such facility that uses coal must be a clean coal facility and must be constructed in a location where the geology is suitable for carbon sequestration.

The Agency may supply electricity produced by the Agency's facilities to municipal electric systems, governmental aggregators, or rural electric cooperatives in Illinois. The electricity shall be supplied at cost. Electric utilities shall not be required to purchase electricity directly or indirectly from facilities developed or sponsored by the Agency.

Financing of new generation generally requires that there be certainty regarding the contractual obligation to purchase the output of the facility. Even priced at cost, electricity produced by such a facility is likely to be priced significantly above the market price of electricity for the foreseeable future. Without a mandate to purchase such electricity, buyers would not elect to purchase the significantly more expensive electricity from a clean coal facility, let alone enter into a contract featuring the length and terms necessary to finance such a facility's construction. Due to a severely restricted pool of potential buyers and the apparent absence of need among those potential buyers, the development of a new IPA facility is unlikely to be feasible for the foreseeable future.

The Agency may sell excess capacity and excess energy into the wholesale electric market at prevailing market rates; provided, however, the Agency may not sell excess capacity or

excess energy through the procurement process described in Section 16-111.5 of the Public Utilities Act.

The Agency shall not directly sell electric power and energy to retail customers. Nothing in this paragraph shall be construed to prohibit sales to municipal electric systems, governmental aggregators, or rural electric cooperatives.

(Source: P.A. 95-481, eff. 8-28-07; 95-1027, eff. 6-1-09.)

These provisions mean that the Agency may not serve as a seller to retail load in Illinois from any facilities it develops, which serves as a protection for both customers and the market. However, a reduced pool of potential buyers helps ensure that there is not sufficient demand at this time (or in the near future) for the IPA to develop a new facility.

- (10) Basic financial and operating information specifically detailed for the reporting year and including, but not limited to, income and expense statements, balance sheets, and changes in financial position, all in accordance with generally accepted accounting principles, debt structure, and a summary of funds on a cash basis.**

The Agency's Fiscal Year 2022 unaudited Financial Statements and Notes are contained in the attached Appendix A. Appendix B contains a summary of funds on a cash basis.

(11) The average quantity, price, contract type and term and rate impact of all renewable resources procured under the long-term renewable resources procurement plans for electric utilities.

This section of the report, in addition to providing the average quantity, price, contract type and term of all renewable resources purchased, provides a comparison of the costs associated with the procurement of the renewable resources to the costs associated with electricity generated by other types of generation facilities. In this Report, “cost” is used to refer to a quantity procured multiplied by that quantity’s average unit price.

Information on the resources procured and the results of the competitive procurements are presented in Tables, 1, 2, and 3 below for the 2021-22 delivery year for ComEd, Ameren Illinois, and MidAmerican, respectively.¹³ To place the costs of renewable resources and conventional generation on a level footing, procurement costs are compared for RECs and electricity contracted or delivered to the utility’s bundled rate customers during the 2021-2022 delivery year. The following costs are tabulated:

- For Ameren Illinois, ComEd, and MidAmerican, the average price and cost of RECs procured in the Competitive Procurements for new Utility-Scale Wind, new Utility-Scale Solar, and Brownfield Site Solar conducted from 2017 through 2019;
- For Ameren Illinois, and ComEd, the average imputed price and cost of RECs delivered under the Adjustable Block Program;
- The average price per MWh and cost of the blocks of electricity procured by the Agency; and
- For Ameren Illinois and ComEd, the 2010 Long-Term Power Purchase Agreements (“LTPPAs”) purchase costs broken down to show the imputed REC and electricity prices,¹⁴ beginning with the 2012-13 delivery year, which is the first year of delivery under those agreements;

With regard to the 2010 LTPPAs, those contracts contain bundled pricing for electricity and RECs. REC prices are “imputed” by subtracting an electricity price from the bundled price. The electricity prices used in those contracts are determined through a forward energy curve calculated at the time

¹³ Historical information is available in the Agency’s Report on Costs and Benefits of Renewable Resource Procurement published on April 1, 2016, and in the Fiscal Year 2016, Fiscal Year 2017, Fiscal Year 2018, Fiscal Year 2019, Fiscal Year 2020, and Fiscal Year 2021 Annual Reports.

¹⁴ In its December 19, 2012 Order, the ICC allowed for the release of the previously confidential “Appendix K” imputed REC prices. The conformed plan (ICC Docket No. 12-0544, 2013 Electricity Procurement Plan Conforming to the Commission’s December 19, 2012 Order at 84) included imputed prices for the five subsequent delivery years 2013-17.

of the procurement event. The process of imputing these REC prices is described in Appendix K to the Agency's 2010 Procurement Plan.¹⁵

Although the tables below compare the costs of procured RECs to the costs of procured electricity, it should be noted that these costs are not for equivalent products. RECs represent only the value of the environmental attributes of electricity produced from renewable energy facilities, and not the value of the underlying electricity. Alternatively, the costs shown for electricity procured represent prices of actual electricity procured for delivery and use by the end customer. In general, the REC costs are additive to the conventional supply costs when calculating individual customer rate and bill impacts. The Agency also notes that the costs reported herein are only for the supply of electricity and do not include distribution, transmission or other costs related to the provision of electric service.

The Competitive Procurements include the Initial Forward Procurements, Subsequent Forward Procurements, and additional Forward Procurements conducted by the Agency, from 2017 through 2019, for the utilities, as required by Section 1-75(c)(1)(G) of the IPA Act. These procurements were for 15-year contracts for RECs to be delivered annually from new utility-scale wind projects, new utility-scale solar projects and brownfield site photovoltaic projects. The REC deliveries were not to start before June 1, 2019 and were to start by June 1, 2022¹⁶. On March 18, 2021 the IPA conducted a procurement for RECs from utility-scale wind projects as a follow up to a procurement held in October 2019 which did not result in any selected bids. The March 2021 procurement also had no selected bids. The average price and cost in Tables 1, 2, and 3 are for all the Competitive Procurements from 2017 through 2019. The average price and cost are based on actual deliveries.

The Agency conducted the first competitive procurement of RECs from utility-scale wind, solar, and brownfield site solar projects under a new procurement model where the price of the REC is indexed to wholesale energy market prices in May 2022, and a second procurement in December 2022. Under this model the bidders submit a strike price which is used to evaluate bids. The actual REC price (and thus associated costs) are based on the difference between the monthly energy price and that strike price, and can be a positive or negative value. In the first procurement event one wind, three solar, and one brownfield site project were selected at an average strike price of \$52.43,¹⁷ and in the second procurement event no wind, seven solar, and four brownfield site

¹⁵ Illinois Power Agency, ICC Docket No. 09-373, Supplemental Filing (Nov. 9, 2009).

¹⁶ This deadline was initially set at June 1, 2021 in Public Act 99-0906 and was subsequently extended to June 1, 2022 through Public Act 101-0113 in the event of certain development delays like the establishment of an operating interconnection.

¹⁷ See: <https://www.ipa-energyrfr.com/wordpress/wp-content/uploads/2022/05/Spring-2022-Indexed-REC-RFP-Results-12-May-2022-posted.pdf>.

projects were selected at an average strike price of \$72.59.¹⁸ As no RECs from these procurements were delivered in the 2021-2022 delivery year, the impacts of those procurements are not included in the tables below.

Sections 1-75(c)(1)(K) and (L) of the IPA Act, as amended by Public Act 99-0906, required the Agency to establish an Adjustable Block Program (“ABP”) for the procurement of RECs from new photovoltaic distributed generation systems and from new photovoltaic community renewable generation projects. The procurements under the ABP are for 15-year contracts with RECs priced according to a transparent schedule of administratively-set prices. The average price and cost of ABP RECs in Tables 2, 3 and 4 are based on actual deliveries.

¹⁸ See: <https://www.ipa-energyrfp.com/wordpress/wp-content/uploads/2022/12/Fall-2022-Indexed-REC-RFP-Results-15-Dec-2022-posted.pdf>.

ComEd

Table 1 shows the average quantity, price and contract type of all renewable energy resources procured under the Long-term Renewable Resources Procurement Plan and a comparison of the cost of RECs relative to the cost of electricity under contract for delivery to ComEd during the 2021-22 delivery year.

Table 1: ComEd - Comparison of the Cost of RECs Relative to the Cost of Electricity

Procurements of REC from Renewable Energy Resources	RECs and Electricity Delivered in the 2021-22 Delivery Year		
	Quantity [RECs]	Average Unit Price	Cost ¹⁹
Competitive Procurements	2,001,386	\$4.37	\$8,749,414
Adjustable Block Program	534,666	\$64.42	\$34,443,184
<u>2010 Long-Term Purchase Agreements - REC Procurement²⁰</u>	<u>1,261,725</u>	<u>\$14.73</u>	<u>\$18,588,946</u>
Total RECs	3,797,777	\$16.27	\$61,781,544
2010 Long-Term Purchase Agreements - Electricity Procurement ²¹	1,261,725	\$51.21	\$64,615,843
Procurements of Electricity from Conventional Resources	Quantity [MWh]	Average Unit Price	Cost
2021 Fall Block Energy Procurement	3,937,350	\$42.99	\$169,262,755
2021 Spring Block Energy Procurement	9,608,000	\$26.38	\$253,476,059
2020 Fall Block Energy Procurement	3,182,600	\$25.67	\$81,682,345
2020 Spring Block Energy Procurement	2,883,175	\$24.21	\$69,791,325
2019 Fall Block Energy Procurement	2,268,225	\$24.41	\$55,369,748
<u>2019 Spring Block Energy Procurement</u>	<u>2,196,400</u>	<u>\$25.87</u>	<u>\$56,828,177</u>
Total Electricity from Conventional Resources	24,075,750	\$28.51	\$686,410,408

¹⁹ Cost = Quantity times Average Unit Price.

²⁰ This represents the Annual Contract Quantity Commitment of RECs specified in the contract and the imputed REC price.

²¹ This represents the energy associated with the Annual Contract Quantity Commitment of RECs specified in the contract and the difference between the Contract Price and the Imputed REC Price.

Ameren Illinois

Table 2 shows the average quantity, price and contract type of all renewable resources procured under the Long-term Renewable Resources Procurement Plan and a comparison of the cost of RECs relative to the cost of electricity under contract for delivery to Ameren Illinois during the 2021-22 delivery year.

Table 2: Ameren Illinois - Comparison of the Cost of RECs Relative to the Cost of Electricity

Procurements of REC from Renewable Energy Resources	RECs and Electricity Delivered in the 2021-22 Delivery Year		
	Quantity [RECs]	Average Unit Price	Cost ²²
Competitive Procurements	723,248	\$4.51	\$3,261,409
Adjustable Block Program	401,291	58.42	\$23,443,412
<u>2010 Long-Term Purchase Agreements - REC Procurement²³</u>	<u>600,000</u>	<u>\$9.26</u>	<u>\$5,554,000</u>
Total RECs	1,724,539	\$18.71	\$32,258,821
2010 Long-Term Purchase Agreements - Electricity Procurement ²⁴	600,000	\$53.42	\$32,050,000
Procurements of Electricity from Conventional Resources	Quantity [MWh]	Average Unit Price	Cost
2021 Fall Block Energy Procurement	834,400	\$46.61	\$38,891,728
2021 Spring Block Energy Procurement	2,480,400	\$28.89	\$71,668,822
2020 Fall Block Energy Procurement	966,400	\$28.98	\$28,001,690
2020 Spring Block Energy Procurement	791,000	\$26.27	\$20,779,606
2019 Fall Block Energy Procurement	482,400	\$26.84	\$12,949,320
<u>2019 Spring Block Energy Procurement</u>	<u>523,200</u>	<u>\$28.34</u>	<u>\$14,827,870</u>
Total Electricity from Conventional Resources	6,077,800	\$30.79	\$187,119,036

²² Cost = Quantity times Average Unit Price.

²³ This represents the Annual Contract Quantity Commitment of RECs specified in the contract and the imputed REC price.

²⁴ This represents the energy associated with the Annual Contract Quantity Commitment of RECs specified in the contract and the difference between the Contract Price and the Imputed REC Price.

MidAmerican

Table 3 shows the price and contract type of all renewable resources procured under the Long-term Renewable Resources Procurement Plan and a comparison of the cost of RECs relative to the cost of electricity under contract for delivery to MidAmerican during the 2021-22 delivery year.

Table 3: MidAmerican - Comparison of the Cost of RECs Relative to the Cost of Electricity

Procurements of REC from Renewable Energy Resources	RECs and Electricity Delivered in the 2021-22 Delivery Year		
	Quantity [RECs]	Average Unit Price	Cost ²⁵
Competitive Procurements	8,959	\$4.52	\$40,452
<u>Adjustable Block Program</u>	<u>3,403</u>	<u>\$40.94</u>	<u>\$139,326</u>
Total RECs	12,362	\$14.54	\$179,777
Procurements of Electricity from Conventional Resources	Quantity [MWh]	Average Unit Price	Cost
<u>2021 Spring Block Energy Procurement</u>	42,800	\$33.43	\$1,430,760
Total Electricity from Conventional Resources	42,800	\$33.43	\$1,430,760

²⁵ Cost = Quantity times Average Unit Price.

Term of REC Contracts for all Utilities

The IPA’s procurement of renewable energy resources includes REC procurements of various terms (i.e., length of contract). Table 4 shows the term²⁶ associated with each procurement of renewable resources for delivery to Ameren Illinois, ComEd and MidAmerican during the 2021-22 delivery year.

Table 4: Term of RECs Contracts for Delivery during the 2021-22 Delivery Year

Procurements from Renewable Energy Resources	Ameren Illinois & ComEd Delivery Terms	MidAmerican Delivery Terms
Competitive Procurement RECs under Contract	15 years starting June 2019	15 years starting June 2019
Adjustable Block Program RECs under Contract	15 years starting June 2019	-
2010 Long-Term Purchase Agreements REC Procurement	20 years starting June 2012	-

²⁶ The term indicated in this section is merely the nominal term for REC deliveries upon a system becoming energized or beginning with its first REC deliveries; the full term applicable to obligations under REC delivery contracts may vary depending on the contracted system’s specific development schedule (i.e., contractual obligations may still need to be fulfilled before deliveries commence, and achieving those milestones may occur months or even years later than the month/year specified in Table 4).

(12) A comparison of the costs associated with the Agency's procurement of renewable energy resources to (A) the Agency's costs associated with electricity generated by other types of generation facilities and (B) the benefits associated with the Agency's procurement of renewable energy resources.²⁷

The costs associated with the Agency's procurement of renewable energy resources and the Agency's costs of electricity generated by other types of generation facilities are presented above in section (11). The environmental and economic benefits that result from the generation of renewable energy are considered in both quantitative and qualitative terms in this section. The primary benefits associated with renewable energy resources are attributable to the reduction of the pollutants emitted by fossil fuel electricity generation that is displaced by electricity generation from renewable resources, and from the economic benefits provided by the construction and operation of these renewable generation facilities. The monetary estimates of the environmental benefits are focused on the reduced costs that result from the avoidance of emissions-related adverse health effects and crop damages. The economic benefits include increased employment that results from the construction and operation of renewable resource facilities, increased taxes or payments in lieu of taxes, and the local revenue and supply chain impacts that benefit local businesses which supply products and services to these facilities and their workers.

1. Environmental Benefits

The environmental benefits associated with renewable energy generation primarily involve the benefits of avoiding the pollutants emitted by electricity generated by the combustion of fossil fuels that is displaced by the electricity generated by renewable resources. Emissions from the combustion of fossil fuels—specifically, particulate matter (PM),²⁸ sulfur dioxide (SO₂) and nitrogen oxides (NO_x)—have been linked to a wide range of adverse health effects. The adverse health impacts that can result from PM emissions are related, to a large extent, to the size of the particles such that the smaller the particle, the greater the potential for damaging health effects. Fine particles referred to as PM_{2.5} are the most damaging and are associated with respiratory diseases such as asthma, bronchitis, and emphysema as well as cardio-pulmonary disease and cancer.²⁹ PM emissions can also damage the surfaces of agricultural crops adversely affecting growth rates and yields. The health effects associated with SO₂ emissions include irritation and inflammation of tissue exposed to the pollutant, which can exacerbate respiratory diseases. NO_x emissions can have adverse impacts such as respiratory and eye irritation and reduced crop yield.

²⁷ 20 ILCS 3855/1-125(12).

²⁸ PM emissions are generally reported as either PM₁₀, particulates that have diameters of 10 micrometers or less, or PM_{2.5}, particulates of 2.5 micrometers or less.

²⁹ State of Illinois, Illinois Environmental Protection Agency, Illinois Air Quality Report AQI Air Quality Index, 2020.

SO₂ and NO_x emissions also add to PM_{2.5} emissions in the form of secondary sources as some of these emissions evolve into nitrate and sulfate particles in the atmosphere after being emitted. NO_x emissions are also a precursor to the photochemical formation of ozone (O₃). Elevated levels of O₃ in the atmosphere can result in significant damage to vegetation as well as lung damage and exacerbation of respiratory diseases. In addition to the pollutants that have direct impacts on public health, carbon dioxide (CO₂), emitted by the combustion of fossil fuels, contributes to climate change and indirectly to increased public health concerns such as reduced agricultural production, increased waterborne and pest-related diseases, increased storm severity, and ocean acidification.³⁰

In Illinois, most of the emissions associated with electricity generation are sourced from coal and natural gas fired power plants. In 2021, these two generation sources accounted for more than 99% of the CO₂, SO₂ and PM_{2.5} as well as 89% of the NO_x emissions from electricity generation. The U.S. Energy Information Administration reported SO₂, NO_x and CO₂ emissions from power generation in the state for 2021.³¹ The emissions of PM_{2.5} were estimated based on the data from the U.S. EPA Air Emissions Inventories Air Pollutant Emissions Trends.³² These emissions are shown in the following table.

Table 5: Illinois Power Generation Emissions 2021 (Tons)

SO ₂	60,766
NO _x	34,439
PM 2.5	2,490
CO ₂	63,026,618

In this report emission factors for the emissions avoided by renewable energy generation are based on the results of the AVERT model run by the U.S. EPA in March 2022.³³ The Avoided Emissions and Generation Tool (AVERT)³⁴ is used to evaluate the change in pollutants (PM_{2.5}, CO₂, NO_x, SO₂) emitted from electric power generation that results from energy efficiency or generation from renewable resource technologies. The AVERT model calculates the emissions impacts in terms of avoided emissions that result from renewable energy generation on a regional basis. Avoided emission rates were calculated using the AVERT model for the Midwest and Mid-Atlantic regions which are equivalent to MISO and PJM, respectively. These emission rates were multiplied by the renewable resource generation related to the Agency’s procurements and then multiplied by the estimated environmental impacts (also known as “damages”) for each pollutant

³⁰ U.S. Environmental Protection Agency, Air Pollution: Current and Future Challenges, www.epa.gov/clean-air-act-overview/air-pollution-current-and-future-challenges, updated March 30, 2022, accessed December 18, 2022.

³¹ U.S. Energy Information Administration, Electricity, Detailed State Data-Final Annual Data for 2021, released October 14, 2022, accessed December 18, 2022, www.eia.gov/electricity/data/state.

³² U.S. EPA State Tier 1 CAPS Trends, Criteria Pollutants Tier1 for 1990 -2021. <https://www.epa.data/air-emissions-inventories/air-pollutant-emissions-trends-data>.

³³ AVERT v 3.2 Avoided Emission Rates 2017-2021 (October 2022).

³⁴ <http://epa.gov/avert/avoided-emission-rates-generated-avert>.

to provide the monetary benefits associated with the renewable energy represented by the number of RECs delivered each year. This approach, using the AVERT model, provides more quantitatively robust estimates of the actual emissions that are avoided by the Agency's renewable energy procurements. For 2021, the generation emission factors for wind and utility-scale PV are: 1.07 lbs./MWh for SO₂, 0.78 lbs./MWh for NO_x, 0.091 lbs./MWh for PM_{2.5} and 1,473 lbs./MWh for CO₂. For the ABP program the Agency utilized the emission factors calculated by AVERT for distributed PV, 1.22 lbs/MWh for SO₂, 0.96 lbs/MWh for NO_x, 0.104 lbs/MWh for PM_{2.5}, and 1,661 lbs/MWh for CO₂. These emission factors reflect the proportion of RECs delivered in MISO and in PJM in determining the final emission rate for each pollutant to be applied to the benefit calculation.

While the emissions that are displaced by renewable generation can be determined with reasonable specificity, assigning monetary values to these emissions benefits is subject to significant uncertainty. Considering this uncertainty, in this report emissions quantities and emissions factors are reported as specific data points and the monetary benefits of the reduced emissions that result from wind and solar generation are reported as ranges.

Several recent studies^{35,36} developed estimates of the marginal damages that result from emissions from electricity generation. The following ranges of damages in dollars per ton emitted are based on the monetary values reported in these studies converted to second quarter 2022 dollars:³⁷ \$7,909 to \$31,431 for SO₂, \$2,179 to \$16,693 for NO_x, and \$12,942 to \$120,741 for PM_{2.5}. The differences in damage estimates between studies highlight the considerable uncertainties associated with these estimates which are dependent on a range of assumptions and inputs that vary between studies. As a result, the estimates provided below should be understood to be extrapolations and estimates rather than definitive calculations of benefits by the Agency.

To estimate the benefits of avoided damages from CO₂ emissions displaced, the Agency used a social cost of carbon measured in terms of dollars per ton of CO₂. The social cost of carbon is an estimate of the economic damages that would result from the emissions of an additional ton of carbon. The social cost of carbon converts the future damages estimated from the emitted carbon into present values based on a discount rate. Also considered in this estimate is the geographic area assumed to be impacted by the emissions, either in terms of global damages or domestic damages specific to the United States. The range of CO₂ emissions benefits were calculated based on the domestic social cost of carbon (in 2020 dollars escalated to 2022 dollars) of \$15.50/ton determined

³⁵ Jaramillo, P. and Muller, N., "Air pollution emissions and damages from energy production in the U.S.: 2002-2011, Energy Policy 90 (2016) pp.202-211.

³⁶ Goodkind, A.L. et al, "Fine-scale damage estimates of particulate matter air pollution reveal opportunities for location-specific mitigation of emissions," PNAS, April 30, 2019, vol. 116, no. 18, 8775-8780, www.pnas.org/cgi/doi/10.1073/pnas.1816102116.

³⁷ Prices escalated using Implicit Price Deflator for Gross Domestic Product, <https://apps.bea.gov/iTable/>

using a 5% discount rate and the social cost of carbon of \$56.50/ton determined using a 3% discount rate.^{38, 39} The values for the social cost of carbon that the Agency uses for this report are sourced from the Interagency Working Group (“IWG”) developed in 2016. The IWG was disbanded in 2017 by the Trump Administration and reestablished by the Biden Administration in 2021. As part of the Executive Order that reestablished the IWG, the IWG was directed to update the social cost of carbon estimates. As of February 2023, this update has not been completed and will be subject to peer review as well as likely review by the U.S. Congress. Since the update has not been completed the Agency continues to use the estimates developed by the IWG in 2016. The new social cost of carbon estimates are expected to be higher than the current estimates with recent estimates developed by other entities significantly higher.⁴⁰

Based on RECs procured by the Agency and delivered to the utilities for the 2021-2022 delivery year, it was estimated that the associated renewable resources generated a total of 3,672,953 MWh, with 2,733,593 MWh from competitive wind and utility PV procurements and 939,360 MWh from the ABP (see Tables 2-4 in Section 11 above). These MWh represent about 16% of the renewable resources generation in Illinois, which was 23,058,000 MWh for the 2022 delivery year.⁴¹ Using the AVERT model emissions factors, the amount of renewable generation that is equivalent to the quantity of RECs procured by the Agency and delivered to the utilities in the 2021-2022 delivery year, and the dollar per ton estimated emissions damages, the value of the environmental benefits from these renewable resources were estimated as shown in the following table.

Table 6: Estimated Benefits of Renewable Resources Procured by the Agency and Delivered to the Utilities in the 2021-22 Delivery Year

SO2	\$16.0 - \$63.7 million
NOx	\$3.3 - \$25.2 million
PM2.5	\$2.2 - \$20.9 million
CO2	\$39.3 - \$143.3 million
Total	\$60.9 - \$253.2 million

By way of comparison, the U.S. EPA’s assessment of the 2019 public health benefits associated with the reduction of emissions by wind and solar generation in the Midwest ranged from

³⁸ Interagency Working Group on Social Cost of Greenhouse Gases, United States Government, February 2021, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates under Executive Order 13990.

³⁹ For context the \$16.50/MWh Social Cost of Carbon used for the development of the Zero Emission Standard Procurement Plan translates to \$31.37/ton based on a CO₂ emissions factor of 1,052 lbs./MWh.

⁴⁰ A joint study by the University of California and Resources for the Future, the results of which were released in an article in Nature (Nature 610,687-692(2022)) in October 2022, “Comprehensive Evidence Implies a Higher Social Cost of CO₂,” developed a mean social cost of carbon for a 3% discount rate \$80/metric ton in 2020 dollars. The U.S. EPA has released a draft report with estimates of the social cost of carbon of \$120/metric ton in 2020 dollars using a 2.5 percent discount rate. External Review “Draft Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances,” September 2022.

⁴¹ U.S. EIA, Electric Power Monthly. Multiple 2022 issues. [https://www.eia.gov/electricity/monthly/.](https://www.eia.gov/electricity/monthly/)

\$29.94/MWh to \$67.57/MWh (2Q 2022 dollars) for utility-scale solar generation and from \$30.85/MWh to \$69.61/MWh for onshore wind generation.⁴² The EPA’s public health benefits were based on reduced PM_{2.5}, SO₂ and NO_x emissions from generation displaced by the renewable generation but did not include the benefits associated with reduced CO₂ emissions. The total estimated environmental benefits of the IPA’s utility-scale wind and solar procurements for the 2021-22 delivery year range from \$16.02/MWh to \$66.50/MWh.

A study by Lawrence Berkley National Laboratory (“LBNL”) and National Renewable Energy Laboratory (NREL) focused on the prospective impacts of renewable portfolio standards (“RPS”) over the period of 2015 to 2050. The study assumed that state RPS policies which were in effect as of July 2016 remained the same through the end of the 35-year forecast period. The study predicts that compliance with the existing RPS goals through 2050 would reduce cumulative SO₂ emissions by 2.1 million metric tons, cumulative NO_x emissions by 2.5 million metric tons, and cumulative PM_{2.5} emissions by 0.3 million metric tons.⁴³ If these reductions were to come to fruition, the report analysis estimates that there would be 12,000 to 28,000 fewer premature deaths due to respiratory issues over this period.⁴⁴ Based on the emissions reductions under the existing RPS, the study estimated total health and environmental benefits to be on the order of \$97 billion for the U.S. over the forecast period.⁴⁵

Based on the range of emissions benefits utilized above and the actual delivery quantity of 939,360 ABP RECs for the 2021-22 delivery year, the ABP emissions benefits for 2021-22 range from a low of \$17.1 million to a high of \$71.4 million.

2. Economic Benefits

The increasing integration of renewable energy into the electric grid is being driven in large part by state RPS requirements with the primary goal of reducing the adverse health and environmental impacts associated with electricity generation. Along with these environmental benefits, renewable generation also offers a range of economic benefits. The economic benefits that can be attributed to renewable energy include potential electricity price reductions, increased electric system reliability through portfolio diversity, as well as state and regional economic development benefits, including employment and tax revenue benefits. Additional benefits that can be obtained from solar PV distributed generation programs, such as the Solar for All Program, include: providing

⁴² U.S. Environmental Protection Agency, “Public Health Benefits per kWh of Energy Efficiency and Renewable Energy in the United States: A Technical Report,” May 2021 – Second Edition.

⁴³ Mai, T., Wiser, R., Barbose, G., Bird, L., Heeter, J., Keyser, D., Krishnan, V., Macknick, J., and Millstein, D., “A Prospective Analysis of the Costs, Benefits, and Impacts of U.S. Renewable Portfolio Standards,” National Renewable Energy Laboratory, Lawrence Berkeley National Laboratory, December 2016, NREL/TP-6A20-67455.

⁴⁴ Id.

⁴⁵ Id. at 45.

incentives for the development of renewable resources in under-served, low income neighborhoods; addressing some of the environmental justice issues affecting these neighborhoods; increased job training and employment in high unemployment areas; and improving local distribution system reliability.⁴⁶

a) Electricity Price Benefits

Price Moderation and Portfolio Diversity

Wind and solar power offer opportunities for lower wholesale electricity costs, generation supply portfolio diversity and, because these sources do not involve fuel costs, the costs of wind and solar generation are not affected by fuel price volatility. In addition to moderating fuel induced price volatility, wind and solar can provide diversity benefits to a generation portfolio that contains significant amounts of fossil fuel and nuclear generation. These renewable resources offer improved reliability by potentially substituting for other resources that may be adversely impacted by fuel supply and transportation issues, supply disruptions, and the potential delay or avoidance of conventional generation capital expenditures.⁴⁷ Wind and solar in a diversified portfolio can provide a hedge against the cost impacts associated with potential changes in environmental regulations that could adversely affect the costs of, and ultimately the price of electricity, from fossil fuel and nuclear generation.⁴⁸ Wind, solar, and certain other forms of renewable energy are not subject to the uncertainty surrounding potential future carbon taxes, unlike fossil fuel-fired power plants.⁴⁹

Since most of the costs associated with wind and solar generation involve upfront investments, these resources have low operating costs. The resulting low marginal costs do not involve fuel costs and as a result can reduce the wholesale price of electricity by shifting more expensive (on a marginal cost basis) resources out on the supply curve. However, the net pricing benefits attributable to renewable energy resources are difficult to monetize and involve determinations that will be impacted by the trade-off between the system costs⁵⁰ incurred by higher market

⁴⁶ U.S. Department of Energy, ICF, Inc. “Review of Recent Cost-Benefit Studies Related to Net Metering and Distributed Solar,” May 2018.

⁴⁷ U.S. Environmental Protection Agency, “Quantifying the Multiple Benefits of Energy Efficiency and Renewable Energy: A Guide for State and Local Governments. Part One: The Multiple Benefits of Energy Efficiency and Renewable Energy.” 2018 edition.

⁴⁸ *Guide to Purchasing Green Power*, United States Department of Energy Office of Renewable Energy and Energy Efficiency, at 5. (March 2010; Update: September 2018). www.epa.gov/greenpower/guide-purchasing-green-power.

⁴⁹ Loomis, D., Stroup, I., Center for Renewable Energy, Illinois State University, “Economic Impact: Illinois Wind Energy Development,” June 2016, at 10.

⁵⁰ System costs generally refer to the costs incurred by increasing variable renewable energy penetration involving grid extension and reinforcement, transmission, and balancing.

penetration and the downward pressure exerted on wholesale electricity prices by higher levels of renewable resource generation.

Developments in FY2022 regarding high-voltage direct current (“HVDC”) transmission systems offer the potential for increasing the supply of renewable energy in Illinois. Under Public Act 102-0662, renewable energy delivered through lines that have converter stations located in Illinois will be considered to be produced in Illinois for the Agency’s procurement purposes. One HVDC line under development, the SOO Green HVDC Link, which actively provided comments regarding the Agency’s 2023 Procurement Plan, could potentially move renewable energy from wind generation facilities in Iowa to the ComEd zone. However, this project has not started construction and is currently not scheduled to go into operation until 2027.

Impacts on Locational Marginal Prices

Wholesale electric energy prices are set for hourly periods based on bidding by available generators into the regional markets. Most analyses of the impact of renewable generation on electricity prices address these Locational Marginal Prices (“LMPs”) and assume generator bids reflect variable costs. LMPs consist of three components – Energy, Congestion, and Marginal Losses. The energy component prices energy purchases and sales, the congestion component prices transmission congestion costs to move energy from one point to another, and the marginal losses component prices losses on the bulk power system as a result of moving power from one point to another. An impact on any one of these components will have a corresponding impact on the overall LMP. Renewable generation resources tend to lower the price of electricity in the real-time markets (LMPs) and indirectly lower forward wholesale market prices.⁵¹ Wind generation tends to displace thermal generation with relatively high fuel costs putting downward pressure on wholesale market prices.

The Lawrence Berkley National Laboratory conducted a study to assess the impact on wholesale electricity prices that resulted from growing variable renewable energy generation (wind and solar) over the period of 2008 through 2017.⁵² This study also evaluated the relative impacts that other market drivers, notably lower natural gas prices and increasing gas-fired generation, had on wholesale prices during this period. While increasing variable renewable generation was found to result in reduced wholesale electricity prices, lower natural gas prices over this period was the dominant driver of declining average wholesale prices. In MISO, solar and wind generation were found to account for \$0.60/MWh of the drop in average wholesale prices (at the Cinergy/Indiana Hub) from \$50.71/MWh in 2008 to \$29.38/MWh in 2017, the drop in natural gas prices accounted for \$10.90/MWh of the wholesale electricity price decline during this period. In PJM, based on an

⁵¹ Electricity acquired through the Agency’s procurement events is purchased competitively in regional forward wholesale markets.

⁵² Mills, A.D., et al, “Impact of Wind, Solar, and Other Factors on Wholesale Power Prices, An Historical Analysis – 2008 through 2017,” Lawrence Berkeley National Laboratory, November 2019.

analysis of wholesale prices at the PJM Western Hub, wind and solar generation accounted for \$0.40/MWh of the drop in the average annual electricity price from \$69.81/MWh in 2008 to \$29.73/MWh in 2017 while lower natural gas prices contributed \$26.30/MWh to the price decline.⁵³ A range of other factors including flat electricity demand growth, declines in other fuel prices, thermal plant heat rate improvements, retirements of high cost generating plants, and in many markets, lower priced imports, accounted for the rest of the wholesale price declines. The relatively modest wholesale price impacts of variable renewable generation in MISO and PJM are due in part to the low penetration of renewable generation in these markets during this time period. However, going forward, increasing penetration of renewable electricity can be expected to exert a larger influence on wholesale prices.

Another study developed a higher estimate of the impact of renewable resource generation on wholesale energy prices in MISO and PJM which ranged from \$1.00/MWh to \$6.70/MWh for utility-scale wind projects with data analyzed for periods covering 2008 through 2016.⁵⁴ Several other analyses have sought to estimate the impact of wind and solar generation on wholesale power prices.⁵⁵ These studies estimated that wind and solar generation showed definite price impacts but these were relatively small when compared with the impact on wholesale electricity prices of changing natural gas prices and adverse weather conditions.

To quantify the relative benefits of wholesale price reductions that could be related to the IPA's procurement of renewable resources, these price reductions estimated in the LBNL study were applied to the renewable energy associated with the RECs delivered under contract for Ameren (MISO \$0.60/MWh) and ComEd (PJM \$0.40/MWh). The estimated wholesale price benefits for the 2021-22 delivery year are \$674,723 for Ameren, \$7,417 for MidAmerican, and \$1,014,420 for ComEd.

A previous simulation modeling study conducted by the LBNL assessed the impact of variable renewable resources on wholesale electricity prices in four market areas including the California Independent System Operator (CAISO), the Electric Reliability Council of Texas (ERCOT), the Southwest Power Pool (SPP), and the New York Independent System Operator (NYISO). This assessment compared the change in prices from 2016 to 2030 of a low variable renewable energy scenario that froze renewable penetration in each market area at 2016 levels with a 40% penetration of a mix of wind and solar generation in 2030. The 2016 renewable generation penetration levels

⁵³ It should be noted here that this analysis of price impacts resulting from increasing wind and solar generation only considers the wholesale market price and does not include consideration of the other environmental and economic benefits associated with renewable electricity generation.

⁵⁴ "Cost Analysis of Renewable Energy Deployment in Illinois," The Power Bureau, April 2021.

⁵⁵ See: MIT Center for Energy and Environmental Policy Research. Large-Scale Wind Power Investments Impact on Wholesale Electricity Markets. MITCEEPR Working Paper 2021-020, December 2021. Quint, D. and Dahlke, S., "The impact of wind generation on wholesale electricity prices in the midcontinent independent system energy market: an empirical investigation," Energy 169, 456-466.

were 21% in CAISO, 13.25% in ERCOT, 19% in SPP, and 3.8% in NYISO, renewable generation in the latter markets areas was predominantly wind. Although specific to the market areas analyzed, the findings support the contention that increasing variable renewable energy generation in competitive wholesale electricity markets would result in a general decrease in average annual hourly wholesale electricity prices.⁵⁶ In these market areas, the reduction in hourly average annual electricity prices ranged from 4% to 21% at the simulated 40% penetration levels as compared to the 2016 renewable penetration levels.

MISO's 2011 launch of the Dispatchable Intermittent Resources ("DIRs") program allows registered intermittent (variable) generation (mostly wind generators) to participate in the Real-Time Energy Market and set the Real-Time price. Wind generation resources in MISO receive production tax credits, which allow these resources to submit negative energy offers in the energy market. Negative price hours are usually correlated with higher variable renewable energy generation, especially during low system loads. The low marginal-cost generation including negative price bidding shifts the supply curve out to the right reducing near-term wholesale prices.⁵⁷

The above studies focused on the impact of renewable generation on wholesale power prices there have been limited studies on the impact on capacity prices, although several of the studies referenced the potential for increasing wind and solar generation to have negative long-term impacts on capacity prices. FERC has highlighted the price suppression concerns of renewables on capacity prices in PJM in the docket dealing with (i) Calpine's complaint that PJM's Minimum Offer Price Rule ("MOPR") is unjust and unreasonable because it does not address the impact of subsidized existing resources on the capacity market, and (ii) PJM's filing consisting of two alternate proposals designed to address the price suppressing effects of state out-of-market support for certain resources.⁵⁸ FERC, in their order noted as follows:

"PJM, however, recognizes that in today's market, even if a load-serving entity's or a state's primary goal may not be to suppress price, the growing use of out-of-market support of renewable resources can have a significant effect on prices. PJM presents evidence showing that the MW-level of renewable resources receiving out-of-market support has increased significantly and raises price suppression concerns, similar to other resources

⁵⁶ J. Seel; A. Mills; R. Wiser; "Impacts of High Variable Renewable Energy Futures on Wholesale Electricity Prices and on Electric-Sector Decision Making." Energy Analysis and Environmental Impacts Division, Lawrence Berkeley National Laboratory, May 2018.

⁵⁷ Wiser, R.; A. Mills; J. Seel; T. Levin; A. Botterud; "Impacts of Variable Renewable Energy on Bulk Power System, Assets, Pricing and Costs." Lawrence Berkeley National Laboratory and Argonne National Laboratory. November 2017.

⁵⁸ Order Rejecting Proposed Tariff Revisions, Granting in Part and Denying in Part Complaint, and Instituting Proceeding under Section 206 of the Federal Power Act, 163 FERC ¶ 61,236, FERC Docket No. EL16-49-000 et al, June 29, 2018 ("The June 29, 2018 Order").

receiving out-of-market support. Intervenors echo this same concern.”⁵⁹ (Underlining added for emphasis)

Following up on their June 29, 2018 Order, FERC issued another order directing PJM to submit a replacement rate that extended the MOPR to resources receiving out-of-market payments. FERC, in that order noted as follows:

“The evidence in this proceeding shows that RPS programs are growing at a rapid pace, and resources participating in these programs will increasingly have the ability to suppress capacity market prices.”⁶⁰ (Underlining added for emphasis)

In the 2021 PJM State of the Market Report, the PJM Market Monitor reported that in 2021, 77.8 percent of the wind marginal units had negative offer prices, 20.9 percent had zero offer prices and 1.4 percent had positive offer prices.⁶¹ During the first nine months of 2022, 55.8 percent of wind marginal units has negative offer prices, 39.1 percent had zero offer prices and 5.1 percent had positive offer prices.⁶² The implications from the PJM Market Monitor report suggests that wind units in PJM also exert downward pressure on LMPs.

These analyses of the downward impacts on LMPs are focused on reductions at the wholesale level and are not necessarily directly or immediately reflected in the retail rates customers pay.

b) Economic Development Opportunities

In 2016, the Illinois State University’s Center for Renewable Energy issued “Economic Impact: Illinois Wind Energy Development,” a report that modeled the economic impact of wind energy on Illinois’ economy by entering wind project-specific information into the NREL’s Jobs and Economic Development Impact (“JEDI”) model. The model was used to estimate the income, economic activity, and number of job opportunities accruing to the state from the wind projects that have generating capacities of larger than 50 MW. The report estimated that the development of the 25 largest Illinois wind farms installed at the time of the analysis, accounting for 3,610 MW of nameplate capacity out of a total nameplate capacity for all wind projects in the state of 3,842 MW, was responsible for 20,173 full-time equivalent jobs in Illinois during construction and 869 permanent jobs, and would generate a total economic benefit of \$6.4 billion⁶³ during the

⁵⁹ Id. at p.102.

⁶⁰ Order Establishing Just and Reasonable Rate, 169 FERC ¶ 61,239, FERC Docket No. EL18-178-000 (Consolidated), December 19, 2019.

⁶¹ Monitoring Analytics, LLC, 2021 State of the Market Report for PJM, March 10, 2022. Volume 2 at 181.

⁶² Monitoring Analytics, LLC, State of the Market Report for PJM, January through September, November 10, 2022, at 198.

⁶³ Economic Impact: Illinois Wind Energy Development at 6.

construction and typical 25-year operational lives of the projects of about \$250 million on an annualized basis.

The U.S. Energy Information Administration reported that as of November 2022 installed wind capacity in Illinois was 7,034.6 MW up 11.7 percent from 6,300.6 MW in June 2021 and installed solar PV capacity in Illinois was 1,800.6 MW up 123 percent from 807.7 MW in June 2021.⁶⁴ Small-scale solar installations (facilities of less than 1 MW) accounted for 877.8845.7 MW of the solar capacity. During this period utility-scale PV capacity increased to 922.8 MW. The Solar Energy Industries Association (“SEIA”) data on the solar industry in Illinois indicated that solar employment in Illinois in 2021 totaled 5,520.⁶⁵

The wind reports by Illinois State University found that renewable power development leads to the creation of temporary and permanent jobs requiring highly skilled workers in the fields of construction, management, and engineering.⁶⁶ Construction phase jobs typically last anywhere from 6 months to over a year, while operational jobs, including operations and maintenance positions, last the life of the generating facility, typically 20-30 years.⁶⁷

The jobs and economic benefits estimated in the wind report included “turbine and supply chain impacts,” which can also be referred to as “indirect impacts.”⁶⁸ Indirect impacts occurred both in the construction and the operation of wind turbines, and included construction spending on materials and wind farm equipment and other purchases of goods and offsite services. The supply chain of inputs required to produce these goods and services; and project revenues that flow to the local economy in the form of land lease revenue, property tax revenue, and revenue to equity investors are also indirect impacts.⁶⁹ The estimated benefits also included local spending by employees working directly or indirectly on the wind farm project who receive their paychecks and then spend money in the community.⁷⁰ Additional economic impacts referred to in the study as “induced impacts” were also considered, these impacts result from changes in household spending in the areas surrounding the wind project development due to increased income brought

⁶⁴ U.S. Energy Information Administration, Electric Power Monthly, November 2022, <https://www.eia.gov/electricity/monthly/archive/epm>.

⁶⁵ SEIA, Solar Spotlight Illinois, Illinois Solar Factsheet Q3 2022.

⁶⁶ Economic Impact: Wind Energy Development in Illinois at 23.

⁶⁷ Id.

⁶⁸ Id. at 19.

⁶⁹ Id. at 20.

⁷⁰ Id. at 20.

about by the direct and indirect impacts.⁷¹ The solar report showed similar types of economic benefits would be associated with the development of photovoltaic generating facilities.

The analysis in the wind report also determined the 25 largest wind projects in Illinois are estimated to generate more than \$30.4 million in annual property taxes.⁷² A recent analysis of historical property taxes in Illinois showed that in 2019 utility-scale wind and solar projects paid \$41.4 million in property taxes and a combined \$49 million in state and local taxes.⁷³ Local governments can also receive significant amounts of revenue from permitting fees.⁷⁴ Benefits to landowners identified included revenue from leasing their land, which the report found amounted to almost \$14 million annually.⁷⁵ There may be some local concerns such as wear and tear on roads during construction, unfunded decommissioning cost liability, and possibly lowered land values that should be considered when evaluating any specific project's impacts.

Other entities have published employment estimates regarding the impact of wind and solar development in Illinois. According to the American Clean Power Association, wind power contributed more than \$57 million annually in state and local taxes and \$47 million in land lease payments in Illinois during 2021.⁷⁶ The Clean Jobs Midwest Illinois Fact Sheet reported that in 2021 there were an estimated 6,087 jobs in solar generation and 9,126 jobs in wind generation in Illinois.⁷⁷

Renewable resource development in Illinois moving forward will have significant, continuing economic and environmental impacts on the state. The development and installation of new renewable generation is expected to expand significantly with the enactment of Public Act 102-0662 which increases RPS goals, in particular by increasing capacity for the Adjustable Block Program, targets for utility-scale wind and solar, and new options for very large customers to directly procure RECs from new wind and solar projects.

The Agency's renewable energy procurement plans include support for the development of utility-scale solar as well as community solar and photovoltaic distributed generation ("DG"). DG

⁷¹ Id. At 20.

⁷² Id. at 23.

⁷³ "Economic Impact of Wind and Solar Energy in Illinois and the Potential Impacts of Path to 100 Legislation," David G. Loomis, Strategic Economic Research, LLC, December 2020.

⁷⁴ Id. at 18.

⁷⁵ The study noted that these payments to landowners usually extend over the 25-year life of the project and can involve adjustments for inflation which would result in higher payments over time.

⁷⁶ American Clean Power Association, Wind Energy in Illinois, accessed December 14, 2022.

⁷⁷ Clean Jobs Midwest Illinois Fact Sheet. <http://www.cleanjobsmidwest.com/state/illinois>, accessed December 14, 2022.

includes residential solar and commercial and industrial solar with a capacity of less than 5 MW.⁷⁸ The Agency procures DG and community solar RECs through the Adjustable Block and Illinois Solar for All programs. Based on the range of emissions benefits utilized above and the actual delivery quantity of 939,360 ABP RECs for 2021-22, the value of these emissions benefits would range from a low of \$17.1 million to a high of \$771.4 million. As additional projects under contract reach energization and begin delivery RECs, that range will climb significantly across future delivery years with the implementation of Public Act 102-0662.

Distributed generation, community solar, and utility-scale solar PV offer economic and environmental benefits, but to a differing degree. On a levelized cost of energy basis (exclusive of federal tax benefits from the Investment Tax Credit and the Production Tax Credit) utility-scale PV is substantially less expensive with costs in the range of \$28 to \$41/MWh as compared with \$147 to \$221/MWh for residential rooftop solar, \$67 to \$180/MWh for commercial and industrial rooftop solar, and \$59 to \$91/MWh for community solar.⁷⁹ The lower cost utility-scale PV generation means that more solar generation can be procured maximizing the environmental and price impact benefits at the lowest overall system cost.⁸⁰ In this case, the Agency can procure more RECs from utility-scale projects at a lower total cost than a similar amount of RECs from DG or community solar. The comparative economics of DG versus utility-scale PV are heavily impacted by net metering policies. Net metering improves the economics of DG by allowing the DG systems to sell unused electricity back to the grid at retail prices. While utility-scale systems result in more renewable generation and more emissions benefits for the same cost, DG systems offer additional benefits in terms of greater local employment impacts, the potential to avoid some transmission and distribution system investments and distributing the benefits of renewable resource electricity to a more diverse range of participants in terms of income strata and geographic location.

The IPA's incentives for the development of photovoltaic distributed generation projects and community solar projects will have a wide range of local impacts as those projects are expected to be spread throughout the state. Some employment impacts are already being observed: since more than 86 percent of the solar capacity added in 2020 involved projects of 1 MW or less, most of the 2020 jobs in the solar industry are focused on small scale distributed PV generation which is a focus of the ABP.

⁷⁸ Prior to the enactment of Public Act 102-0662, the limit was 2 MW.

⁷⁹ Lazard's Levelized Cost of Energy Analysis, Version 15.0, October 2021, lazard.com/media/451881/larzards-levelized-cost-of-energy-version-150-vf.pdf.

⁸⁰ Tsuchida, B. et. al., "Comparative Generation Costs of Utility-Scale and Residential-Scale PV in Xcel Energy Colorado's Service Area," The Brattle Group, July 2015, brattle.com/news-and-knowledge/publications/comparative-generation-costs-of-utility-scale-and-residential-scale-pv-in-xcel-energy-colorados-service-area.

c) Workforce Diversity and Use of Graduates of Job Training Programs

The Long-Term Renewable Resources Procurement Plan contains a requirement applicable to ABP Approved Vendor⁸¹ that Annual Reports include reporting on “[o]ther 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.”⁸²

The Agency conducted a stakeholder feedback process on how to collect this information in June of 2020 and finalized the reporting requirements in July of 2020.⁸³ Those finalized reporting requirements included a provision that “[t]he Agency will publicly report aggregated data and other information from the Annual Reports that does not identify the specific Approved Vendor.”

Information provided by Approved Vendors in response to this job training and diversity requirement was submitted at the Approved Vendor level (rather than reporting for each ABP project separately) and for this report covers the period from June 1, 2021 through May 31, 2022. Employment information was reported for two categories: direct (“hiring and employment by the Approved Vendor, e.g., staff on the Approved Vendor’s payroll”) and indirect (“hiring and employment conducted by the Approved Vendor’s Designees, installers, marketing/sales sub-contractors, and other entities with which it works as it relates to the marketing, sale, development, and operation of projects participating in the Adjustable Block Program”). Approved Vendors were instructed to only report only on their Illinois-based workforce.

While the Agency believes that the data reported herein provides a reasonable snapshot of the solar industry in Illinois, the Agency notes several limitations of this data. First, this data is self-reported and has not been independently verified. Second, due to the varied nature of the business models within the solar industry, what may be a direct job function for one entity might be an indirect job function for another entity (e.g., if sales and marketing are conducted in-house or outsourced, or if an Approved Vendor conducts installations itself or subcontracts that work). Third, some Approved Vendors, notably those serving as aggregators who manage REC contracts and delivery obligations for smaller solar firms, reported that it was difficult to collect data from all of the entities with which they worked. In such cases, indirect hiring may be underreported. And fourth, some Approved Vendors may have REC delivery contracts for projects which had not yet commenced construction during the reporting period. Alternatively, for many projects (particularly

⁸¹ Approved Vendors are the entities that receive contracts for the delivery of RECs to the utilities in the ABP, Approved Vendors range from vertically integrated marketing, engineering, and installation companies, to aggregators who manage RECs for smaller installers, to special purpose entities created for the development and financing of individual solar projects.

⁸² See 2022 Long-Term Plan at 218.

⁸³ See: <https://illinoisabp.com/wp-content/uploads/2020/07/Job-Training-Report-Requirements-7-30-20.pdf>.

community solar projects), some project development activities would have also occurred before the reporting period.

The following tables contain the aggregated information collected from Approved Vendors in July 2022.

Table 7: Workforce Diversity

	Direct (FTE ⁸⁴)	Indirect (FTE)	Total (FTE)	Direct (%)	Indirect (%)	Total (%)
Race						
Black or African-American	185	171	356	6.4%	4.9%	5.6%
Hispanic or Latinix	272	280	552	9.5%	8.0%	8.7%
Asian	57	55	112	2.0%	1.6%	1.8%
American Indian or Alaska Native	12	14	26	0.4%	0.4%	0.4%
Native Hawaiian or Other Pacific Islander	2	5	7	0.1%	0.1%	0.1%
Total ⁸⁵	529	525	1,054	7%	13%	9%
Two or more races	60	40	100	2.1%	1.1%	1.6%
Gender						
Female	812	414	1,240	21.5%	15.1%	17.7%
Non Binary	2	12	14	0.5%	0.0%	0.2%
Disabled	4	4	8	0.5%	0.2%	0.3%

Table 8: Job Training Graduate Hiring

Program	Direct	Direct	Direct	Indirect	Indirect	Indirect
	Full Time	Part Time	Temp.	Full Time	Part Time	Temp.
Solar Training Pipeline Program	51	2	0	41	6	2
Craft Apprenticeship Program	209	0	0	279	4	4
Multi-Cultural Jobs Programs	4	0	0	9	1	1
Total	264	2	0	329	11	7

⁸⁴ FTE: Full-Time Equivalent.

⁸⁵ Some respondents may have identified more than one race and therefore some numbers may overlap.

(13) Rate Impacts on Eligible Retail Customers

“An analysis of the rate impacts associated with the Illinois Power Agency’s procurement of renewable resources, including, but not limited to, any long term contracts, on the eligible retail customers of electric utilities. The analysis shall include the Agency’s estimate of the total dollar impact that the Agency’s procurement of renewable resources has had on the annual electricity bills of the customer classes that comprise each eligible retail customer class taking service from an electric utility.”⁸⁶

This section of the report also includes estimates of bill impacts determined by analysis of the load of each eligible customer class, numbers of customers, and bill estimates contained in publicly available utility tariff and rate case filings. For the purposes of determining the total bill impact, this section of the report includes the same costs included in the statutory RPS spending cap: “the total amount paid for electric service [which] includes without limitation amounts paid for supply, transmission, distribution, surcharges, and add-on taxes.” The bill impacts are presented both as a percentage of an average customer bill for that class and as cents per kilowatt-hour.

These breakouts provide the rate impact associated with the Agency’s procurement of renewable resources. When multiplied by the overall billing determinants, the values also provide the total dollar impact on the annual electricity bills of each customer class. Results for each electric utility and corresponding customer class are presented for ComEd in Table 9 and Table 10, for Ameren Illinois in Table 11 and Table 12, and for MidAmerican in Table 13 and Table 14.⁸⁷

⁸⁶ 20 ILCS 3855/1-125(13).

⁸⁷ ComEd, Ameren Illinois, and MidAmerican provided the information in these tables in response to the IPA’s data requests issued November 17, 2022.

ComEd

Table 9: Rate Impact for Customers Taking Supply from ComEd⁸⁸

Customer Class	Description	2021-22 Delivery Year
Single Family No Electric Space Heat	Revenue/kWh	\$0.1447
	REC/kWh	\$0.00260
	Ratio (REC/Revenue) ⁸⁹	1.80%
Multi Family No Electric Space Heat	Revenue/kWh	\$0.1548
	REC/kWh	\$0.00260
	Ratio (REC/Revenue)	1.68%
Single Family With Electric Space Heat	Revenue/kWh	\$0.1129
	REC/kWh	\$0.00260
	Ratio (REC/Revenue)	2.30%
Multi Family With Electric Space Heat	Revenue/kWh	\$0.1222
	REC/kWh	\$0.00260
	Ratio (REC/Revenue)	2.13%
Watt-hour	Revenue/kWh	\$0.1648
	REC/kWh	\$0.00260
	Ratio (REC/Revenue)	1.58%
Small Load (< 100 kW)	Revenue/kWh	\$0.1206
	REC/kWh	\$0.00260
	Ratio (REC/Revenue)	2.16%

Table 10: Dollar Impact for Customers Taking Supply from ComEd⁹⁰

Customer Class	Description	2021-22 Delivery Year
Single Family No Electric Space Heat	Usage (kWh)	15,355,827,754
	Dollar Impact	\$39,925,152
Multi Family No Electric Space Heat	Usage (kWh)	4,154,361,523
	Dollar Impact	\$10,801,340
Single Family With Electric Space Heat	Usage (kWh)	392,837,498
	Dollar Impact	\$1,021,377
Multi Family With Electric Space Heat	Usage (kWh)	1,127,319,506
	Dollar Impact	\$2,931,031
Watt-hour	Usage (kWh)	182,541,683
	Dollar Impact	\$474,608
Small Load (< 100 kW)	Usage (kWh)	4,421,425,729
	Dollar Impact	\$11,495,707

⁸⁸ Overall bill (e.g. Revenue/kWh) includes fixed supply charges, RTO services charges, delivery services charges (customer charge, standard metering service charges, distribution facilities charges, and Illinois Electricity Distribution Tax charge), other environmental cost recovery and energy efficiency & demand adjustments, franchise cost additions, and municipal and state taxes. The REC/kWh value is equal to the cost of renewable resources in the delivery year, divided by the sum of the actual load of eligible retail customers.

⁸⁹ This value represents the amount that RECs cost each customer of that delivery year class as a percentage of the amount paid for total “annual electricity bills,” including taxes. Thus, a Rate Impact of 1.80% (Single Family No Electric Space Heat) means that 1.80% of the total electricity bill of a customer of that class in the 2021-22 delivery year was spent on contracts for renewable energy resources.

⁹⁰ Usage values were reported by ComEd. Dollar Impact values were calculated by multiplying the Usage by the REC/kWh reported in Table 9.

Ameren Illinois

Table 11: Rate Impact for Customers Taking Supply from Ameren Illinois⁹¹

Customer Class	Description	2021-22 Delivery Year
Residential Service (DS-1)	Revenue/kWh	\$0.115
	REC/kWh	\$0.001805
	Ratio (REC/Revenue) ⁹²	1.57%
Small General Service (DS-2)	Revenue/kWh	\$0.110
	REC/kWh	\$0.001805
	Ratio (REC/Revenue)	1.64%
General Service & Large General Service (DS-3 and DS-4) ⁹³	Revenue/kWh	\$0.084
	REC/kWh	\$0.001805
	Ratio (REC/Revenue)	2.15%

Table 12: Dollar Impact for Customers Taking Supply from Ameren Illinois⁹⁴

Customer Class	Description	2021-22 Delivery Year
Residential Service (DS-1)	Usage (kWh)	5,009,904,405
	Dollar Impact	\$9,044,881
Small General Service (DS-2)	Usage (kWh)	1,764,330,324
	Dollar Impact	\$3,185,322
General Service & Large General Service (DS-3 and DS-4) ⁹⁵	Usage (kWh)	1,547,804,394
	Dollar Impact	\$2,794,406

⁹¹ Overall bill (i.e. Revenue/kWh) includes fixed supply charges, RTO services charges, delivery services charges (customer charge, standard metering service charges, distribution facilities charges, and Illinois Electricity Distribution Tax charge), other environmental cost recovery and energy efficiency & demand adjustments, franchise cost additions, and municipal and state taxes. The REC/kWh value is equal to the cost of renewable resources in the delivery year, divided by the sum of the actual load of eligible retail customers.

⁹² This value represents the amount that RECs cost each customer of that delivery year class as a percentage of the amount paid for total “annual electricity bills,” including taxes. Thus, a Rate Impact of 1.57% (Residential Service) means that 1.57% of the total electricity bill of a customer of that class in the 2021-22 delivery year was spent on contracts for renewable energy resources.

⁹³ General Service & Large General Service (DS-3 and DS-4) have been declared fully competitive and therefore these classes can no longer take supply from Ameren Illinois fixed price (Rider BGS). Therefore, calculations represent only the load of customers taking supply from Ameren Illinois real time price supply applicable to larger customers (Rider HSS). The REC/kWh value is as described in the footnote above except it only applies to customers and load on Rider HSS.

⁹⁴ Usage values were reported by Ameren Illinois. Dollar Impact values were calculated by multiplying the Usage by the REC/kWh reported in Table 11.

⁹⁵ General Service & Large General Service (DS-3 and DS-4) have been declared fully competitive and therefore these classes can no longer take supply from Ameren Illinois fixed price (Rider BGS). Therefore, calculations represent only the load of customers taking supply from Ameren Illinois real time price supply applicable to larger customers (Rider HSS).

MidAmerican

Table 13: Rate Impact for Customers Taking Supply from MidAmerican⁹⁶

Customer Class	Description	2021-22 Delivery Year
Residential	Revenue/kWh	\$0.10174
	REC/kWh	\$0.00124
	Ratio (REC/Revenue) ⁹⁷	1.22%
Commercial	Revenue/kWh	\$0.08189
	REC/kWh	\$0.00124
	Ratio (REC/Revenue)	1.52%
Industrial	Revenue/kWh	\$0.05341
	REC/kWh	\$0.00124
	Ratio (REC/Revenue)	2.32%
Public Authority	Revenue/kWh	\$0.06846
	REC/kWh	\$0.00124
	Ratio (REC/Revenue)	1.81%
Street Lighting	Revenue/kWh	\$0.14140
	REC/kWh	\$0.00124
	Ratio (REC/Revenue)	0.88%

Table 14: Dollar Impact for Customers Taking Supply from MidAmerican⁹⁸

Customer Class	Description	2021-22 Delivery Year
Residential	Usage (kWh)	664,575,644
	Dollar Impact	\$825,071
Commercial	Usage (kWh)	425,410,696
	Dollar Impact	\$528,147
Industrial	Usage (kWh)	690,821,411
	Dollar Impact	\$857,655
Public Authority	Usage (kWh)	145,687,634
	Dollar Impact	\$180,871
Street Lighting	Usage (kWh)	6,823,942
	Dollar Impact	\$8,472

⁹⁶ Overall bill (e.g. Revenue/kWh) includes fixed supply charges, RTO services charges, delivery services charges (customer charge, standard metering service charges, distribution facilities charges, and Illinois Electricity Distribution Tax charge), other environmental cost recovery and energy efficiency & demand adjustments, franchise cost additions, and municipal and state taxes. The REC/kWh value is equal to the cost of renewable resources in the delivery year, divided by the sum of the actual load of eligible retail customers.

⁹⁷ This value represents the amount that RECs cost each customer of that delivery year class as a percentage of the amount paid for total “annual electricity bills,” including taxes. Thus, a Rate Impact of 1.22% (Residential) means that 1.22% of the total electricity bill of a customer of that class in the 2021-22 delivery year was spent on contracts for renewable energy resources.

⁹⁸ Usage values were reported by MidAmerican. Dollar Impact values were calculated by multiplying the Usage by the REC/kWh reported in Table 13.

(14) (Blank)

(15) Renewable Energy Generation in Illinois

20 ILCS 3855/1-125(b) requires that in addition to reporting on the transactions and operations of the Agency as included in Sections (11)-(13) above, the Agency shall also endeavor to report on the following items through its annual report, recognizing that full and accurate information may not be available for certain items:

- (1) The overall nameplate capacity amount of installed and scheduled renewable energy generation capacity physically located in Illinois.
- (2) The percentage of installed and scheduled renewable energy generation capacity as a share of overall electricity generation capacity physically located in Illinois.
- (3) The amount of megawatt hours produced by renewable energy generation capacity physically located in Illinois for the preceding delivery year.
- (4) The percentage of megawatt hours produced by renewable energy generation capacity physically located in Illinois as a share of overall electricity generation from facilities physically located in Illinois for the preceding delivery year.
- (5) The renewable portfolio standard expenditures made pursuant to paragraph (1) of subsection (c) of Section 1-75 and the total scheduled and installed renewable generation capacity expected to result from these investments. This information shall include the total cost of REC delivery contracts of the renewable portfolio standard by project category, including, but not limited to, renewable energy credits delivery contracts entered into pursuant to subparagraphs (C), (G), (K), and (R) of paragraph (1) of subsection (c) Section 1-75. The Agency shall also report on the total amount of customer load featuring renewable portfolio standard compliance obligations scheduled to be met by self-direct customers pursuant to subparagraph (R) of paragraph (1) of subsection (c) of Section 1-75, as well as the minimum annual quantities of renewable energy credits scheduled to be retired by those customers and amount of installed renewable energy generating capacity used to meet the requirements of subparagraph (R) of paragraph (1) of subsection (c) of Section 1-75.

(1) The overall nameplate capacity amount of installed and scheduled renewable energy generation capacity physically located in Illinois.

Installed Generation

Table 15 shows the overall nameplate capacity of installed renewable energy generation capacity physically located in Illinois, provided by the Energy Information Administration (EIA).

Table 15: Installed Renewable Generation Capacity in Illinois

Technology	Installed Capacity (MW)
Conventional Hydroelectric	32.9
Biomass	73.2
Onshore Wind Turbine	7,034.6
Solar Photovoltaic	1,800.6
Total	8,941.3

Source: EIA Electric Power Monthly, November 2022⁹⁹

Of the installed capacity, for wind, 2,133 MW (30% of total) represents projects supported by IPA procurements, while for solar, 1,1651 MW (91% of total) represents projects supported by IPA programs and procurements.

Scheduled Generation

The IPA reviewed the estimates of scheduled renewable energy generation capacity additions for Illinois, provided by the EIA, PJM, and MISO. The information provided by PJM and MISO is contained in the RTOs’ interconnection queues. The information provided by the EIA is contained in the Electric Power Monthly and EIA Form 860 M.

Table 16 shows the scheduled renewable energy generation capacity as provided by the EIA and Table 17 shows the estimate provided by PJM and MISO in their interconnection queues.

Table 16: Scheduled Renewable Generation Capacity in Illinois – EIA Estimate

IL Total per EIA	Scheduled Renewable Generation Capacity in IL (MW)		
	2023	2024	2025
Solar	133	1,302	
Wind	765	254	250
Hydro	10		
Yearly Total	909	1,556	250
Grand Total	2,715		

Source: EIA Form 860 M

⁹⁹U.S. Energy Information Administration, Electric Power Monthly, November 2022, https://www.eia.gov/electricity/monthly/archivecurrent_month/epm,

Table 17: Scheduled Renewable Generation Capacity in Illinois – PJM and MISO Estimate

IL Total per PJM and MISO	Scheduled Renewable Generation Capacity in IL (MW)				
	2023	2024	2025	2026	2027
Solar	5,576	3,021	6,084	2,124	1,160
Wind	1,062	2,601	879	300	200
Yearly Total	6,639	5,622	6,963	2,424	1,360
Grand Total	23,007				

Source: PJM and MISO Interconnection Queues^{100,101}

As shown in Table 16 and Table 17, the estimates provided by the EIA, PJM, and MISO provide a wide range for the scheduled renewable generation capacity in Illinois. The EIA estimates that up to 2,715 MW could be built by 2025 while the interconnection queues in PJM and MISO estimate up to 23,007 MW by 2027. Based on these estimates the range of scheduled renewable generation capacity is 2,715 MW – 23,007 MW by 2027. Projects currently under contract through IPA programs and procurements that are under development include 200 MW of wind, and 1,962 MW of solar (however 805 MW of the solar is distributed generation or community solar and would not be reflected in the PJM and MISO interconnection queues).

The IPA however notes that there is a very high level of uncertainty as to how much of the total capacity that goes through the interconnection queues in MISO and PJM will actually go into service. While MISO does not publish statistics on the progress of queue positions through the interconnection queue, in particular how much of the total capacity that started the queue process actually went into service, PJM does. Based on PJM’s statistics only 25% of the capacity that started the interconnection process ends up signing a generator interconnection agreement (GIA), and only 14% actually goes into service.¹⁰²

The resource adequacy survey that is conducted jointly between the Organization of MISO States and MISO (“OMS-MISO Survey”) looked into the treatment of new planning resources that are in the queue in particular the amount of capacity that must be credited to a resource based on its progress through the queue. Stakeholders recommended that a weight be applied to a resource’s capacity to reflect its progress through the MISO interconnection queue, based on its study

¹⁰⁰ The PJM Interconnection Queue can be found at: <https://pjm.com/Home/planning/services-requests/interconnection-queues>

¹⁰¹ The MISO Interconnection Queue can be found at: https://www.misoenergy.org/planning/generator-interconnection/GI_Queue/gi-interactive-queue/

¹⁰² See <https://www.pjm.com/-/media/committees-groups/committees/pc/2020/20200512/20200512-pc-info-only-pjm-queue-status-update.ashx>

phase.¹⁰³ For the 2022 OMS-MISO survey, the following weights were applied to new planning resources.¹⁰⁴

- Not Started / Phase 1 = 10%
- Phase 2 = 75% for non-intermittent resources;
50% for Intermittent resources
- Phase 3 / GIA in Progress = 90%

Thus in MISO if a resource has not yet started the study phase, or is in Phase 1, a 10% weight is applied to the resource's capacity. What this means is that if a resource's capacity is 100 MW, the resource will only be credited with 10 MW.

The IPA therefore notes that if PJM's 14% probability of in-service was applied to the scheduled renewable generation capacity in the PJM interconnection queue, and the MISO weights were applied to the scheduled renewable generation capacity in the MISO queue, the 23,007 MW in Table 3 would result in a much lower number more in line with the EIA estimates.

The IPA also notes that FERC recently approved changes to the PJM interconnection process which may also have an impact on the scheduled renewable generation capacity in PJM.¹⁰⁵

¹⁰³ MISO's interconnection process has three study phases. Under Phase 1 a preliminary system impact study is conducted. Under Phase 2 a revised system impact study and an initial Facilities study are conducted. Under Phase 3 a final system impact study and a final facilities study are conducted. After the three study phases an interconnection customer can proceed to the signing of a GIA, followed by construction.

¹⁰⁴ See <https://cdn.misoenergy.org/20220610%20OMS-MISO%20Survey%20Results%20Workshop%20Presentation625148.pdf>

¹⁰⁵ FERC Order Accepting Tariff Revisions Subject to Condition - Docket Nos. ER22-2110-000; ER22-2110-001; Issued November 29, 2022.

(2) The percentage of installed and scheduled renewable energy generation capacity as a share of overall electricity generation capacity physically located in Illinois.

Table 18 shows the percentage of installed renewable generation capacity as a share of total installed generation capacity physically located in Illinois.

Table 18: Percentage of Installed Renewable Generation Capacity

Percentage of Installed Renewable Generation Capacity		
Total Installed Capacity (MW)	Installed Renewable Capacity (MW)	% of Installed Renewable Capacity
47,952	8,941	18.6%

Source: EIA Electric Power Monthly

Table 19 shows the percentage of scheduled renewable generation capacity as a share of total installed capacity, as estimated by the EIA. Table 20 shows the percentage of scheduled renewable generation capacity as a share of total installed capacity, as estimated by PJM and MISO.

Table 19: Percentage of Scheduled Renewable Generation Capacity (Per EIA)

Percentage of Scheduled Renewable Generation Capacity through 2025 (Per EIA)		
Total Installed Capacity (MW)	Scheduled Renewable Capacity (MW)	% of Scheduled Renewable Capacity
47,952	2,715	5.7%

Source: EIA Form 860 M

Table 20: Percentage of Scheduled Renewable Generation Capacity (Per PJM and MISO)

Percentage of Scheduled Renewable Generation Capacity through 2027 (Per PJM and MISO)		
Total Installed Capacity (MW)	Scheduled Renewable Capacity (MW)	% of Scheduled Renewable Capacity
47,952	23,007	48%

Source: PJM and MISO Interconnection Queues

Based on the estimates by the EIA, PJM, and MISO presented in Table 19 and Table 20, the range for the percentage of scheduled renewable generation capacity as a share of total installed generation capacity physically located in Illinois is 5.7% – 48% by 2027, although as discussed above, the estimate based on PJM and MISO interconnection is likely too high.

(3) The amount of megawatt hours produced by renewable energy generation capacity physically located in Illinois for the preceding delivery year.

Table 21 shows the amount of MWh produced by renewable generation capacity physically located in Illinois for the 2021-2022 Delivery Year.

Table 21: MWh Produced by Renewable Generation Capacity

Technology	MWh Produced in 2021-2022
Hydro	120,363
Landfill Gas	367,728
Wind	21,748,310
Solar	946,910
Total	23,183,311

Source: EIA Form 923

(4) The percentage of megawatt hours produced by renewable energy generation capacity physically located in Illinois as a share of overall electricity generation from facilities physically located in Illinois for the preceding delivery year.

Table 22 shows the percentage of MWh produced by renewable generation capacity as a share of the overall MWh produced from facilities located in Illinois for the 2021-2022 Delivery Year.

Table 22: Percentage of MWh Produced by Renewable Generation Capacity

Percentage of Energy Generated by Renewable Generation Capacity in 2021-2022		
Total Energy Generated (MWh)	Energy Generated by Renewable Capacity (MWh)	% of Energy Generated by Renewable Capacity
186,818,081	23,183,311	12.4%

Source: EIA Form 923

(5) The renewable portfolio standard expenditures made pursuant to paragraph (1) of subsection (c) of Section 1-75 and the total scheduled and installed renewable generation capacity expected to result from these investments. This information shall include the total cost of REC delivery contracts of the renewable portfolio standard by project category, including, but not limited to, renewable energy credits delivery contracts entered into pursuant to subparagraphs (C), (G), (K), and (R) of paragraph (1) of subsection (c) Section 1-75. The Agency shall also report on the total amount of customer load featuring renewable portfolio standard compliance obligations scheduled to be met by self-direct customers pursuant to subparagraph (R) of paragraph (1) of subsection (c) of Section 1-75, as well as the minimum annual quantities of renewable energy credits scheduled to be retired by those customers and amount of installed renewable energy generating capacity used to meet the requirements of subparagraph (R) of paragraph (1) of subsection (c) of Section 1-75.

Tables 23 through 25 show the annualized renewable portfolio standard contract values, expenditures, and associated renewable generation capacity for Ameren, ComEd, and MidAmerican respectively.¹⁰⁶

Table 23: Ameren RPS Expenditures and Associated Generation Capacity

	2021-2022 Delivery Year
REC Contract Values by Type (\$)	\$35,624,465
Adjustable Block Program	\$23,443,412
Utility-Scale	\$6,627,053
LTPPAs	\$5,554,000
REC Expenditures by Type (\$)	\$88,999,643
Adjustable Block Program	\$80,184,234
Utility-Scale	\$3,261,409
LTPPAs	\$5,554,000
REC Delivery Contracts (MWh)	2,192,424
Adjustable Block Program	401,291
Utility-Scale	1,191,133
LTPPAs	600,000
Installed Generation Capacity from REC Contracts (MW)	966
Scheduled Generation Capacity from REC Contracts (MW)	693

¹⁰⁶ Ameren Illinois, ComEd, and MidAmerican provided the information in these tables in response to the IPA's data requests issued November 17, 2022.

Table 24: ComEd RPS Expenditures and Associated Generation Capacity

	2021-2022 Delivery Year
REC Contract Values by Type (\$)	\$95,616,385
Adjustable Block Program	\$61,134,160
Utility-Scale	\$15,893,279
LTPPAs	\$18,588,946
REC Expenditures by Type (\$)	\$204,323,662
Adjustable Block Program	\$179,083,314
Utility-Scale	\$7,270,698
LTPPAs	\$17,969,650
REC Delivery Contracts (MWh)	5,101,626
Adjustable Block Program	983,288
Utility-Scale	2,856,613
LTPPAs	1,261,725
Installed Generation Capacity from REC Contracts (MW)	1,603
Scheduled Generation Capacity from REC Contracts (MW)	1,015

Table 25: MidAmerican RPS Expenditures and Associated Generation Capacity

	2021-2022 Delivery Year
REC Contract Values by Type (\$)	\$312,010
Adjustable Block Program	\$244,213
Utility-Scale	\$67,797
REC Expenditures by Type (\$)	\$179,777
Adjustable Block Program	\$139,326
Utility-Scale	\$40,452
REC Delivery Contracts (MWh)	12,362
Adjustable Block Program	3,403
Utility-Scale	8,959
Installed Generation Capacity from REC Contracts (MW)	2
Scheduled Generation Capacity from REC Contracts (MW)	1

The large customer Self-Direct Renewable Portfolio Standard Compliance program (described in subparagraph (R) of paragraph (1) of subsection (c) of Section 1-75 of the IPA Act) will not begin until June 1, 2023, therefore there is not load or Renewable Energy Credits under that program to report.

Alternative Compliance Payment Mechanism Fund Report

“[T]he Illinois Power Agency shall submit an annual report to the General Assembly, the Commission, and alternative retail electric suppliers that shall include ...”

- (A) the total amount of alternative compliance payments received in aggregate from alternative retail electric suppliers by planning year for all previous planning years in which the alternative compliance payment was in effect;*
- (B) the total amount of those payments utilized to purchased [sic] renewable energy credits itemized by the date of each procurement in which the payments were utilized; and*
- (C) the unused and remaining balance in the Agency Renewable Energy Resources Fund attributable to those payments.”¹⁰⁷*

For the delivery year ending May 31, 2017, to the extent an ARES complied with its RPS obligations by procuring renewable energy resources, at least 60% of the renewable energy resources procured by that ARES was required to come from wind generation, while at least 6% of the renewable energy resources procured was required to come from solar PV.¹⁰⁸ If an ARES did not purchase at least the technology-specific sub- target levels of wind or photovoltaic renewable energy resources, then it was required to make additional ACPs at the same rate to meet those obligations. For the delivery years beginning on June 1, 2017 and June 1, 2018, 32% of the renewable energy resources procured by an ARES had to come from either wind or photovoltaics and cannot come from facilities that had their costs recovered through rates regulated by a state. For deliveries years starting June 1, 2019 ARES no longer had RPS obligations.

Up until June 1, 2017, all ACPs were deposited into the Renewable Energy Resources Fund (“RERF”), a state fund administered by the Agency to procure renewable energy resources through the purchase and retirement of RECs.¹⁰⁹ As of June 1, 2017, changes to Section 16-115D(d)(4.5) of the Public Utilities Act contained in Public Act 99-0906 required ACPs to be remitted to the utilities and used to support the procurement of renewable resources for the utilities by the IPA under Section 1-75(c) of the IPA Act.

¹⁰⁷ 220 ILCS 5/16-115D(d)(4).

¹⁰⁸ 220 ILCS 5/16-115D(a)(3) (the 60% statutory wind energy minimum for ARES is lower than the 75% wind standard for utilities).

¹⁰⁹ 20 ILCS 3855/1-56.

A. Total Amount of ACPs Received

This report must provide the total amount of ACPs received in aggregate from ARES for each delivery year in which the ACP was in effect.¹¹⁰ Under the PUA, a delivery year begins on June 1st of each calendar year.¹¹¹ The ACP mechanism was “in effect” by September 1, 2010 to require payments by ARES for the period of June 1, 2009 to May 1, 2010.¹¹² Therefore, this report provides the aggregate total amount of ACPs for the delivery years 2009-10 through 2017-18. Table 26 shows the total ACPs for each year through 2015-2016 which were collected by the ICC and deposited into the Renewable Energy Resources Fund. Starting with the 2016-2017 delivery year, ACP payments are made to the applicable utility and are reported separately.

Table 26: Total ACPs Received by the RERF¹¹³

Delivery Year	Total ACPs Received
June 2009 – May 2010	\$7,148,261.61
June 2010 – May 2011	\$5,632,587.18
June 2011 – May 2012	\$2,156,777.61
June 2012 – May 2013	\$38,382,345.57
June 2013 – May 2014	\$77,145,921.09
June 2014 – May 2015	\$86,278,411.02
June 2015 – May 2016	\$71,649,805.76
Aggregate Total	\$288,394,109.84

ARES ACP payments were due by September 1st following the end of the delivery year. For example, for the delivery year that ended in May, 2017, payments were due September 1, 2017.¹¹⁴ Payments are made in conjunction with a Compliance Report submitted to the ICC.

Table 27 shows total the ACPs collected by the utilities from ARES from for the delivery years 2016-2017, 2017-2018 and 2018-2019, the final delivery year. ComEd reported interests earned from their ACP balance in the 2019-2020 delivery year.

¹¹⁰ 220 ILCS 5/16-115D(d)(4)(A).

¹¹¹ See e.g. 220 ILCS 5/16-111.5(b).

¹¹² Pub. Act 96-0033 (eff. 7/10/2009); 220 ILCS 5/16-115D(d)(2).

¹¹³ Total ACPs Received does not account for expenditures (or other diversions) from the RERF and, therefore, the Aggregate Total reported in this figure will differ from the RERF balance reported in Table 16. Source: internal IPA records reconciled with the ARES reports submitted to the ICC.

¹¹⁴ 220 ILCS 5/16-115D(d)(2).

Table 27: Total ACPs Collected by the Utilities¹¹⁵

Delivery Year	ComEd^{116 117}	Ameren Illinois	MidAmerican	Total ACPs
June 2016 – May 2017	\$40,575,311.19	\$23,375,512.09	\$10,532	\$63,961,355.28
June 2017 – May 2018	\$74,147.65	\$76,169.24	\$1,951	\$152,267.89
June 2018 – May 2019	\$228,292.00	\$67,725.00	\$1,073.00	\$ 297,090.00
Aggregate Total	\$42,731,063.07	\$23,519,406.33	\$13,556.00	\$64,410,713.17

The dramatic decrease in the amount of ACP payments collected by the utilities between the first two Delivery Years appears to be the result of the removal of the requirement that an ARES was required to make ACP payments for 50% of its RPS obligations as well as a very low ACP rate for the 2017-2018 delivery year. ARES appear to have complied with their RPS obligations primarily through the purchase and retirement of Renewable Energy Credits rather than making ACP payments.

The combined total of ACPs received by the Renewable Energy Resources Fund and by the utilities since the ACP compliance mechanisms was first instituted is \$354,658,135.24.

B. Amount of ACPs used to purchase RECs

1. Purchases Made

Prior to May 2013, the only disbursements made from the RERF were temporary transfers of funds to the State’s General Revenue Fund pursuant to 30 ILCS 105/5h(a). Of the \$7,148,261.61 in total ACPs received for the 2009-10 delivery year, the State of Illinois transferred \$2,000,000 on September 20, 2010 and \$4,710,000 on October 15, 2010.¹¹⁸ The remaining \$438,261.61 was not used to purchase RECs and remained in the RERF. The State was required to repay the funds within 18 months of borrowing, and it repaid \$2,000,000 to the RERF in March 2012 and the remaining \$4,710,000 was repaid in April 2012. Because the funds were transferred from a non-interest earning account, no interest was paid.

¹¹⁵ Source: ACP balances provided to the IPA by the respective utility.

¹¹⁶ ACP payments are received in the subsequent delivery year. For purposes of this schedule, the payments are reflected in the procurement year it relates to.

¹¹⁷ Interest is earned monthly. For purposes of this schedule, the amounts include the interest earned during the delivery year.

¹¹⁸ 30 ILCS 105/5h(a).

In 2013, REC deliveries under the 2010 LTPPAs were curtailed due to application of the RPS budget cap.¹¹⁹ Pursuant to the 2013 Procurement Plan, holders of those LTPPAs were given the option to sell curtailed RECs to ComEd with the purchases supported by the ACPs collected from customers on hourly pricing, which are distinct from ACPs collected from ARES. Those funds were insufficient to purchase all of the curtailed RECs and the IPA offered to voluntarily use the RERF to purchase remaining curtailed RECs. In May 2013, the IPA entered into contracts to purchase RECs associated with ComEd’s curtailed long-term contracts that were not otherwise purchased by ComEd.¹²⁰ These purchase contracts were for the delivery year June 1, 2013 through May 31, 2014, and were for up to 121,620 RECs with no minimum delivery levels with a total value of \$2.24 million. Due to improved market prices for RECs elsewhere, not all contract holders exercised their rights to deliver RECs to the IPA. A total of 74,402 RECs were delivered in the June 1, 2013 through May 31, 2014 delivery year under these contracts at a total cost of \$1,719,141.52. There was no direct rate impact resulting from these purchases because they used ACP funds previously collected from ARES. As approved in ICC Docket No. 12-0544, ComEd also used ACP funds to purchase 79,674 RECs curtailed under the operation of LTPPAs in the June 1, 2013 through May 31, 2014 delivery year at a total cost of \$1,647,596.

Effective June 28, 2014, Public Act 98-0672 created new subsection 1-56(i) of the Illinois Power Agency Act requiring the Agency to develop a one-time supplemental procurement plan for the procurement of renewable energy credits from new or existing photovoltaics using up to \$30,000,000 from the RERF. The Supplemental Plan was developed by the IPA in 2014 and approved by the ICC on January 21, 2015. Three procurement events were conducted pursuant to the Supplemental Plan (June 2015; November 2015; and March 2016). Table 28 shows the number of RECs contracted for purchase using alternative compliance payments held in the RERF as the result of each procurement event.¹²¹

Table 28: Supplemental Photovoltaic Procurement RECs and RERF Funds Committed

Procurement Event	RECs Contracted For Purchase	RERF Funds Committed
June 2015	37,082	\$4,999,963
November 2015	70,096	\$9,999,961
March 2016	91,770	\$14,999,894
Total	198,948	\$29,999,818

Table 29 below documents the expenditures for RECs from those procurements as the photovoltaic projects developed pursuant to it are completed and begin operation. As of February 15, 2023,

¹¹⁹ Illinois Power Agency, *2013 Annual Report*, December 1, 2013, at 5. This document, which is available at http://www2.illinois.gov/ipa/Pages/IPA_Reports.aspx#AnnualReports, should not be confused with the *2013 Annual Report on the Costs and Benefits of Renewable Resource Procurement in Illinois*.

¹²⁰ Of the eight LTPPA-holders, seven elected to enter into contracts.

¹²¹ Source: SPV procurement results, internal IPA records

1,062 new photovoltaic projects began operation as a result of this procurement process and have delivered 136,086 RECs under five-year delivery contracts.¹²²

Public Act 99-0002, effective March 26, 2015, authorized the transfer of \$98,000,000 from the RERF to the State's General Revenue Fund. That transfer occurred on April 1, 2015 and did not include a repayment provision, further increasing the differential between ACPs received and the current RERF balance.

Public Act 99-0524, effective June 30, 2016, included an appropriation of \$12 million from the Renewable Energy Resources Fund for deposit into the Illinois Commerce Commission Public Utility Fund. The transfer occurred on June 23, 2017.

Public Act 100-0023, effective July 6, 2017, authorized transfers from special funds (such as the Renewable Energy Resources Fund) to the State's General Revenue Fund with a two-year deadline for repayment provision. On August 10, 2017, \$150 million was transferred from the Renewable Energy Resources Fund to the General Revenue Fund. In April 2018, \$37.5 million was repaid back to the Renewable Energy Resources Fund from the General Revenue Fund. However, on January 22, 2020, an additional \$10 million was transferred from the Renewable Energy Resources Fund to the General Revenue Fund, and on March 23, 2020 another \$20 million was transferred to the Health Insurance Reserve Fund. Subsequently, \$24 million has been repaid in October 2021 through January 2022, and the balance in March of 2022.

2. Changes in Spending the RERF

Public Act 99-0906, effective June 1, 2017, substantially revamped Section 1-56 of the Illinois Power Agency Act (which governs how the Agency uses the RERF). Other than expenditures previously committed via the Supplemental Photovoltaic Procurement process as described above, the remaining balance of the RERF was shifted to supporting the Illinois Solar for All Program, which is designed to create incentives for and support to the development of photovoltaic resources benefitting low-income households and communities. (Solar for All is also supported by contracts with the utilities in addition to the RERF funds.)

Details of the Illinois Solar for All Program were included in the original Long-Term Renewable Resources Procurement Plan developed by the Agency and approved by the Illinois Commerce Commission in 2018, and subsequently updated in the Revised Long-Term Renewable Resources Procurement Plan approved in 2020, and the 2022 Long-Term Renewable Resources Procurement Plan approved in 2022. See www.illinoisssa.com for more information and details on the program. As of February 15, 2023, REC contracts totaling \$52,222,692 have been awarded to Illinois Solar

¹²² Unlike future REC purchases as part of the Illinois Solar for All Program which will feature upfront payments, the Supplemental Photovoltaic Procurement only pays for RECs as they are delivered.

for All projects using funds from the RERF (and an additional \$75,198,132 in contracts funded by the utilities).

Some of the challenges in spending the RERF that have been previously documented are resolved by this change in State law. However, the RERF remains a special State Fund and expenditures from it are only authorized pursuant to the annual appropriations process, and the RERF could be subject to future reallocations of funds to other State purposes if authorized by the General Assembly and Governor.

C. Balance in RERF

As of February 15, 2023, the RERF balance equals \$124,074,193. Table 29 shows the current RERF balance and RERF transactions in Fiscal 2022 and to date.¹²³ As discussed above, ACP payments from ARES were submitted to the utilities in recent years and were not deposited into the RERF.

Table 29: IPA RERF Balance Sheet

Date	Transaction	Amount	Cumulative Balance
Fall 2021	REC Payments / SPV Deposit Returns	(\$1,116,449.98)	\$6,931,220.89
Fall 2021	ILSfA REC Payments	\$13,500.00	\$6,944,720.89
Fall 2021	ILSfA Expenses	(\$433,881.24)	\$6,510,839.65
Fall 2021/Winter 2022	Repayments from General Revenue Fund	\$24,000,000.00	\$30,510,839.65
Winter 2021-2022	REC Payments / SPV Deposit Returns	(\$321,477.31)	\$30,189,362.34
Winter 2021-2022	ILSfA REC Payments	(\$891,658.74)	\$29,297,703.60
Winter 2021-2022	ILSfA Expenses	(\$649,749.21)	\$28,647,954.39
Winter 2021-2022	ILSfA Collateral Deposits	\$288,054.51	\$28,936,008.90
Spring 2022	REC Payments / SPV Deposit Returns	(\$465,253.07)	\$28,470,755.83
Spring 2022	ILSfA REC Payments	(\$959,762.95)	\$27,510,992.88
Spring 2022	ILSfA Expenses	(\$894,353.44)	\$26,616,639.44
Spring 2022	Repayments from General Revenue Fund	\$108,500,000.00	\$135,116,639.44
Summer 2022	REC Payments / SPV Deposit Returns	(\$380,554.15)	\$134,736,085.29
Summer 2022	ILSfA REC Payments	(\$4,985,481.80)	\$129,750,603.49
Summer 2022	ILSfA Expenses	(\$850,911.04)	\$128,899,692.45
Summer 2022	ILSfA Collateral Deposits	(\$46,250.00)	\$128,853,442.45
Fall 2022	REC Payments / SPV Deposit Returns	(\$262,242.89)	\$128,637,449.56
Fall 2022	ILSfA REC Payments	(\$3,132,827.54)	\$125,504,622.02
Fall 2022	ILSfA Expenses	(\$973,015.44)	\$124,531,606.58
Fall 2022	ILSfA Collateral Deposits	(\$46,250.00)	\$124,485,356.58
Winter 2022-2023	REC Payments / SPV Deposit Returns	(\$225,734.50)	\$124,259,622.08
Winter 2022-2023	ILSfA REC Payments	(\$480,919.70)	\$123,778,702.38
Winter 2022-2023	ILSfA Expenses	(\$2,700.00)	\$123,776,002.38
Winter 2022-2023	ILSfA Collateral Deposits	\$298,190.70	\$124,074,193.08

¹²³ Source: internal IPA records. For prior year transactions, please see prior year Annual Reports available at: <https://ipa.illinois.gov/about-ipa/ipa-publications.html>.

Appendix A

Illinois Power Agency

Fiscal Year 2022

Financial Statement and Notes (Unaudited)

State of Illinois
 Illinois Power Agency
 Individual Nonshared Governmental Funds
 Balance Sheet
 June 30, 2022
 (Expressed in Thousands)

UNAUDITED

	<u>Special Revenue</u>		<u>Permanent Trust</u>
	<u>Illinois Power Agency Operations 0425</u>	<u>Illinois Power Agency Renewable Energy Resources 0836</u>	<u>Illinois Power Agency Trust 0424</u>
Assets			
Cash equity in State Treasury	\$ 5,572	\$ 130,056	\$ 100
Securities lending collateral equity with State Treasurer	-	-	1
Investments - held in the Illinois State Board of Investment Commingled Fund at fair value	-	-	41,520
Other receivables, net	\$ 248	\$ -	\$ -
Due from other State funds	83	-	-
Total assets	<u>\$ 5,903</u>	<u>\$ 130,056</u>	<u>\$ 41,621</u>
Deferred Outflows of Resources (DOR)	-	-	-
Total DOR	-	-	-
Total assets and DOR	<u>\$ 5,903</u>	<u>\$ 130,056</u>	<u>\$ 41,621</u>
Liabilities			
Accounts payable and accrued liabilities	\$ 2,852	\$ 1,123	\$ -
Due to other government - local	-	60	-
Bid deposits	-	2,272	-
Obligations under securities lending of State Treasurer	-	-	1
Due to other State funds	23	-	100
Total liabilities	<u>2,875</u>	<u>3,455</u>	<u>101</u>
Deferred Inflows of Resources (DIR)	-	-	-
Total DIR	-	-	-
Fund Balances			
Nonspendable - endowments and similar funds	-	-	41,520
Committed			
Employment and economic development	3,028	126,601	-
Total fund balance	<u>3,028</u>	<u>126,601</u>	<u>41,520</u>
Total liabilities, DIR, and fund balances	<u>\$ 5,903</u>	<u>\$ 130,056</u>	<u>\$ 41,621</u>

The accompanying notes to the financial statements are an integral part of this statement.

State of Illinois
 Illinois Power Agency
 Individual Nonshared Governmental Funds
 Statements of Revenues, Expenditures, and Changes in Fund Balances
 June 30, 2022
 (Expressed in Thousands)

UNAUDITED

	<u>Special Revenue</u>	<u>Permanent Trust</u>	
	<u>Illinois Power Agency Operations 0425</u>	<u>Illinois Power Agency Renewable Energy Resources 0836</u>	<u>Illinois Power Agency Trust 0424</u>
Revenues			
Licenses and fees	\$ 5,519	\$ -	\$ -
Interest and other investment income	-	-	(2,913)
Other revenues	-	141	-
Total revenues	<u>5,519</u>	<u>141</u>	<u>(2,913)</u>
Expenditures			
Employment and economic development	11,341	11,926	-
Debt service principal	94	-	-
Debt service interest	6	-	-
Total expenditures	<u>11,441</u>	<u>11,926</u>	<u>-</u>
Excess (deficiency) of revenues over (under) expenditures	<u>(5,922)</u>	<u>(11,785)</u>	<u>(2,913)</u>
Other financing sources (uses)			
Transfers in	3,439	-	-
Transfers in from other State fund	2,000	-	-
Transfers out	-	-	(3,439)
Net other financing sources (uses) resources	<u>5,439</u>	<u>-</u>	<u>(3,439)</u>
Net change in fund balances	<u>(483)</u>	<u>(11,785)</u>	<u>(6,352)</u>
Fund balances, July 1, 2021	<u>\$ 3,511</u>	<u>\$ 138,386</u>	<u>\$ 47,872</u>
Fund Balances, June 30, 2022	<u>\$ 3,028</u>	<u>\$ 126,601</u>	<u>\$ 41,520</u>

The accompanying notes to the financial statements are an integral part of this statement.

**STATE OF ILLINOIS
ILLINOIS POWER AGENCY**

Individual Nonshared Governmental Funds
Notes to the Financial Statements

June 30, 2022

(1) Organization

The Illinois Power Agency (Agency) is a part of the executive branch of government of the State of Illinois (State) and operates under the authority of and review by the Illinois General Assembly. The Agency actively administers four individual nonshared governmental funds - the Illinois Power Agency Operations Fund, the Illinois Power Agency Trust Fund, the Illinois Power Agency Investment Fund, and the Illinois Power Agency Renewable Energy Resources Fund (collectively, "Funds") - described within these Notes to the Financial Statements. A nonshared fund is a fund in which a single agency of the State is responsible for administering substantially all of the financial transactions of the fund. Each of the Funds operate under a budget approved by the Illinois General Assembly in which resources are appropriated for the use of the Agency to meet each one of the Funds' specific mission and functions as described within the Illinois Compiled Statutes and the Illinois Administrative Code. All funds appropriated to the Agency from each one of the Funds and all cash received for each one of the Funds are under the custody and control of the State Treasurer.

The Agency, created in Fiscal Year 2008, is dedicated to capturing the benefits of competitive energy markets and facilitating the development of alternative energy technologies for the benefit of Illinois consumers. The Agency meets these objectives by planning and managing competitive procurements and participating in the development of new power generation assets and approaches in Illinois. The Agency is an independent agency subject to the oversight of the Executive Ethics Commission and its activities are subject to the authority of certain departments of the executive and legislative branches of government (such as the Department of Central Management Services (CMS), the Governor's Office of Management and Budget, the State Treasurer's Office, and the State Comptroller's Office) as defined by the Illinois General Assembly.

(2) Summary of Significant Accounting Policies

The financial statements of the Funds have been prepared in accordance with accounting principles generally accepted in the United States of America (GAAP) for governmental funds, as prescribed by the Governmental Accounting Standards Board (GASB). To facilitate user understanding of the Funds' financial statements, significant accounting policies are summarized below.

(a) Financial Reporting Entity

As defined by GAAP, the financial reporting entity consists of a primary government, as well as its component units, which are legally separate organizations for which the elected officials of the primary government are financially accountable.

The financial statements only present the Funds administered by the Agency and do not purport to, and do not, present fairly the financial position of the Agency or the State as of June 30, 2022, nor changes in the Agency or State's financial position for the year ended in conformity with GAAP.

**STATE OF ILLINOIS
ILLINOIS POWER AGENCY**

Individual Nonshared Governmental Funds
Notes to the Financial Statements

June 30, 2022

(2) Summary of Significant Accounting Policies – Continued

(a) Financial Reporting Entity - Continued

The Funds are not legally separate from the State; therefore, the financial information of the Funds are included in the financial statements of the State. The State's Annual Comprehensive Financial Report (ACFR) may be obtained by writing to the State Comptroller's Office, Division of Financial Reporting, 325 West Adams Street, Springfield, Illinois, 62704-1871, or accessing its website at www.illinoiscomptroller.gov.

(b) Basis of Presentation

In government, the basic reporting entity is a fund. A fund is defined as an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources together with all related liabilities, obligations, inflows, outflows, and equities, which are segregated for the purpose of carrying on specific activities or attaining certain objectives in accordance with special regulations, restrictions, or limitations. A balance sheet and statement of revenues, expenditures, and changes in fund balance have been presented for the Funds administered by the Agency.

The Agency administers the following fund types:

Governmental Fund Type:

Special Revenue:

These funds account for resources obtained from specific revenue sources that are legally restricted or committed to expenditures for specified purposes. Special revenue funds account for, among other things, federal grant programs, taxes levied with statutorily defined distributions, and other resources restricted as to purpose.

Illinois Power Agency Operations Fund – 425

This fund was created as a special fund in the State Treasury. The fund is administered by the Agency for Agency operations as specified in the Illinois Power Agency Act. Funding sources include charges for services through fee reimbursements as provided by the Illinois Power Agency Act and transfers of interest and investment income from the Illinois Power Agency Trust Fund.

Illinois Power Agency Debt Service Fund – 427

This fund was created as a special fund in the State Treasury. The fund shall be administered by the Agency for retirement of revenue bonds issued for any Agency

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facility. There were no account balances or activities in this fund during Fiscal Year 2022.

(2) Summary of Significant Accounting Policies – Continued

(b) Basis of Presentation - Continued

Illinois Power Agency Facilities Fund – 426

This fund was created as a special fund in the State Treasury. The fund shall be administered by the Agency for costs incurred in connection with the development and construction of a power facility by the Agency as well as costs incurred in connection with the operation and maintenance of an Agency facility. There were no account balances or activities in this fund during Fiscal Year 2022.

Illinois Power Agency Renewable Energy Resources Fund – 836

This fund was created as a special fund in the State Treasury. This fund is administered by the Agency for the procurement of renewable energy resources. This fund's funding source was Alternative Compliance Payments remitted by Alternative Retail Electric Suppliers to comply with the State's Renewable Portfolio Standard established by the Public Utilities Act.

Permanent:

These funds account for resources that are legally restricted to the extent that only earnings, and not principal, may be used for purposes that benefit the government or its citizens.

Illinois Power Agency Trust Fund – 424

This fund was created as a special fund in the State Treasury. This fund has two distinct purposes:

- 1) This fund may accept, receive, and administer any grants, loans, or other funds made available to it by any source. Any funds received except for interest and investment income shall not be considered income but shall be added to the principal of the Illinois Power Agency Trust Fund. These amounts shall be interfund cash transferred to the Illinois Power Agency Investment Fund to be held for investment by the Illinois State Board of Investment for the purpose of obtaining a total return on investments for the long term as described in the State Finance Act (30 ILCS 105/6z-75).

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- 2) This fund may accept cash transfers of investment income from the Illinois Power Agency Investment Fund for interfund cash transfer, subject to appropriations from the Illinois General Assembly, to the Illinois Power Agency Operations Fund as described in the State Finance Act (30 ILCS 105/6z-75).

(2) Summary of Significant Accounting Policies – Continued

(b) Basis of Presentation - Continued

Illinois Power Agency Investment Fund – 1408

This fund was created as a locally held fund held by the Illinois State Board of Investment outside of the State Treasury. Any funds received by the Illinois Power Agency Investment Fund from the Illinois Power Agency Trust Fund shall not be considered income but shall be added to the principal of the Fund. In addition, the Agency may interfund cash transfer, subject to the maximum appropriation for the Illinois Power Agency Trust Fund from the Illinois General Assembly, up to 90% of the annual investment income to the Illinois Power Agency Trust Fund for interfund cash transfer to the Illinois Power Agency Operations Fund. Any investment income not interfund cash transferred to the Illinois Power Agency Trust Fund for interfund cash transfer to the Illinois Power Agency Operations Fund shall not be considered income but shall be added to the principal of the Illinois Power Agency Investment Fund.

The Illinois Power Agency Investment Fund has been collapsed into the Illinois Power Agency Trust Fund for financial reporting purposes.

Funding sources for both permanent funds include interest accumulations deposited by the State Treasurer, investment income received through the Illinois State Board of Investment, and any grants, loans, or other funds made available to it by any source.

(c) Measurement Focus and Basis of Accounting

The Funds are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the State considers revenues to be available if they are collected within 60 days of the end of the current fiscal year. Expenditures generally are recorded when the liability is incurred, as under accrual accounting. However, principal and interest on formal debt issues, claims and judgments, and compensated absences are recorded only when payment is due. Capital asset acquisitions are reported as expenditures in governmental funds. Proceeds of formal debt issues and acquisitions under capital leases and installment purchases are reported as other financing sources. Significant revenue sources which are susceptible to

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accruals include charges for services and interest and investment income. All other revenue sources including fines, licenses, and other miscellaneous revenues are considered to be measurable and available if they are collected within 60 days of the end of the current fiscal year.

(2) Summary of Significant Accounting Policies – Continued

(d) Cash Equity in State Treasury

Cash equity in the State Treasury includes deposits held in the State Treasury. It also includes cash received and deposited in the Agency's clearing account and in process to the State Treasurer.

(e) Investments

Investments are reported at fair value. The Illinois State Board of Investment holds investments for the Illinois Power Agency Trust Fund within the Illinois Power Agency Investment Fund pursuant to the State Finance Act (30 ILCS 105/6z-75).

(f) Interfund Transactions

The following types of interfund transactions between the Funds and funds of other State agencies may occur:

Interfund Loans are amounts provided with a requirement for repayment made in accordance with State law, which are reported as interfund receivables in lender funds and interfund payables in borrower funds. When interfund loan repayments are not expected within a reasonable time, the interfund balances are reduced and the amount that is not expected to be repaid is reported as a transfer from the fund that made the loan to the fund that received the loan.

Services provided and used are sales and purchases of goods and services between funds for a price approximating their external exchange value. Interfund services provided and used are reported as revenues in seller funds and expenditures or expenses in purchaser funds. Unpaid amounts are reported as interfund receivables and payables in the governmental fund's balance sheet.

Reimbursements are repayments from the funds responsible for particular expenditures or expenses to the funds that initially paid for them. Reimbursements are reported as expenditures in the reimbursing fund and as a reduction of expenditures in the reimbursed fund.

Transfers are flows of assets (such as cash or goods) between funds without equivalent flows of assets in return and without a requirement for repayment. In governmental funds,

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transfers are reported as other financing uses in the governmental funds making transfers and as other financing sources in the governmental funds receiving transfers.

(2) Summary of Significant Accounting Policies – Continued

(g) Fund Balances

Fund balances are classified in the following categories:

Non-spendable – This consists of amounts that cannot be spent because they are either not in spendable form or are legally or contractually required to be maintained intact. The Illinois Power Agency Trust Fund had a non-spendable fund balance as of June 30, 2022.

Restricted – This consists of amounts that are restricted to specific purposes, which is when constraints placed on the use of resources are either externally imposed by creditors, grantors, contributors, or laws or regulations of other governments, or imposed by law through constitutional provisions or enabling legislation. There were no restricted fund balances as of June 30, 2022.

Committed – This consists of amounts that can only be used for specific purposes pursuant to constraints imposed by formal action of the Agency’s highest level of decision-making authority. Committed amounts cannot be used for any other purpose unless the Agency removes or changes the specified use by taking the same type of action it employed to previously commit those amounts. The Agency’s highest level of decision-making authority rests with the Illinois General Assembly and the Governor. The State passes “Public Acts” to commit its fund balances. The Illinois Power Agency Trust Fund, the Illinois Power Agency Operations Fund, and the Illinois Power Agency Renewable Energy Resources Fund had committed fund balances as of June 30, 2022.

Assigned – This consists of net amounts that are constrained by the Agency’s intent to be used for specific purposes, but that are neither restricted nor committed. Fund balance assignments can only be removed or changed by action of the General Assembly. There were no assigned fund balances as of June 30, 2022.

Unassigned – This consists of residual fund balance that has not been designated for specific purposes within the Funds. There were no unassigned fund balances as of June 30, 2022.

The Agency has a general policy to first use restricted resources for expenditures incurred for which both restricted and unrestricted (committed, assigned, or unassigned) resources are available. When expenditures are incurred for which only unrestricted resources are available, the policy is to use committed resources first, then assigned. Unassigned amounts are only used after the other resources have been used.

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(2) Summary of Significant Accounting Policies – Continued

(h) Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, and deferred inflows of resources and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenditures during the reporting period. Actual results could differ from those estimates.

(i) Future Adoption of GASB Statements

Effective for the year ending June 30, 2023, the Agency will adopt GASB Statement No. 91, *Conduit Debt Obligations*, defines a debt instrument issued in the State that is for the benefit of a third party primarily liable for repayment of the debt instrument. It Establishes standards for recognition, measurement, and disclosure for issuers. The Agency believes this will not have a significant impact on the Funds' financial statements as a result of adopting this statement.

Effective for the year ending June 30, 2023, the Agency will adopt GASB Statement No. 94, *Public-Private and Public – Public Partnerships and Availability Payment Arrangements*, Establishes standards of reporting for PPP and APA's to improve comparability of financial statements among governments that enter into these types of agreements. The Agency believes this will not have a significant impact on the Funds' financial statements as a result of adopting this statement.

Effective for the year ending June 30, 2023, the Agency will adopt GASB Statement No. 96, *Subscription-Based Information Technology Arrangements*. Establishes a definition for SBITAs and provide uniform guidance on accounting and financial reporting of SBITAs. SBITs provide government with access to IT software and associated capital assets without granting governments a perpetual license or title to the software and assets. The Agency believes this will not have a significant impact on the Funds' financial statements as a result of adopting this statement.

(3) Deposits and Investments

(a) Deposits

The State Treasurer is the custodian of the Fund's deposits and investments for funds maintained in the State Treasury. Deposits in the custody of the State Treasurer on June 30, 2022, including cash on hand and cash in transit, totaled \$5.6 million for the Illinois Power Agency Operations Fund and \$130 million for the Illinois Power Agency Renewable Energy Resources Fund. These deposits are pooled and invested with other State funds in accordance with the Deposit of State Moneys Act of the Illinois Compiled Statutes (15 ILCS 520/11). Funds held by the State Treasurer have not been categorized as to credit risk because the Funds do

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not own individual securities. Details on the nature of these deposits are available within the State's ACFR.

(b) Investments

The Illinois State Board of Investment, an internal investment pool of the State, holds the investments within the Illinois Power Agency Investment Fund pursuant to the State Finance Act (30 ILCS 105/6z-75). At June 30, 2022, total investments were \$42 million.

The Illinois State Board of Investment manages all assets held by it within a single commingled fund. Disclosures pertaining to these investments are included in the financial statements of the Illinois State Board of Investment. A copy of the financial statements of the Illinois State Board of Investment may be obtained by writing to the Illinois State Board of Investment, 180 North LaSalle Street, Suite 2015; Chicago, Illinois, 60601.

(4) Other Receivables

The balance of Other Receivables for the Illinois Power Agency Operations Fund includes reimbursements owed to the Agency, totaling \$248 thousand.

(5) Interfund Balances and Activity

Interfund transfer activity during the year ended June 30, 2021, consisted of the following:

The following balances (in thousands) represents amounts transferred among funds:

<u>Transfers In</u>	<u>Transfers Out</u> Illinois Power Agency Trust Fund	<u>Description/Purpose</u>
Illinois Power Agency Operations Fund	\$ 3,439	Transfer Pursuant to the State Finance Act (30 ILCS 105/6z-75)
Other State Fund	\$ 2,000	CEJA / DCEO (PA 102-0662)
Total:	<u>\$ 5,439</u>	

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In addition, the General Assembly ordered a \$150 million interfund loan between the Illinois Power Agency Renewable Energy Resources Fund and the General Fund. On August 9, 2017, the State Comptroller and the State Treasurer, in consultation with the Governor’s Office of Management and Budget, processed the transaction. Under the State Finance Act (30 ILCS 105/5h.5), the State Comptroller and the State Treasurer must repay the loan by August 8, 2022. On April 27, 2018, the first repayment of \$37.5 million was processed from the General Fund to the Illinois Power Agency Renewable Energy Resources Fund by the State Comptroller and the State Treasurer. On January 22, 2020, and March 27, 2020, the State Comptroller transferred a total of \$10 million each day to the Health Insurance Reserve from the Illinois Power Agency Renewable Energy Resources Fund, this transfer is made pursuant to statutory authorization set forth in 30 ILCS 150/5h.5 as amended in P.A. 101-0010 which provides for transfers to the Health Insurance Reserve Fund to meet cash flow deficits and to maintain liquidity between July 1, 2017 and March 1, 2021. Additionally, all monies transferred shall be repaid to the fund of origin within 48 months along with any interest that the fund would have accrued had the transfer not occurred. The State Comptroller and the State Treasurer processed the following repayments from the General Fund to the Illinois Power Agency Renewable Energy Resources Fund;

October 21, 2021	\$ 4,000
December 2, 2021	\$ 10,000
January 10, 2022	\$ 10,000
April 4, 2022	\$108,500
Total	\$132,500

The following presents the Funds’ interfund balances and activities at June 30, 2021: The following balances (in thousands) represents amounts due to other funds:

<u>Due From</u>	<u>Due To</u>		<u>Description/Purpose</u>
	<u>Other State Funds</u>		
Illinois Power Agency Operations Fund	\$	23	Payment for Services
Total:	\$	23	

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June 30, 2022

(6) Pension Plan

Substantially all of the Agency's full-time employees participate in the State Employees' Retirement System (SERS), which is a pension trust fund in the State of Illinois' reporting entity. The SERS is a single-employer defined benefit public employee retirement system in which State employees participate, except those covered by the State Universities, Teachers', General Assembly, and Judges' Retirement Systems. The financial position and results of operations of the SERS for Fiscal Year 2022 are included in the State of Illinois' ACFR for the year ended June 30, 2022. The SERS also issues a separate ACFR that may be obtained by writing to the SERS, 2101 South Veterans Parkway, Springfield, Illinois, 62794-9255.

A summary of benefit provisions, changes in benefit provisions, employee eligibility requirements including eligibility for vesting, and the authority under which benefit provisions are established are included as an integral part of the SERS' ACFR. Also included is a discussion of employer and employee obligations to contribute and the authority under which those obligations are established.

The Agency pays employer retirement contributions based upon an actuarially determined percentage of its payrolls. For Fiscal Year 2022, the employer contribution rate was 56.169% and the Illinois Power Agency Operations Fund made contributions of \$802 thousand.

(7) Post-employment Benefits

The State provides health, dental, vision, and life insurance benefits for retirees and their dependents in a program administered by the CMS. Substantially all State employees become eligible for post-employment benefits if they eventually become annuitants of one of the State sponsored pension plans. Health, dental, and vision benefits include basic benefits for annuitants and dependents under the State's self-insurance plan and insurance contracts currently in force. Annuitants may be required to contribute towards health, dental, and vision benefits with the amount based on factors such as date of retirement, years of credited service with the State, whether the annuitant is covered by Medicare, and whether the annuitant has chosen a managed health care plan. Annuitants who retired prior to January 1, 1998, and who are vested in the State Employees' Retirement System do not contribute towards health, dental, and vision benefits. For annuitants who retired on or after January 1, 1998, the annuitant's contribution amount is reduced five percent for each year of credited service with the State allowing those annuitants with twenty or more years of credited service to not have to contribute towards health, dental, and vision benefits. Annuitants also receive life insurance coverage equal to the annual salary of the last day of employment until age 60, at which time the benefit becomes \$5,000.

The total cost of the State's portion of health, dental, vision, and life insurance benefits of all members, including post-employment health, dental, vision, and life insurance benefits, is recognized as an expenditure by the State in the State's ACFR.

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The State finances the costs on a pay-as-you-go basis. The total costs incurred for health, dental, vision, and life insurance benefits are not separated by department or component unit for annuitants and their dependents nor active employees and their dependents.

A summary of post-employment benefit provisions, changes in benefit provisions, employee eligibility requirements including eligibility for vesting, and the authority under which benefit provisions are established is included as an integral part of the financial statements of CMS. A copy of the financial statements of CMS may be obtained by writing to CMS, 715 Stratton Building, 401 South Spring Street, Springfield, Illinois, 62706.

(8) Risk Management

The Funds are exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; workers compensation; and, natural disasters. The State retains the risk of loss (i.e., self-insured) for these risks.

The Funds' risk management activities for self-insurance, unemployment insurance, and workers' compensation are financed through appropriations to the Department of Central Management Services and are accounted for in the General Fund of the State. The claims are not considered to be a liability of the Funds; and accordingly, have not been reported in the Funds' financial statements for the year ended June 30, 2022.

(9) Commitments and Contingencies

(a) Operating Leases

The Illinois Power Agency leases various real property and equipment under terms of non-cancellable operating lease agreements through November 30, 2023, that required the Illinois Power Agency Operations Fund to make minimum lease payments plus pay a pro rata share of certain operating costs. Rent expense under operating leases was \$100 thousand for the year ended June 30, 2022.

(b) Renewable Energy Credits

During Fiscal Years 2015 and 2016, under the Supplemental Photovoltaic Procurement Plan developed pursuant to Public Act 98-0672, the Agency held procurements to purchase up to \$30 million in Renewable Energy Credits (RECs) from new photovoltaic distributed energy generation devices. Renewable energy credits are certificates that represent the environmental benefits of electricity generated from renewable energy generation, such as solar panels or wind turbines.

A total of 14 companies has contracts to sell RECs to the Agency with contracts that started on or after, July 1, 2016, and with terms that allowed for up to nine months to identify individual projects, one year to develop projects, and then five years for the delivery of RECs as they are

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created. As of June 30, 2022, the outstanding commitment for those contracts totaled \$3.6 million.

Starting in Fiscal Year 2019 the Agency implemented the Illinois Solar For All Program which has a total of 18 companies with contracts that include incentives for low-income distributed generation and community solar projects and other associated approved expenditures as stated in the (20 ILCS 3855/1-56(B)(2)). As of June 30, 2022, the total outstanding commitment for the contracts listed above is \$48 million.

(10) Subsequent Events

The Agency is not aware of any additional facts, decisions, or conditions that might be expected to have a significant effect on the financial position or results of operations during this and future fiscal years.

Appendix B

Illinois Power Agency

Fiscal Year 2022

Summary of Funds on a Cash Basis

State of Illinois
 Illinois Power Agency
 Summary of Funds on a Cash Basis
 Balance Sheet
 June 30, 2022
 (Expressed in Thousands)

UNAUDITED

	Special Revenue		Permanent Trust
	Illinois Power Agency Operations 0425	Illinois Power Agency Renewable Energy Resources 0836	Illinois Power Agency Trust 0424
Assets			
Cash equity in State Treasury	\$ 5,572	\$ 130,056	\$ 100
Securities lending collateral equity with State Treasurer	-	-	1
Investments - held in the Illinois State Board of Investment Commingled Fund at fair value	-	-	41,520
Total assets	\$ 5,572	\$ 130,056	\$ 41,621
Deferred Outflows of Resources (DOR)	-	-	-
Total DOR	-	-	-
Total assets and DOR	\$ 5,572	\$ 130,056	\$ 41,621
Liabilities			
Obligations under securities lending of State Treasurer	-	-	1
Due to other State funds	-	-	100
Total liabilities	-	-	101
Deferred Inflows of Resources (DIR)	-	-	-
Total DIR	-	-	-
Fund Balances			
Nonspendable - endowments and similar funds	-	-	41,520
Committed			
Employment and economic development	5,572	130,056	-
Total fund balance	5,572	130,056	41,520
Total liabilities, DIR, and fund balances	\$ 5,572	\$ 130,056	\$ 41,621

The accompanying notes to the financial statements are an integral part of this statement.