## FISCAL YEAR 2018



## ANNUAL REPORT FEBRUARY 15, 2019

#### Illinois Power Agency Annual Report Fiscal Year 2018

(July 2017 - June 2018) Prepared in Accordance with 20 ILCS 3855/1-125 and 220 ILCS 5/16-115D(d)(4)

February 15, 2019

#### INTRODUCTION

The Illinois Power Agency ("IPA") was established to serve the people of Illinois by administering electricity and renewable resources planning and procurement processes for Ameren Illinois Company ("Ameren Illinois"), Commonwealth Edison Company ("ComEd"), and MidAmerican Energy Company ("MidAmerican").<sup>1</sup>

The IPA's processes and mandates are described in the Illinois Power Agency Act (20 ILCS 3855) and the Illinois Public Utilities Act (220 ILCS 5). The Agency strives to employ best practices to meet the goals set out for it in those statutes. Chief among these is to develop electricity and renewable resources procurement plans and processes to ensure adequate, reliable, affordable, efficient, and environmentally sustainable electric service at the lowest total cost over time, taking into account any benefits of price stability. The Agency prepares electricity procurement plans on an annual basis. For renewable energy resources, the Agency's Long-term Renewable Resources Procurement Plan was first developed in 2017-2018 and will be updated on a biennial basis.

As an independent agency subject to the oversight of the Executive Ethics Commission, the Illinois Power Agency is committed to:

- Conducting competitive procurement processes to procure the supply resources identified in procurement plans.
- Ensuring that the process of power procurement is conducted in an ethical and transparent fashion, immune from improper influence.
- 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.

<sup>&</sup>lt;sup>1</sup> Section 16-111.5(a) of the Public Utilities Act allows small multi-jurisdictional electric utilities to elect to participate in the IPA procurement process. In April 2015, MidAmerican elected to participate in the development of the IPA's 2016 Procurement Plan. Therefore, this Annual Report includes information about procurements for MidAmerican pursuant to that Plan and subsequent Plans.

• 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.

Fiscal Year 2018 featured the following accomplishments for the Agency:

- The Agency developed its 2018 Annual Electricity Procurement Plan and had that Plan approved by the Illinois Commerce Commission for implementation in calendar year 2018.
- The Agency successfully conducted electricity, capacity, and renewable energy resource procurement events as approved in the 2017 and 2018 Procurement Plans.
- Public Act 99-0906 took effect one month prior to the beginning of the Fiscal Year. This Act made significant changes to Agency operations, including requirements related to the development and implementation of a procurement plan for Zero Emission Credits, conducting large-scale "Initial Forward Procurements" for renewable energy credits from new utility-scale wind and solar facilities, the separation of renewable energy resource procurements and programs from the Agency's regular procurement plan into a new Long-Term Renewable Resources Procurement Plan, and the development of a low-income solar incentive program (known as the "Illinois Solar for All" program). The implementation activities of the Agency during Fiscal Year 2018 included:
  - The Zero Emission Standard Procurement Plan was approved by the Illinois Commerce Commission on September 11, 2017 and the zero emission credits procurement was held on January 10, 2018.
  - The Long-Term Renewable Resources Procurement Plan was approved by the Illinois Commerce Commission on April 3, 2018. Implementation of the procurements and programs approved by that Plan are underway in Fiscal Year 2019.
  - An Initial Forward Procurement of RECs from new utility-scale wind and solar projects was held on August 31, 2017. Subsequently, Initial Forward Procurements were held for RECs from new utility-scale solar and brownfield site photovoltaic projects on March 15, 2018 and on April 26, 2018.

The IPA welcomes your questions and hopes you will take advantage of the information offered herein and on the Agency's website: <u>www.illinois.gov/IPA</u>.

#### **REPORT ORGANIZATION**

20 ILCS 3855/1-125 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)  $(Blank)^2$
- (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 purchased under the electricity 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.

<sup>&</sup>lt;sup>2</sup> 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.

- (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 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) An analysis of how the operation of the alternative compliance payment mechanism, any long-term contracts, or other aspects of the applicable renewable portfolio standards impacts the rates of customers of alternative retail electric suppliers.

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 2018 is drafted to address each of the above requirements, including submitting alternative compliance payment information.

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

The IPA's 2018 Procurement Plan, approved by the Illinois Commerce Commission in Docket No. 17-0392, 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, 2018),<sup>3,4</sup> 50% for the following year (starting June 1, 2019), and 25% for the next year thereafter (starting June 1, 2020). This approach constitutes a continuation of the approach adopted in the 2015, 2016 and 2017 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 2018, the IPA held two energy procurements: the first occurred in August, 2017 pursuant to the 2017 Plan; the second took place in April, 2018 pursuant to the 2018 Plan.

The following tables report on the names of winning suppliers, quantity, price, and term for electricity contracts procured through the two procurement events.<sup>5</sup> The specific months and quantities procured reflect the load forecasts provided by Ameren Illinois, ComEd and MidAmerican.

<sup>&</sup>lt;sup>3</sup> Delivery year is synonymous with planning year and used interchangeably in this Report.

<sup>&</sup>lt;sup>4</sup> This percentage total is 106% for July and August 2018, on-peak.

<sup>&</sup>lt;sup>5</sup> 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.

#### August 2017 Procurement

#### <u>Ameren Illinois</u>

#### Winning Suppliers

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

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

	On-P	eak	Off-Peak		
Month(s)	Average Price	Quantity	Average Price	Quantity	
October 2017	32.07	125	23.46	125	
November 2017	32.02	150	23.56	125	
December 2017	32.31	175	24.08	150	
January 2018	37.37	175	28.32	175	
February 2018	36.22	175	28.13	150	
March 2018	33.93	150	26.35	125	
April 2018	31.99	125	25.78	125	
May 2018	32.79	100	22.90	100	
June 2018	33.82	75	22.69	75	
July 2018	38.02	100	24.03	75	
August 2018	38.02	100	24.03	75	
September 2018	31.68	75	22.17	50	
October 2018	30.63	75	22.51	75	
November 2018	30.44	75	23.01	50	
December 2018	31.16	100	24.20	100	
January 2019	35.81	100	29.67	75	
February 2019	35.81	100	27.74	75	
March 2019	32.00	75	26.70	75	
April 2019	29.78	50	23.08	50	
May 2019	30.63	75	21.05	75	
June 2019	31.93	75	21.59	75	
July 2019	35.80	100	23.76	75	
August 2019	35.80	100	23.76	75	

	On-Pe	eak	Off-Peak	
Month(s)	Average Price	Quantity	Average Price	Quantity
September 2019	30.33	75	21.20	50
October 2019	28.73	50	21.31	25
November 2019	28.73	50	21.24	25
December 2019	29.31	75	24.50	50
January 2020	36.22	75	29.18	50
February 2020	35.69	50	28.50	25
March 2020	31.64	50	26.18	25
April 2020	29.48	25	23.00	25
May 2020	30.10	25	20.85	25

In the August 2017 procurements, the IPA also procured capacity for Ameren Illinois as specified in the 2017 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 supplier, quantity of capacity procured in Zonal Resource Credits (ZRCs), the average contracted price, and term.

#### Winning Suppliers

Prairie Power, Inc.	
Voltus, Inc.	

#### Term, Average Price (\$/MW-Day) and Quantities (in ZRCs) of Capacity Contracts<sup>6</sup>

Term Zonal Resource Credits	
Delivery Year	Average Price
June 2018 – May 2019	\$23.26 per MW-day

<sup>&</sup>lt;sup>6</sup> In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. The results of the August 2017 Procurement of capacity for Ameren Illinois did not meet that threshold, therefore quantity is not provided.

#### <u>ComEd</u>

#### Winning Suppliers

AEP Energy Partners, Inc.
American Electric Power Service Corporation as agent for Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company and Wheeling Power Company
Axpo U.S. LLC
Exelon Generation Company, LLC
Macquarie Energy LLC
Midwest Generation, LLC
Morgan Stanley Capital Group Inc.
NextEra Energy Marketing, LLC
Shell Energy North America (US), L.P.
TransAlta Energy Marketing (U.S.) Inc.
Vitol Inc.

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

	On-P	On-Peak		Off-Peak	
Month(s)	Average Price	Quantity	Average Price	Quantity	
October 2017	32.03	425	22.75	425	
November 2017	31.90	500	22.73	475	
December 2017	32.79	550	23.39	575	
January 2018	41.41	575	30.62	550	
February 2018	40.97	525	30.51	500	
March 2018	34.48	450	25.59	450	
April 2018	32.40	400	23.79	375	
May 2018	32.13	425	20.56	425	
June 2018	32.63	350	21.16	300	
July 2018	37.41	450	22.27	375	
August 2018	37.39	425	22.04	350	
September 2018	31.57	300	20.92	300	
October 2018	30.60	250	20.40	250	
November 2018	30.50	300	20.59	275	
December 2018	30.95	325	23.00	350	
January 2019	40.13	375	28.94	350	
February 2019	39.03	325	28.74	350	
March 2019	32.09	275	23.69	300	
April 2019	30.62	250	22.50	250	
May 2019	30.22	275	19.56	250	
June 2019	31.36	325	19.01	275	
July 2019	36.06	475	22.02	375	

	On-Peak		Off-Peak	
Month(s)	Average Price	Quantity	Average Price	Quantity
August 2019	35.12	400	21.51	300
September 2019	30.05	275	18.67	250
October 2019	29.20	200	18.64	150
November 2019	29.08	225	19.12	200
December 2019	29.60	300	22.00	275
January 2020	39.24	300	29.81	250
February 2020	37.94	275	28.70	275
March 2020	31.71	225	23.91	175
April 2020	31.34	175	22.40	150
May 2020	30.28	200	18.59	175

#### **MidAmerican**

#### Winning Suppliers

NextEra Energy Power Marketing, LLC	
TransAlta Energy Marketing (U.S.), Inc.	

#### Average Prices (\$/MWh) and Quantities (MW) of Electricity Contracts<sup>7</sup>

	On-Peak	Off-Peak
Month(s)	Average Price	Average Price
October 2017	30.35	20.71
November 2017	30.33	20.71
December 2017		

<sup>&</sup>lt;sup>7</sup> In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. The results of the August 2017 Procurement of electricity for MidAmerican did not meet that threshold, therefore quantity is not provided.

#### April 2018 Procurement

#### <u>Ameren Illinois</u>

#### Winning Suppliers

Axpo U.S. LLC
Dynegy Marketing and Trade, LLC
Exelon Generation Company, LLC
Macquarie Energy, LLC
NextEra Energy Marketing, LLC
Shell Energy North America (US), L.P.
The Energy Authority, Inc.
TransAlta Energy Marketing (U.S.), Inc.
Union Electric Company d/b/a Ameren Missouri

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

	On-Pea	On-Peak		Off-Peak	
Month(s)	Average Price	Quantity	Average Price	Quantity	
June 2018	32.62	525	22.91	425	
July 2018	36.38	650	24.38	450	
August 2018	35.66	625	24.13	450	
September 2018	32.62	400	22.74	325	
October 2018	31.44	175	23.41	150	
November 2018	30.85	250	22.91	225	
December 2018	31.62	225	23.53	200	
January 2019	33.73	250	26.06	250	
February 2019	32.76	250	25.33	225	
March 2019	31.37	150	23.51	150	
April 2019	30.32	175	23.07	150	
May 2019	30.82	175	22.97	150	
June 2019	30.96	125	21.42	100	
July 2019	35.70	150	23.56	100	
August 2019	34.90	150	23.11	100	
September 2019	31.02	100	21.20	75	
October 2019	29.18	100	20.53	75	
November 2019	28.72	100	20.17	100	
December 2019	28.99	125	23.18	100	
January 2020	33.26	125	26.92	100	
February 2020	31.97	125	26.92	100	
March 2020	31.07	75	23.89	75	

	On-Peak		Off-Peak	
Month(s)	Average Price	Quantity	Average Price	Quantity
April 2020	29.90	75	23.21	50
May 2020	29.72	75	20.14	75
June 2020	31.07	100	21.31	75
July 2020	36.77	125	23.70	75
August 2020	36.77	125	23.70	75
September 2020	31.32	75	20.96	50
October 2020	28.90	50	21.01	25
November 2020	28.90	50	20.89	50
December 2020	29.08	75	23.91	75
January 2021	34.30	75	27.14	75
February 2021	32.63	75	26.76	50
March 2021	30.93	50	22.95	25
April 2021	30.22	25	22.95	25
May 2021	30.46	50	19.96	50

In the April 2018 procurement, the IPA also procured capacity for Ameren Illinois as specified in the 2018 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

Hoosier Energy Rural Electric Cooperative, Inc.
Southern Illinois Power Cooperative
Voltus, Inc.

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

Term	Zonal Resource Credits		
Delivery Year	Average Price Quantity		
June 2019 – May 2020	\$28.11 per MW-day	225	

#### <u>ComEd</u>

#### Winning Suppliers

AEP Energy Partners, Inc.

American Electric Power Service Corporation as agent for Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, and Wheeling Power Company

Axpo U.S. LLC

Exelon Generation Company, LLC

Macquarie Energy LLC

Midwest Generation, LLC

Morgan Stanley Capital Group Inc.

NextEra Energy Marketing, LLC

Shell Energy North America (US), L.P.

TransAlta Energy Marketing (U.S.), Inc.

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

	On-Pea	On-Peak Off-Peal		
Month(s)	Average Price	Quantity	Average Price	Quantity
June 2018	32.34	1,600	21.11	1,300
July 2018	36.77	2,150	23.19	1,525
August 2018	36.48	2,025	23.05	1,450
September 2018	32.62	1,275	21.14	1,100
October 2018	31.95	525	21.98	450
November 2018	31.82	575	21.71	525
December 2018	31.88	675	22.06	600
January 2019	35.28	675	27.10	625
February 2019	34.19	650	24.86	575
March 2019	31.91	575	23.45	525
April 2019	31.48	525	21.79	475
May 2019	31.55	550	21.19	475
June 2019	30.75	400	19.55	325
July 2019	36.88	475	22.52	375
August 2019	34.33	450	21.36	375
September 2019	30.51	325	19.49	275
October 2019	28.94	275	19.67	250
November 2019	28.94	300	19.76	275
December 2019	29.54	350	21.01	325
January 2020	37.34	375	29.16	325
February 2020	35.79	325	28.53	300

	On-Peak		Off-Peak	
Month(s)	Average Price	Quantity	Average Price	Quantity
March 2020	30.47	300	23.42	275
April 2020	29.10	275	20.12	250
May 2020	30.18	275	18.98	250
June 2020	30.18	375	18.81	275
July 2020	35.86	475	22.36	350
August 2020	33.22	425	21.43	325
September 2020	30.42	300	19.24	225
October 2020	28.98	225	20.10	175
November 2020	28.80	225	20.09	200
December 2020	29.83	300	21.32	275
January 2021	36.75	300	29.17	275
February 2021	35.53	275	29.05	250
March 2021	30.56	250	24.20	175
April 2021	29.58	200	21.03	150
May 2021	30.36	225	19.88	175

#### <u>MidAmerican</u>

#### Winning Suppliers

Macquarie Energy, LLC
NextEra Energy Marketing, LLC
TransAlta Energy Marketing (U.S.), Inc.

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

	On-Peak		Off-	Peak
Month(s)	Average Price	Quantity	Average Price	Quantity
June 2018	30.22	50	20.40	50
July 2018	36.40	100	20.91	50
August 2018	34.40	100	21.80	75
September 2018	29.58	125	20.40	50
October 2018	28.31	25	19.55	25
November 2018	28.31	25	19.55	25
December 2018	-	-	-	-
January 2019	-	-	-	-
February 2019	-	-	-	-
March 2019	-	-	-	-
April 2019	-	-	19.55	25
May 2019	28.31	25	19.55	25

(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 2018. 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 previsions were terminated as part of Public Act 99-0906, which took effect on June 1, 2017. However, Public Act 99-0906 added a new provision (d)(1) to Section 16-111.5B allowing the programs that had been scheduled to end in May 2017 to operate through December 2017. The provision also allowed for the utilities "to increase, on a pro rata basis, the energy savings goals and budgets approved under this Section to reflect the additional seven months of implementation of the energy efficiency programs and measures." While Ameren Illinois elected not to extend its programs, ComEd chose to extend its programs for the additional seven months

ComEd reported that the results of the Section 16-111.5B programs for the period June 2017 – December 2017 were 497,843 MWh of net first year incremental savings. This was more than the planned goal of 436,656 MWh. The cost of the programs was \$62,651,939, which represents an initial rate impact of approximately 1.9%. The rate impact is based upon the cost of the programs for the energy delivery year as a percent of total revenue from both eligible and potentially eligible retail customers. The rate impact and MWh savings do not include future savings from energy efficiency measures that have a lifespan of more than one year, and thus the true savings of the measures will be significantly higher and will produce net positive savings over the lifetime of the measures. To have been approved, all programs had to first pass a "Total Resource Cost Test" under which the net present value of the expected benefits had to exceed the expected costs.

#### (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 2018.

## (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 2018.

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

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2018.

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

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2018.

#### (8) The accumulated depreciation for each facility.

Consistent with prior years, the IPA had no Agency facilities during Fiscal Year 2018.

#### (9) The status of any projects under development.

Consistent with prior years, the IPA had no Agency facilities under development during Fiscal Year 2018.

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.<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> 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. Absent 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 load in Illinois with any facilities it develops, which serves as a protection of 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 2018 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 purchased under the electricity 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, 2, 3, and 4 below for the 2018-19 delivery year for ComEd, Ameren Illinois, and MidAmerican, respectively.<sup>9</sup> In order 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 2018-19 delivery year. The following costs are tabulated:

- The weighted average price and cost of RECs procured by the Agency;
- The weighted average price per MWh and cost of the blocks of electricity procured by the Agency;
- 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,<sup>10</sup> beginning with the 2012-13 delivery year, which is the first year of delivery under those agreements; and
- For Ameren Illinois, ComEd, and MidAmerican, the cost of RECs procured in the 2015 Fall Distributed Generation Procurement (Ameren Illinois and ComEd only), the 2016 Spring Distributed Generation Procurement, the 2017 Spring Distributed Generation Procurement, and the 2017 Fall Distributed Generation Procurement (Ameren Illinois and ComEd only).

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

<sup>&</sup>lt;sup>9</sup> 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 and Fiscal Year 2017 Annual Reports.

<sup>&</sup>lt;sup>10</sup> 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.

prices used in those contracts are determined through a forward energy curve calculated at the time of the procurement event. The process of imputing these REC prices is described in Appendix K to the Agency's 2010 Procurement Plan.<sup>11</sup>

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 resources, 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.

In addition to the renewable resources that were delivered to the utilities during the 2018-2019 delivery year, Fiscal Year 2018 also featured the Agency conducting Initial Forward Procurements for the utilities as required by Section 1-75(c)(1)(G) of the IPA Act. These procurements were for 15-year contracts for one million RECs to be delivered annually from new utility-scale wind projects, and one million RECs to be delivered annually from new utility-scale solar and brownfield site photovoltaic projects. The REC deliveries may not start before June 1, 2019 and must start by June 1, 2021. As these REC deliveries have not yet started, there are not yet any rate impacts from the Initial Forward Procurements. The results are listed in Table 1.

Procurement Date	Product	Average Price (\$/REC)
August, 2017	Wind/Solar	4.26
March, 2018	Solar	6.07
April, 2018	Solar	5.01

**Table 1: Initial Forward Procurement Results** 

While there were three winning bidders for the wind procurement for a total of one million RECs, one bidder subsequently declined their award leaving a total procured of 965,000 RECs delivered annually for new utility-scale wind.

In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. There was only one winning bidder in the August 2017 solar procurement, and two each for the March and April 2018 procurements, so quantities were not

<sup>&</sup>lt;sup>11</sup> Illinois Power Agency, ICC Docket No. 09-373, Supplemental Filing (Nov. 9, 2009).

publicly released for each procurement. However, in total the solar procurements successfully procured the target of one million RECs delivered annually.

#### ComEd

Table 2 shows the average quantity, price and contract type of all renewable resources purchased and a comparison of the cost of RECs relative to the cost of electricity under contract for delivery to ComEd during the 2018-19 delivery year.

Table 2: Relative Cost Com	parison of RECs and Electricit	y under Contract with Com	Ed for the 2018-19 Delivery Year
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Cost of RECs and Electricity Under Contract for Delivery to ComEd in the 2018-19 Delivery Year				
Procurements from Renewable Energy Resources	Quantity		Average Unit Price	Contracted Cost
2017 Fall Five-Year Distributed Generation REC Procurement	4,998	RECs	\$59.63	\$298,043
2017 Spring Five-Year Distributed Generation REC Procurement	13,463	RECs	\$128.68	\$1,732,441
2016 Spring Five-Year Distributed Generation REC Procurement <sup>12</sup>		RECs	\$129.50	
2015 Fall Five-Year Distributed Generation REC Procurement <sup>13</sup>		RECs	\$113.30	
2010 Long-Term Purchase Agreements REC Procurement <sup>14</sup>	<u>1,261,725</u>	<u>RECs</u>	<u>\$18.51</u>	\$23,358,206
Total RECs <sup>15</sup>	1,283,165	RECs	\$20.06	\$25,743,108
Long-Term Renewable Energy, 2010 Long-Term Purchase Agreements <sup>16</sup>	1,261,725	MWh	\$43.63	\$55,048,316
Electricity Procured from Conventional Energy Resources	Quai	ntity	Average Unit Price	Contracted Cost
2018 Fall Block Energy Procurement	3,348,225	MWh	\$28.24	\$94,563,099
2018 Spring Block Energy Procurement	7,784,400	MWh	\$28.51	\$221,926,744
2017 Fall Block Energy Procurement	2,771,775	MWh	\$28.33	\$78,529,003
2017 Spring Block Energy Procurement	3,630,600	MWh	\$28.57	\$103,714,512
2016 Fall Block Energy Procurement	2,446,800	MWh	\$29.60	\$72,435,543
2016 Spring Block Energy Procurement	<u>2,294,825</u>	MWh	<u>\$30.32</u>	<u>\$69,590,049</u>
Total Conventional Energy Resources	22,276,625	MWh	\$28.76	\$640,758,950

<sup>&</sup>lt;sup>12</sup> In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. The results of the 2016 Distributed Generation Procurement did not meet that threshold, therefore quantity (and cost) is not provided. The IPA also notes that these RECs were purchased using collected ACP from hourly rate customers; thus, this purchase has no rate effect on ComEd's fixed-price rate customers.

<sup>13</sup> In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. The results of the 2015 Distributed Generation Procurement did not meet that threshold, therefore quantity (and cost) is not provided. The IPA also notes that these RECs were purchased using collected ACP from hourly rate customers; thus, this purchase has no rate effect on ComEd's fixed-price rate customers.

<sup>14</sup> This represents the Annual Contract Quantity Commitment of RECs specified in the contract and the imputed REC price.

<sup>15</sup> Total REC quantities and contracted cost includes the results of the 2015 and 2016 Spring procurements that are not individually disclosed.

<sup>16</sup> 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 3 shows the average quantity, price and contract type of all renewable resources purchased and a comparison of the cost of RECs relative to the cost of electricity under contract for delivery to Ameren Illinois during the 2018-19 delivery year.

Table 3: Relative Cost Comparison of RECs and Electricit	y under Contract with Ameren	Illinois for the 2018-19 Delivery Year

Cost of RECs and Electricity Under Contract for Delivery to Ameren Illinois in the 2018-19 Delivery Year					
Procurements from Renewable Energy Resources	Quar	ntity	Average Unit Price	Contracted Cost	
2017 Fall Five-Year Distributed Generation REC Procurement	8,070	RECs	\$127.54	\$1,029,248	
2017 Spring Five-Year Distributed Generation REC Procurement	4,589	RECs	\$108.47	\$497,785	
2016 Spring Five-Year Distributed Generation REC Procurement <sup>17</sup>		RECs	\$154.31		
2015 Fall Five-Year Distributed Generation REC Procurement <sup>18</sup>		RECs	\$123.78		
2010 Long-Term Purchase Agreements REC Procurement <sup>19</sup>	600,000	<b>RECs</b>	<u>\$13.33</u>	<u>\$7,998,000</u>	
Total RECs <sup>20</sup>	614,048	RECs	\$15.81	\$9,710,246	
Long-Term Renewable Energy, 2010 Long-Term Purchase Agreements <sup>21</sup>	600,000	MWh	\$43.47	\$26,082,000	
Electricity Procured from Conventional Energy Resources	Quar	ntity	Average Unit Price	Contracted Cost	
2018 Fall Block Energy Procurement	851,200	MWh	\$29.00	\$24,686,058	
2018 Spring Block Energy Procurement	2,539,600	MWh	\$28.74	\$72,988,898	
2017 Fall Block Energy Procurement	672,000	MWh	\$29.02	\$19,501,132	
2017 Spring Block Energy Procurement	953,800	MWh	\$28.80	\$27,473,858	
2016 Fall Block Energy Procurement	524,000	MWh	\$32.17	\$16,854,968	
2016 Spring Block Energy Procurement	<u>561,800</u>	MWh	<u>\$30.82</u>	<u>\$17,314,638</u>	
Total Conventional Energy Resources	6,102,400	MWh	\$29.30	\$178,819,552	

<sup>&</sup>lt;sup>17</sup> In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. The results of the 2016 Distributed Generation Procurement did not meet that threshold, therefore quantity (and cost) is not provided. The IPA also notes that these RECs were purchased using collected ACP from hourly rate customers; thus, this purchase has no rate effect on Ameren's fixed-price rate customers.

<sup>19</sup> This represents the Annual Contract Quantity Commitment of RECs specified in the contract and the imputed REC price.

<sup>20</sup> Total REC quantities and contracted cost includes the results of the 2015 and 2016 Spring procurements that are not individually disclosed.

<sup>21</sup> 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.

<sup>&</sup>lt;sup>18</sup> In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. The results of the 2015 Distributed Generation Procurement did not meet that threshold, therefore quantity (and cost) is not provided. The IPA also notes that these RECs were purchased using collected ACP from hourly rate customers; thus, this purchase has no rate effect on Ameren's fixed-price rate customers.

#### MidAmerican

Table 4 shows the price and contract type of all renewable resources purchased and a comparison of the cost of RECs relative to the cost of electricity under contract for delivery to MidAmerican during the 2018-19 delivery year.

Table 1. Relative Cost Comparison of RECs and Electricit	y under Contract with MidAmerican for the 2018-19 Delivery Year
Table 4. Relative Cost Comparison of RECS and Electricit	y under Contract with Whitehead for the 2010-19 Derivery Tear

Cost of RECs and Electricity Under Contract for Delivery to MidAmerican in the 2018-19 Delivery Year						
Procurements from Renewable Energy Resources	Qua	ntity	Average Unit Price	Cost		
2017 Spring Five-Year Distributed Generation REC Procurement	524	RECs	\$165.94	\$86,952		
2016 Spring Five-Year Distributed Generation REC Procurement <sup>22</sup>		<u>RECs</u>	<u>\$189.90</u>			
Total RECs <sup>23</sup>	655	RECs	\$170.73	\$111,829		
Electricity Procured from Conventional Energy Resources	Qua	ntity	Average Unit Price	Contracted Cost		
2018 Spring Block Energy Procurement	278,200	MWh	\$26.84	\$7,468,210		
2017 Spring Block Energy Procurement	<u>8,800</u>	<u>MWh</u>	<u>\$30.42</u>	<u>\$267,696</u>		
Total Conventional Energy Resources	287,000	MWh	\$26.95	\$7,735,906		

<sup>&</sup>lt;sup>22</sup> In accordance with the procurement RFP rules and previous Illinois Commerce Commission orders, quantity information is only released when the number of successful bidders in a procurement is greater than two. The results of the 2016 Distributed Generation Procurement did not meet that threshold, therefore quantity (and cost) is not provided.

<sup>&</sup>lt;sup>23</sup> Total REC quantities and contracted cost includes the results of the 2016 Spring procurement that are not individually disclosed.

#### 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 5 shows the term<sup>24</sup> associated with each procurement of renewable resources for delivery to Ameren Illinois, ComEd and MidAmerican during the 2018-19 delivery year.

Procurements from Renewable Energy Resources	Ameren Illinois & ComEd Delivery Term	MidAmerican Delivery Term
2017 Fall Five-Year Distributed Generation REC Procurement	5 years starting June 2017	-
2017 Spring Five-Year Distributed Generation REC Procurement	5 years starting June 2017	5 years starting June 2017
2016 Spring Five-Year Distributed Generation REC Procurement	5 years starting June 2016	5 years starting June 2016
2015 Fall Five-Year Distributed Generation REC Procurement	5 years starting June 2015	-
2010 Long-Term Purchase Agreements REC Procurement	20 years starting June 2012	_

Table 5: Term of RECs Contracts for Delivery during the 2018-19 Delivery Year

In addition to these contracts, as previously noted, in Fiscal Year 2018 the Agency conducted Initial Forward Procurements for new utility-scale wind and solar projects. Those contracts feature 15-year REC delivery terms, with deliveries starting no earlier than June 1, 2019 and no later than June 1, 2021.

<sup>&</sup>lt;sup>24</sup> The five-year distributed generation term indicated in this section is merely the nominal term for REC deliveries; the full term applicable to obligations under the 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).

# (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.<sup>25</sup>

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 under (11). The environmental and economic benefits that result from the procurement of renewable energy resources are explained below, in both quantitative and qualitative terms.

#### 1. Environmental Benefits

The environmental benefits of renewable energy generation are mainly associated with the benefits of avoiding the pollutants emitted by electricity generation sources that burn fossil fuels. Emissions from the combustion of fossil fuels—in particular, fine particles, sulfur dioxide and nitrogen oxides—have been linked to a wide range of adverse health effects, including: lung diseases such as asthma and chronic obstructive pulmonary disorder, heart attacks, and strokes.<sup>26</sup> The environmental benefits of renewable energy can be measured in terms of the annual emissions that are avoided by using renewable energy instead of an equivalent amount of electricity generated from sources such as coal or natural gas-fired power plants.

By way of example, a retrospective analysis by Lawrence Berkeley National Laboratory ("LBNL") and the National Renewable Energy Laboratory ("NREL"), conducted in 2016, found that, on a national level, renewable generation from wind and solar sources in 2015 avoided sulfur dioxide ("SO<sub>2</sub>") emissions of 156,900 metric tons, emissions of nitrogen oxides (NO<sub>x</sub>) of 102,700 metric tons, and  $PM_{2.5}^{27}$  emissions of 4,400 metric tons.<sup>28</sup> In addition, this analysis found that nationwide generation by wind and solar sources in 2015 avoided the emissions of 147.1 million metric tons of carbon dioxide (CO<sub>2</sub>) that would have been emitted by the generation from fossil fuel sources. The American Wind Energy Association ("AWEA") estimated that, based on using the U.S. EPA's

<sup>&</sup>lt;sup>25</sup> 20 ILCS 3855/1-125(12).

<sup>&</sup>lt;sup>26</sup> U.S. Environmental Protection Agency, Air Pollution: Current and Future Challenges, <u>www.epa.gov/clean-air-act-overview/air-pollution-current-and-future-challenges</u>, accessed January 4, 2019.

<sup>&</sup>lt;sup>27</sup> PM<sub>2.5</sub> refers to particles with diameters 2.5 micrometers or less.

<sup>&</sup>lt;sup>28</sup> Millstein, D., Wiser, R., Bolinger, M. and Barbose, G., "The Climate and Air-Quality Benefits of Wind and Solar Power in the United States." Nature Energy 2. 17134 (2017).

AVERT system,<sup>29</sup> in 2017 operating wind projects alone avoided 170,500 metric tons of SO<sub>2</sub>, 110,700 metric tons of NO<sub>x</sub>, and 189 million metric tons of CO<sub>2</sub> emissions.<sup>30</sup>

A separate study by LBNL and 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, as compared to a reference case where it was assumed that existing RPS requirements were eliminated as of the end of 2014. The study predicts that compliance with the existing RPS goals through 2050 would reduce cumulative SO<sub>2</sub> emissions by 2.1 million metric tons, cumulative NO<sub>x</sub> emissions by 2.5 million metric tons, and cumulative PM<sub>2.5</sub> emissions by 0.3 million metric tons.<sup>31</sup> 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.<sup>32</sup> 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.<sup>33</sup>

An update to this LBNL/NREL report<sup>34</sup> estimated that emissions avoided as the result of compliance with the current RPS requirements in the East North Central Region<sup>35</sup> over the period of 2015 through 2050 would be 240,000 metric tons of SO<sub>2</sub>, 294,000 metric tons of NO<sub>x</sub>, 32,000 metric tons of PM<sub>2.5</sub>, and 600 million metric tons of CO<sub>2</sub>.<sup>36</sup> These estimates are based on modeling of the reduction in fossil fuel generation that would be displaced by new renewable generation used to serve RPS obligations of the states in this region.

<sup>32</sup> Id.

<sup>33</sup> Id. at 45.

<sup>36</sup> The Prospective LBNL/NREL report did not break out emissions reductions on a state by state basis.

<sup>&</sup>lt;sup>29</sup> AVERT is the U.S. EPA's Avoided Emissions Generation Tool, which allows users to estimate the emissions benefits of renewable energy policies by tracking generation, heat input and emissions by fossil fuel generating units to identify changes in regional emissions associated with the addition of new renewable resources.

<sup>&</sup>lt;sup>30</sup> American Wind Energy Association, website Wind Environmental Benefits, <u>www.awea.org/wind-101/benefits-of-</u><u>wind</u>.

<sup>&</sup>lt;sup>31</sup> 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.

<sup>&</sup>lt;sup>34</sup> Ryan Wiser, et al, "Assessing the Costs and Benefits of US Renewable Portfolio Standards." 2017 Environmental Research Letters. 12. 094023.

<sup>&</sup>lt;sup>35</sup> The East North Central Region is defined as including the following states and their respective RPS requirements: Illinois 25% by 2025; Indiana no mandatory RPS; Ohio 12.5% by 2026; Kentucky no mandatory RPS; Michigan 15% by 2021; and Wisconsin 10% already attained. Source: Galen Barbose, Lawrence Berkeley National Laboratory, "U.S. Renewables Portfolio Standards. 2018 Annual Status Report. November 2018.

#### 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. But 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 electricity price reductions, increased electric system reliability through portfolio diversity, as well as state and regional economic development, including employment and tax revenue benefits.

#### a) Electricity Price Benefits

#### Price Moderation and Portfolio Diversity

Wind and solar power offers opportunities for lower 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.<sup>37</sup> 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.<sup>38</sup> 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.<sup>39</sup>

Since the majority 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. In evaluating the wholesale price impacts of the renewable resources used to meet RPS compliance requirements in 2013, a

<sup>&</sup>lt;sup>37</sup> 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.

<sup>&</sup>lt;sup>38</sup> *Guide to Purchasing Green Power*, United States Department of Energy Office of Renewable Energy and Energy Efficiency, at 5. (March 2010).

<sup>&</sup>lt;sup>39</sup> Loomis, D., Stroup, I., Center for Renewable Energy, Illinois State University, "Economic Impact: Illinois Wind Energy Development," June 2016, at 10.

recent LBNL/NREL report estimated that the resulting reduction in wholesale electricity prices saved consumers in states with RPS requirements as much as \$1.2 billion.<sup>40</sup> Since 2009, the levelized cost of solar photovoltaic has dropped 88% and the levelized cost of onshore wind dropped 69%.<sup>41</sup> The cost of generation by utility scale solar photovoltaic and onshore wind declined 13% and 7% respectively in the year ending October 2018. As a result, utility-scale new-build renewable resources are competitive with existing fossil fuel generation. Lazard estimated the levelized cost of electricity from new-build onshore wind to be in the range of \$14/MWh to \$47/MWh and the levelized cost of electricity from new-build utility-scale solar PV of \$32/MWh to \$41/MWh including subsidies as compared with estimated levelized cost of existing coal-fired generation of \$27/MWh to \$45/MWh.<sup>42</sup>

#### 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 real-time 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.<sup>43</sup> A recent simulation modeling study conducted by the Lawrence Berkeley National Laboratory found that increasing variable renewable energy generation (wind and solar) in competitive wholesale electricity markets would result in a general decrease in average annual hourly wholesale electricity prices.<sup>44</sup>

<sup>&</sup>lt;sup>40</sup> Wiser, R. et al, "A Retrospective Analysis of the Benefits and Impacts of U.S. Renewable Portfolio Standards," Lawrence Berkeley National laboratory, National Renewable Energy Laboratory, January 2016, NREL/TP 6A20 65005.

<sup>&</sup>lt;sup>41</sup> Lazard's Levelized Cost of Energy Analysis – Version 12.0. November 2018.

<sup>&</sup>lt;sup>42</sup> Lazard Website, Levelized Cost of Energy and Levelized Cost of Storage 2018. November 8, 2018. www.lazard.com/perspective/levelized-cost-of-energy-and-levelized-cost-of-storage-2018.

<sup>&</sup>lt;sup>43</sup> Electricity acquired through the Agency's procurement events is purchased competitively in regional forward wholesale markets.

<sup>&</sup>lt;sup>44</sup> 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.

MISO's 2011 launch of the Dispatchable Intermittent Resources ("DIRs") program allows registered intermittent 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.<sup>45</sup> Other support for the impact of renewable energy generation on prices comes from a recent study of the impact of wind generation on hourly, real-time MISO system prices conducted by the Colorado School of Mines and the Great Plains Institute, which showed that prices decreased in a range from \$1.39/MWh to \$3.40/MWh for each additional GWh of wind generation during the 2008 through 2016 period for which relevant data was available.<sup>46</sup>

In the 2017 PJM State of the Market Report, the PJM Market Monitor reported that "[i]n 2017, 73.3 percent of the wind marginal units had negative offer prices, 20.4 percent had zero offer prices and 6.3 percent had positive offer prices."<sup>47</sup> The PJM Market Monitor report suggests that, similar to the MISO market, wind units in PJM also put downward pressure on LMPs.

In a 2014 study on the impacts of the integration of renewable energy on the PJM system, PJM concluded that wind and solar resources are effectively price-takers and therefore displace more expensive generation resources resulting in lower average LMPs across the PJM grid.<sup>48</sup>

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

<sup>&</sup>lt;sup>45</sup> 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.

<sup>&</sup>lt;sup>46</sup> Quint, D. Colorado School of Mines, Dahlke, S. Great Plains Institute, "The Impact of Wind Generation on Wholesale Electricity Prices in the Midcontinent Market. An Empirical Investigation." June 5, 2017.

<sup>&</sup>lt;sup>47</sup> Monitoring Analytics, LLC, 2017 State of the Market Report for PJM, March 8, 2018. Volume 2 at 107.

<sup>&</sup>lt;sup>48</sup> PJM: PJM Renewable Integration Study, March 31, 2014.

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 billion<sup>49</sup> during the construction and typical 25-year operational lives of the projects. NREL lists the current installed wind capacity in Illinois to be 4,464 MW which reflects a 16% increase in installed wind capacity since 2016.<sup>50</sup>

The Solar Energy Industries Association ("SEIA") data on the solar industry in Illinois indicates that in 2017 total installed solar capacity was 100.5 MW, reflecting 12.9 MW of new capacity added in 2017.<sup>51</sup> SEIA also reported that solar employment in Illinois in 2017 totaled 3,570. The Illinois State University Center for Renewable Energy conducted a study similar to the 2016 wind study to assess the potential economic impact of solar photovoltaic development in Illinois.<sup>52</sup> The solar study estimated the technical potential solar photovoltaic capacity that could be developed in Illinois by 2030 to range from 2,292 MW to 11,265 MW. This range reflects assumptions that photovoltaic output would amount to 1.5% of total load in the state at the low end of the range to 7.5% of total load at the upper end of the range. The study estimated full-time equivalent employment impacts associated with this solar development would range from 1,223 to 6,010 during the operating years of these solar facilities and from 26,783 to 131,637 full-time equivalent jobs for the construction of these facilities. The total economic impact over the development period would range from \$4.01 billion to \$20.1 billion (2016 \$).

The wind and solar 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.<sup>53</sup> 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.<sup>54</sup>

<sup>&</sup>lt;sup>49</sup> Economic Impact: Illinois Wind Energy Development at 6.

<sup>&</sup>lt;sup>50</sup> U.S. Department of Energy, National Renewable Energy Laboratory, WINDExchange, Installed Wind Capacity, accessed January 7, 2019. The NREL installed capacity data is based on the American Wind Energy Association Q3 2018 Market Report.

<sup>&</sup>lt;sup>51</sup> SEIA, Solar Spotlight Illinois, December 2018.

<sup>&</sup>lt;sup>52</sup> Loomis D. et al, Illinois Center for Renewable Energy, Illinois State University, "Economic Impact Potential of Solar Photovoltaics in Illinois," December 2013.

<sup>&</sup>lt;sup>53</sup> Economic Impact: Wind Energy Development in Illinois at 23.

<sup>&</sup>lt;sup>54</sup> Id.

The jobs and economic benefits estimated in the wind report included "turbine and supply chain impacts," which can also referred to as "indirect impacts."<sup>55</sup> 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.<sup>56</sup> 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.<sup>57</sup> 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 about by the direct and indirect impacts.<sup>58</sup> 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.<sup>59</sup> Local governments can also receive significant amounts of revenue from permitting fees.<sup>60</sup> Benefits to landowners identified included revenue from leasing their land, which the report found amounted to almost \$14 million annually.<sup>61</sup> 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 Wind Energy Association, wind power supported 5,001-6,000 direct and indirect jobs in Illinois during 2017.<sup>62</sup> This apparently includes manufacturing jobs, which may be supported by wind generation located outside Illinois. The Clean Energy Trust, in partnership with Environmental Entrepreneurs, reported that in 2017 there were an estimated 5,222 jobs in the solar industry and 8,633 jobs in the wind industry in Illinois.<sup>63</sup>

- 58 Id. At 20.
- <sup>59</sup> Id. at 23.

60 Id. at 18.

<sup>61</sup> 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.

<sup>62</sup> American Wind Energy Association, State Wind Facts, Illinois Wind Energy, accessed January 9, 2019.

<sup>63</sup> Clean Jobs Midwest 2018. http://www.cleanjobsmidwest.com/state/illinois, accessed January 13, 2019.

<sup>55</sup> Id. at 19.

<sup>56</sup> Id. at 20.

<sup>&</sup>lt;sup>57</sup> Id. at 20.

An Illinois Science & Technology Institute report conducted with Strategic Economic Research estimated that increasing Illinois' RPS target to 35% would result in average annual additional jobs of 8,571 by 2030.<sup>64</sup>

Implementation of Public Act 99-0906's renewable resources provisions 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 RECs from approximately 1,300 MW of new utility-scale wind generating capacity and 1,500 MW of new utility scale solar already under contract to be procured (with development to occur in the coming years), and approximately 666 MW of photovoltaic distributed generation and community solar expected to be developed over the next several years. The expansion of 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: the Solar Foundation's National Solar Jobs Census found that solar jobs in Illinois had increased by 37% from 2017 to 2018, the second largest increase by volume and third largest increase by percentage in the country.<sup>65</sup> The Agency plans to monitor and report on the impacts of the development of these (and other) new resources in future Annual Reports.

<sup>&</sup>lt;sup>64</sup> Illinois Science & Technology Institute, "Illinois Employment Impacts Due to Energy Policy Changes," Executive Summary, March 2015.

<sup>&</sup>lt;sup>65</sup> The National Solar Jobs Census was released in February 2019 and may be found here: <u>https://www.thesolarfoundation.org/national/</u>.

## (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."<sup>66</sup>

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 6 and Table 7, for Ameren Illinois in Table 8 and Table 9, and for MidAmerican in Table 10 and Table 11.

#### <sup>66</sup> 20 ILCS 3855/1-125(13).

### ComEd

Customer Class	Description	2017-18 Delivery Year	2018-19 Delivery Year (Through December 2018)
	Revenue/kWh	\$0.1423	\$0.1461
Single Family No Electric Space Heat	REC/kWh	\$0.0019	\$0.0019
	Ratio (REC/Revenue)68	1.34%	1.30%
	Revenue/kWh	\$0.1532	\$0.1574
Multi Family No Electric Space Heat	REC/kWh	\$0.0019	\$0.0019
	Ratio (REC/Revenue)	1.24%	1.21%
	Revenue/kWh	\$0.1109	\$0.1158
Single Family With Electric Space Heat	REC/kWh	\$0.0019	\$0.0019
	Ratio (REC/Revenue)	1.71%	1.64%
	Revenue/kWh	\$0.1207	\$0.1240
Multi Family With Electric Space Heat	REC/kWh	\$0.0019	\$0.0019
	Ratio (REC/Revenue)	1.57%	1.53%
	Revenue/kWh	\$0.1646	\$0.1835
Watt-hour	REC/kWh	\$0.0019	\$0.0019
	Ratio (REC/Revenue)	1.15%	1.04%
	Revenue/kWh	\$0.1151	\$0.1239
Small Load (< 100 kW)	REC/kWh	\$0.0019	\$0.0019
	Ratio (REC/Revenue)	1.65%	1.53%

#### Table 6: Rate Impact for Customers Taking Supply from ComEd<sup>67</sup>

<sup>&</sup>lt;sup>67</sup> 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.

<sup>&</sup>lt;sup>68</sup> 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 1.34% (2017-18 delivery year) means that 1.34% of the total electricity bill of a customer of that class in that delivery year was spent on contracts for renewable energy resources.

Customer Class	Description	2017-18 Delivery Year	2018-19 Delivery Year (Through December 2018)
Single Family No Electric Space Heat	Usage (kWh)	12,328,586,196	8,278,772,165
Single Family No Electric Space freat	Dollar Impact	\$23,424,314	\$15,729,667
Multi Family No Electric Space Heat	Usage (kWh)	3,420,587,157	2,245,305,837
Multi Failing No Electric Space Heat	Dollar Impact	\$6,499,116	\$4,266,081
Single Family With Flastric Space Heat	Usage (kWh)	394,859,759	185,682,414
Single Family With Electric Space Heat	Dollar Impact	\$750,234	\$352,797
Multi Family With Flagtric Space Heat	Usage (kWh)	1,107,863,480	506,875,264
Multi Family With Electric Space Heat	Dollar Impact	\$2,104,941	\$963,063
Wett hours	Usage (kWh)	93,269,595	3,872,675
Watt-hour	Dollar Impact	\$177,212	\$7,358
	Usage (kWh)	4,193,038,920	2,469,815,556
Small Load (< 100 kW)	Dollar Impact	\$7,966,774	\$4,692,650

Table 7: Dollar Impact for Customers Taking Supply from ComEd<sup>69</sup>

<sup>&</sup>lt;sup>69</sup> Usage values were reported by ComEd. Dollar Impact values were calculated by multiplying the Usage by the REC/kWh reported in Table 6.

### **Ameren Illinois**

Customer Class	Description	2017-18 Delivery Year	2018-19 Delivery Year (Through December 2018)
	Revenue/kWh	\$0.11	\$0.11
Residential Service (DS-1)	REC/kWh	\$0.001775	\$0.001789
	Ratio (REC/Revenue) <sup>71</sup>	1.61%	1.66%
	Revenue/kWh	\$0.11	\$0.11
Small General Service (DS-2)	REC/kWh	\$0.001782	\$0.001792
	Ratio (REC/Revenue)	1.59%	1.65%
	Revenue/kWh	\$0.06	\$0.06
General Service & Large General Service (DS-3 and DS-4) <sup>72</sup>	REC/kWh	\$0.000903	\$0.001354
	Ratio (REC/Revenue)	1.56%	2.13%

Table 8: Rate Impact for Customers Taking Supply from Ameren Illinois<sup>70</sup>

<sup>&</sup>lt;sup>70</sup> 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.

<sup>&</sup>lt;sup>71</sup> 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 1.61% (2017-18 delivery year) means that 1.61% of the total electricity bill of a customer of that class in that delivery year was spent on contracts for renewable energy resources.

<sup>&</sup>lt;sup>72</sup> 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.

Customer Class	Description	2017-18 Delivery Year	2018-19 Delivery Year (Through December 2018)
Residential Service (DS-1)	Usage (kWh)	4,783,699,770	2,934,257,259
Residential Service (DS-1)	Dollar Impact	\$8,491,713	\$5,248,871
Small General Service (DS-	Usage (kWh)	1,729,305,723	1,017,778,497
2)	Dollar Impact	\$3,081,727	\$1,823,927
General Service & Large General Service (DS-3 and	Usage (kWh)	1,696,266,609	877,057,801
DS-4) <sup>74</sup>	Dollar Impact	\$1,531,220	\$1,187,580

Table 9: Dollar Impact for Customers Taking Supply from Ameren Illinois<sup>73</sup>

<sup>&</sup>lt;sup>73</sup> Usage values were reported by Ameren Illinois. Dollar Impact values were calculated by multiplying the Usage by the REC/kWh reported in Table 8.

<sup>&</sup>lt;sup>74</sup> 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

Customer Class	Description	2017-18 Delivery Year	2018-19 Delivery Year (Through December 2018)
	Revenue/kWh	\$0.10831	\$0.10679
Residential	REC/kWh	\$0.00124	\$0.00124
	Ratio (REC/Revenue) <sup>76</sup>	1.15%	1.16%
	Revenue/kWh	\$0.08219	\$0.08414
Commercial	REC/kWh	\$0.00124	\$0.00124
	Ratio (REC/Revenue)	1.51%	1.48%
	Revenue/kWh	\$0.05733	\$0.05973
Industrial	REC/kWh	\$0.00124	\$0.00124
	Ratio (REC/Revenue)	2.17%	2.08%
	Revenue/kWh	\$0.07325	\$0.07063
Public Authority	REC/kWh	\$0.00124	\$0.00124
	Ratio (REC/Revenue)	1.69%	1.76%
	Revenue/kWh	\$0.11793	\$0.13088
Street Lighting	REC/kWh	\$0.00124	\$0.00124
	Ratio (REC/Revenue)	1.05%	0.95%

 Table 10: Rate Impact for Customers Taking Supply from MidAmerican<sup>75</sup>

<sup>&</sup>lt;sup>75</sup> 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.

<sup>&</sup>lt;sup>76</sup> 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 1.15% (2017-18 delivery year) means that 1.15% of the total electricity bill of a customer of that class in that delivery year was spent on contracts for renewable energy resources.

Customer Class	Description	2017-18 Delivery Year	2018-19 Delivery Year (Through December 2018)
Residential	Usage (kWh)	635,091,585	413,398,072
Kesidentiai	Dollar Impact	\$788,466	\$513,234
Commercial	Usage (kWh)	478,794,145	285,324,354
Commercial	Dollar Impact	\$594,423	\$354,230
Industrial	Usage (kWh)	639,114,735	370,338,822
Industrial	Dollar Impact	\$793,461	\$459,776
Dublie Autheniter	Usage (kWh)	164,422,834	103,006,762
Public Authority	Dollar Impact	\$204,131	\$127,883
Streat Lighting	Usage (kWh)	11,453,552	5,291,469
Street Lighting	Dollar Impact	\$14,220	\$6,569

 Table 11: Dollar Impact for Customers Taking Supply from MidAmerican<sup>77</sup>

<sup>&</sup>lt;sup>77</sup> Usage values were reported by MidAmerican. Dollar Impact values were calculated by multiplying the Usage by the REC/kWh reported in Table 10.

## (14) Rate Impacts on Customers of Alternative Retail Electric Suppliers

"An analysis of how the operation of the alternative compliance payment mechanism, any long-term contracts, or other aspects of the applicable renewable portfolio standards impacts the rates of customers of alternative retail electric suppliers."<sup>78</sup>

Due to changes to Section 16-115D of the Public Utilities Act contained in Public Act 99-0906, for the 2017-2018 delivery year through the 2018-2019 delivery year, Section 16-115D's ARES RPS requirements are gradually phased out, with Section 16-115D's requirements applicable to only 50% of load in the first of those years and 25% of load in the second. Furthermore, ARES are no longer required to make alternative compliance payments ("ACPs") for a portion of their obligations.<sup>79</sup> After the 2018-2019 delivery year, RPS obligations will become fully consolidated under the processes identified in Section 1-75(c) of the IPA Act and funded through a charge applicable to all retail customers.

Delivery Year	ComEd ACP Rate (¢/kWh)	Ameren Illinois ACP Rate (¢/kWh)	MidAmerican ACP Rate (¢/kWh)
June 2009 - May 2010	0.0764	0.0645	
June 2010 - May 2011	0.0256	0.0211	
June 2011 - May 2012	0.00568	0.00584	
June 2012 - May 2013	0.09724	0.06687	
June 2013 - May 2014	0.15923	0.14661	
June 2014 - May 2015	0.18917	0.16811	
June 2015 - May 2016	0.16641	0.14806	
June 2016 - May 2017	0.12815	0.17351	0.01507
June 2017 - May 2018	0.04317	0.04252	0.00586

Table	12:	ACP	Rates <sup>80</sup>
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Assuming an ARES uses the ACP to meet half its RPS requirement and passes through the costs of the ACP to all its volume sold, the estimated rate impact on ARES customers would be half the values shown in Table 12 above. That is, for example, for an ARES customer in Ameren Illinois

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<sup>&</sup>lt;sup>78</sup> 20 ILCS 3855/1-125(14).

<sup>&</sup>lt;sup>79</sup> Additional new requirements include a change from 60% of resources coming from wind, and 6% from photovoltaics, to a combined 32% coming from wind or photovoltaics. Resources also may not come from facilities that have their costs recovered through rates regulated by a state.

<sup>&</sup>lt;sup>80</sup> The data is sourced from <u>https://www.icc.illinois.gov/electricity/RPSCompliancePaymentNotices.aspx</u>. The ICC is still in the process of estimating the actual 2018-2019 ACP Rate. The Maximum ACP Rate for that time period is 0.18917 cents/kWh for ComEd, 0.18054 cents/kWh for Ameren Illinois, and 0.12415 cents/kWh for MidAmerican. The actual ACP rate is likely to be significantly lower as was the 2017-2018 ACP rate.

territory, the ARES rate impact in delivery year June 2017 to May 2018 would be 0.02126 cents per kilowatt-hour for the ACP portion of that ARES's compliance. The ARES would incur additional costs to self-procure the additional renewable resources to meet the balance of its obligations. However, ARES are not required to disclose those costs.

Because ACPs are based on the utilities' average cost of REC procurement, if ARES were to pay approximately the same amount for renewable resources they directly procure as the utilities, the bill impact of renewable procurement on ARES and utility customers would be similar in dollar amount. The percentage impact on an ARES is shown in Table 13. However, if ARES were to procure different or less expensive products (for instance, only purchasing short-term REC supply contracts rather than entering into long-term PPAs), overall ARES costs to comply with the RPS would likely be lower than the costs paid by utility default service customers.

Utility Territory	Maximum ACP Rate (¢/kWh)	Representative ARES Price (¢/kWh) <sup>81</sup>	Maximum Rate Impact on ARES Customers Assuming 100% ACP (estimated)
ComEd	0.18917	8.25	2.29%
Ameren Illinois	0.18054	6.37	2.83%

 Table 13: RPS Compliance - Comparative Rate Impact on ARES Customers

The Maximum ACP Rates for the June 2018 through May 2019 period are shown in Table 13 above. The rate impact is a high-end estimate that assumes that an ARES complied with the RPS through 100% ACP payment. However, it appears that most ARES are procuring RECs rather than making ACP payments so the actual rate impacts are likely to be significantly lower. Because price information on ARES direct purchases of RECs is not publicly available, an exact calculation of typical or average rate impacts on ARES customers is not possible. It is also important to note that the comparison here is only looking at the supply component of a customer's bill, not the entire bill, so it is not directly comparable to the rate impacts presented in Tables 6, 8, and 10.

<sup>&</sup>lt;sup>81</sup> Representative ARES prices are for the 2018-19 delivery year, based on offers found on the Plug In Illinois website (<u>https://www.pluginillinois.org/OffersBegin.aspx</u>) for 12-month fixed prices energy contracts as of 1/4/2019. Any monthly fees included with the offers were converted to  $\phi$ /kWh based on a usage rate of 1,000 kWh/month. ARES data for the MidAmerican service area had only one offer with a variable price over a 24 month period. Due to the lack of offers with 12-month fixed prices, the rate impact on ARES customers in the MidAmerican service area is not included in Table 13. Note that some plans may contain early termination fees that are not included in the calculation of the representative prices. Clarification of the specifications, marketing, and disclosure requirements associated with these plans was the subject of a rulemaking proceeding before the ICC (see Docket No. 15-0512). A Final Order in the Docket was issued on October 19, 2017.

## **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."<sup>82</sup>

For the delivery year ending May 31, 2017, to the extent an ARES complied with its RPS obligations by procuring renewable 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.<sup>83</sup> 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 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.

Through 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.<sup>84</sup> Changes to Section 16-115D(d)(4.5) of the Public Utilities Act contained in Public Act 99-0906 now require ACPs to be submitted 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.

84 20 ILCS 3855/1-56.

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<sup>82 220</sup> ILCS 5/16-115D(d)(4).

<sup>&</sup>lt;sup>83</sup> 220 ILCS 5/16-115D(a)(3) (the 60% statutory wind energy minimum for ARES is lower than the 75% wind standard for utilities).

## A. Total Amount of ACPs Received

This report must provide the total amount of ACPs received in aggregate from ARES for each planning year in which the ACP was in effect.<sup>85</sup> Under the PUA, a planning year begins on June 1st of each calendar year.<sup>86</sup> 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.<sup>87</sup> Therefore, this report must provide the aggregate total amount of ACPs for the planning years 2009-10 through 2017-18. Table 14 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.

ARES ACP payments are due by September 1<sup>st</sup> following the end of the planning year. For example, for the planning year that ended in May, 2017, payments were due September 1, 2017.<sup>88</sup> Payments are made in conjunction with a Compliance Report submitted to the ICC.

Planning Year	<b>Total ACPs Received</b>
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

Table 14: Total ACPs Received by the RERF<sup>89</sup>

For ARES compliance for the 2016-2017 delivery year, ComEd collected \$40,575,311.19, Ameren Illinois \$23,375,512.09, and MidAmerican \$10,532. For the 2017-2018 delivery year ComEd collected \$74,147.65, Ameren Illinois \$76,169.24, and MidAmerican \$710.00. The dramatic decrease in the amount of ACP payments collected by the utilities between the two 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 (see Table 12 above). ARES appear to have complied with their RPS obligations primarily through the purchase and retirement of Renewable Energy Credits rather than making ACP payments.

<sup>89</sup> 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 15.

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<sup>&</sup>lt;sup>85</sup> 220 ILCS 5/16-115D(d)(4)(A).

<sup>&</sup>lt;sup>86</sup> See e.g. 220 ILCS 5/16-111.5(b).

<sup>&</sup>lt;sup>87</sup> Pub. Act 96-0033 (eff. 7/10/2009); 220 ILCS 5/16-115D(d)(2).

<sup>&</sup>lt;sup>88</sup> 220 ILCS 5/16-115D(d)(2).

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 \$352,506,492.01.

## 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 planning year, the State of Illinois transferred \$2,000,000 on September 20, 2010 and \$4,710,000 on October 15, 2010.<sup>90</sup> 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.

In 2013, REC deliveries under the 2010 LTPPAs were curtailed due to application of the RPS budget cap.<sup>91</sup> 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.<sup>92</sup> 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

<sup>&</sup>lt;sup>90</sup> 30 ILCS 105/5h(a).

<sup>&</sup>lt;sup>91</sup> 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.

<sup>&</sup>lt;sup>92</sup> Of the eight LTPPA-holders, seven elected to enter into contracts.

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 15 shows the number of RECs contracted for purchase using alternative compliance payments held in the RERF as the result of each procurement event.

Procurement Event	<b>RECs Contracted For Purchase</b>	<b>RERF Funds Committed</b>
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 15: Supplemental Photovoltaic Procurement RECs and RERF Funds Committed

Table 16 below documents the expenditures for RECs from those procurements as the photovoltaic projects developed pursuant to it are completed and begin operation. As of January 31, 2019, over 1,000 new photovoltaic projects have begun operation as a result of this procurement process and have delivered over 54,000 RECs under five-year delivery contracts.<sup>93</sup>

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. As of February 15, 2019, \$37.5 million has been repaid to the Renewable Energy Resources Fund.

## 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,

<sup>&</sup>lt;sup>93</sup> 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.

the remaining balance of the RERF will shift 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. Details of the Illinois Solar for All Program were included in the Long-Term Renewable Resources Procurement Plan developed by the Agency and approved by the Illinois Commerce Commission. Implementation of Illinois Solar for All 2019.

Some of the challenges in spending the RERF that have been previously documented will be 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, 2019, the RERF balance equals \$53,930,293.59. Table 16 shows the current ERF balance. As discussed above ACP payments from ARES now go to the utilities and are not deposited into the RERF.

Date	Transaction	Amount	Cumulative Balance
Fall 2010	ACPs received	\$7,148,261.61	\$7,148,261.61
September 2010	Transfer to General Revenue Fund pursuant to 30 ILCS 105/5h(a)	(\$2,000,000.00)	\$5,148,261.61
October 2010	Transfer General Revenue Fund pursuant to 30 ILCS 105/5h(a)	(\$4,710,000.00)	\$438,261.61
Fall 2011	ACPs received	\$5,606,245.18	\$6,044,506.79
March 2012	Transfer in pursuant to 30 ILCS 105/5h(a)	\$2,000,000.00	\$8,044,506.79
April 2012	Transfer in pursuant to 30 ILCS 105/5h(a)	\$4,710,000.00	\$12,754,506.79
Fall 2012	ACPs received	\$2,156,777.61	\$14,911,284.40
Fall 2013	ACPs received	\$38,382,345.57	\$53,293,629.97
Winter/Spring 2014	RECs purchased per May 2013 Contracts	(\$1,719,141.52)	\$51,574,488.45
Fall 2014	ACPs received	\$77,145,921.09	\$128,720,409.54
Fall 2014	Supplemental PV Procurement Expenses	(\$170,068.33)	\$128,550,341.21
Spring 2015	Transfer to General Revenue Fund pursuant to Public Act 99-0002	(\$98,000,000.00)	\$30,550,341.21
Spring 2015	ACPs Received	\$26,342.00	\$30,576,683.21
Summer 2015	Supplemental PV Procurement Expenses	(\$653,549.18)	\$29,923,134.03
Summer 2015	SPV Deposits	\$427,836.00	\$30,350,970.03
Fall 2015	ACPs Received	\$86,278,411.02	\$116,629,381.05
Fall 2015	SPV Deposits	\$492,785.00	\$117,122,166.05
Spring 2016	SPV Deposits	\$561,734.04	\$117,683,900.09
Summer 2016	REC Payments/SPV Deposit Returns/Supplemental PV Procurement Expenses	(\$738,377.81)	\$116,945,522.28
Fall 2016	ACPs Received	\$71,649,805.76	\$188,595,328.04
Fall 2016	REC Payments/SPV Deposit Returns	(\$728,153.71)	\$187,867,174.33
Winter 2016	REC Payments/SPV Deposit Returns	(\$734,612.31)	\$187,132,562.02
Spring 2017	REC Payments/SPV Deposit Returns	(\$660,180.37)	\$186,472,381.65
Spring 2017	Transfer to Public Utility Fund pursuant to Public Act 99-0524	(\$12,000,000)	\$174,472,381.65
Summer 2017	REC Payments/SPV Deposit Returns	(\$871,070.33)	\$173,601,311.32
Summer 2017	Transfer to General Revenue Fund pursuant to Public Act 100-0023	(\$150,000,000.00)	\$23,601,311.32
Fall 2017	REC Payments/SPV Deposit Returns	(\$1,169,996.58)	\$22,431,314.74
Winter 2017	REC Payments/SPV Deposit Returns	(\$1,235,079)	\$21,196,235.74
Spring 2018	REC Payments/SPV Deposit Returns	(\$792,668.65)	\$20,403,567.09
Spring 2018	Repayment pursuant to Public Act 100-0023	\$37,500,000.00	\$57,903,567.09
Summer 2018	REC Payments/SPV Deposit Returns	(\$1,397,724.65)	\$56,505,842.44
Fall 2018	REC Payments/SPV Deposit Returns	(\$1,553,532.50)	\$54,952,309.94
Winter 2018	REC Payments/SPV Deposit Returns	(\$1,022,016.35)	\$53,930,293.59

**Table 16: IPA RERF Balance Sheet** 

# Appendix A

# **Illinois Power Agency**

## Fiscal Year 2018

# **Financial Statement and Notes (Unaudited)**

Illinois Power Agency FY 2018 Annual Report

#### State of Illinois Illinois Power Agency Individual Nonshared Governmental Funds Balance Sheet June 30, 2018 (Expressed in Thousands)

	Special Revenue				Permanent Trust	
	A	ois Power gency tions 0425	Illinois Power Agency Renewable Energy Resources 0836		Illinois Power Agency Trust 0424	
Assets						
Cash equity in State Treasury	\$	5,925	\$	57,903	\$	-
Investments		-		-		38,606
Other receivables, net		169		-		-
Due from other Agency funds		-		112,500		-
Total assets	\$	6,094	\$	170,403	\$	38,606
Liabilities						
Accounts payable and accrued liabilities Due to other Agency funds	\$	967	\$	1,456	\$	-
Due to other State funds				_		-
Total liabilities		967		1,456		-
Deferred Inflows of Resources (DIR)						
Unavailable revenue		-		-		-
Total DIR		-		-		-
Fund Balances						
Nonspendable - endowments and similar funds Committed		-		-		38,606
Employment and economic development		5,127		168,947		-
Total fund balances		5,127		168,947		38,606
Total liabilities, DIR, and fund balances	\$	6,094	\$	170,403	\$	38,606
					-	

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 For the Year Ended June 30, 2018 (Expressed in Thousands)

	Special Revenue				Permanent Trust	
	Illinois Power Agency Operations 0425		Illinois Power Agency Renewable Energy Resources 0836		Illinois Power Agency Trust 0424	
<b>Revenues</b> Licenses and fees Interest and other investment income Other revenues <b>Total revenues</b>	\$	3,437  	\$	- - 13 13	\$	2,838 
Expenditures Employment and economic development Interest Total expenditures		4,040		4,332		-
Excess (deficiency) of revenues over (under) expenditures		(603)		(4,319)		2,838
Other sources (uses) of financial resources Transfers in Transfers out Net other sources (uses) of financial		1,125 -		-		- (1,125)
resources Net change in fund balances		1,125 522		- (4,319)		(1,125) 1,713
Fund balances, July 1, 2017 Fund Balances, June 30, 2018	\$	4,606 5,128	\$	173,266 168,947	\$	36,893 38,606

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, 2018

#### (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 Complied 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, 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, 2018, 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, 2018

#### (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 Comprehensive Annual Financial Report 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 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

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

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 facility. There was no activity in this fund during Fiscal Year 2018.

#### (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 was no activity in this fund during Fiscal Year 2018.

#### 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 is 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).

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

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

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

formal debt issues and acquisitions under capital leases and installment purchases are reported as other financing sources. Significant revenue sources which are susceptible to accrual 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 only when cash is received.

#### (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

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

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, 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:

**Nonspendable** – 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 nonspendable fund balance as of June 30, 2017.

**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, 2018.

**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 Operations Fund and the Illinois Power Agency Renewable Energy Resources Fund had committed fund balances as of June 30, 2018.

**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, 2018.

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

**Unassigned** – This consists of residual fund balance (deficit) that has not been designated for specific purposes within the Funds. There were no unassigned fund balances as of June 30, 2018.

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.

#### (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) Current Year Adoption of GASB Statements:

During the Fiscal Year 2018, the Agency adopted the following Governmental Accounting Standards Board (GASB) standards, but has determined that they were not applicable to the Agency's financial reporting as of June 30,2018.

- GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, which is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities.
- GASB Statement No. 81, *Irrevocable Split-Interest Agreements,* which is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement.

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

- GASB Statement No. 85, *Omnibus 2017,* which is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits).
- GASB Statement No. 86, Certain Debt Extinguishment Issues, which is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources—resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of extinguishing debt.

#### (2) Summary of Significant Accounting Policies – Continued

#### (j) Future Adoption of GASB Statements

Effective for the year ending June 30, 2019, the Agency will adopt GASB Statement No. 83, *Certain Asset Retirement Obligations,* which is to address accounting and financial reporting for legally enforceable liability associated with the retirement of a tangible capital asset. The Agency has not yet determined the impact on the Funds' financial statements as a result of adopting this statement.

Effective for the year ending June 30, 2020, the Agency will adopt GASB Statement No. 84, *Fiduciary Activities*, which is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The Agency has not yet determined the impact on the Funds' financial statements as a result of adopting this statement.

Effective for the year ending June 30, 2021, the Agency will adopt GASB Statement No. 87, Leases, which is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. The Agency has not yet determined the impact on the Funds' financial statements as a result of adopting this statement.

Effective for the year ending June 30, 2019, the State will adopt GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, the objective of which is to improve the consistency of information that is disclosed in the notes to government financial statements related to debt, including direct borrowings and direct

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

placements, and to provide financial statement users with additional essential information about debt. It also clarifies which liabilities should be included in the debt related disclosures. The statement defines debt for the purposes of disclosures in notes to financial statements as a liability that arises from a contractual obligation to pay cash in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. The Agency has not yet determined the impact on its financial statements as a result of adopting this statement.

Effective for the year ending June 30, 2021, the State will adopt GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the end of a Construction Period*, which enhances the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and establishes accounting requirements for interest cost incurred before the end of a construction period. The Agency has not yet determined the impact on its financial statements as a result of adopting this statement.

#### (2) Summary of Significant Accounting Policies – Continued

#### (j) Future Adoption of GASB Statements- Continued

Effective for the year ending June 30, 2020, the State will adopt GASB Statement No. 90, Majority Equity Interests an amendment of GASB Statements No. 14 and No. 61, the objective of which is to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. The statement defines a majority equity interest and provides information on how the holding of a majority equity interest in a legally separate organization should be accounted for based on the ownership percentage, whether the holding meets the definition of an investment or whether the legally separate organization should be reported as a component unit. The Agency has not yet determined the impact on its 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 at June 30, 2018, including cash on hand and cash in transit, totaled \$5.925 million for the Illinois Power

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

Agency Operations Fund and \$57.903 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 not own individual securities. Details on the nature of these deposits are available within the State's Comprehensive Annual Financial Report.

#### (3) Deposits and Investments – Continued

#### (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, 2018, total investments were \$38.606 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 \$ .169 million.

#### (5) Interfund Balances and Activity

The following presents the Funds' interfund balances and activities at June 30, 2018:

The following balances (in thousands) represents amounts due to other funds:

	Due to	
Due From	Other State Funds	Description/Purpose
Illinois Power Agency Operations Fund	7	Payment for Services
Total:	\$7	

#### (6) Pension Plan

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

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 (PERS) 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 2017 are included in the State of Illinois' Comprehensive Annual Financial Report (CAFR) for the year ended June 30, 2018. The SERS issues a separate CAFR that may be obtained by writing to the SERS, 2101 South Veterans Parkway, Springfield, Illinois, 62794-9255.

#### (6) Pension Plan – Continued

A summary of SERS 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' CAFR. 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 2018, the employer contribution rate was 44.568%.

#### (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 Department of Central Management Services. 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 Comprehensive Annual Financial Report.

## STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

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 the Department of Central Management Services. A copy of the financial statements of the Department of Central Management Services may be obtained by writing to the Department of Central Management Services, 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, 2018.

#### (9) Commitments and Contingencies

#### (a) Operating Leases

The Illinois Power Agency Operations Fund leases various real property and equipment under terms of noncancellable operating lease agreements that require 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 \$18 thousand for the year ended June 30, 2018. On October 15, 2018, the Agency entered into a new lease office agreement for its main office relocating from 160 N. LaSalle Street, Chicago Illinois a CMS owned building to 105 W Madison Street, Chicago Illinois a privately-owned building. The new lease commencement date is December 1, 2018. The Agency will lease 3,555 square feet of office space starting at a monthly rent of \$8,331 per month until the end of the term November 30, 2023

#### (b) Renewable Energy Credits

### STATE OF ILLINOIS ILLINOIS POWER AGENCY

## Individual Nonshared Governmental Funds Notes to the Financial Statements

### June 30, 2018

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.

A total of 14 companies have 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 created. As of June 30, 2018, the contractual liabilities for those contracts totaled \$20.9 million.

#### (10) Subsequent Events

On October 15, 2018, the Agency entered into a new lease office agreement for its main office relocating from 160 N. LaSalle Street, Chicago Illinois a CMS owned building to 105 W Madison Street, Chicago Illinois a privately-owned building. The new lease commencement date is December 1, 2018. The Agency will lease 3,555 square feet of office space starting at a monthly rent of \$8,331 per month until the end of the term November 30, 2023.

# Appendix B

**Illinois Power Agency** 

## Fiscal Year 2018

## **Summary of Funds on a Cash Basis**

Illinois Power Agency FY 2018 Annual Report

### State of Illinois Illinois Power Agency Summary of Funds on a Cash Basis June 30, 2018 (Expressed in Thousands)

	Special Revenue					Permanent Trust	
	Illinois Power Agency Operations 0425		Age Renewab	Power ncy le Energy ces 0836	Illinois Power Agency Trust 0424		
Assets	•						
Cash equity in State Treasury Investments	\$	5,925 -	\$	57,903 -	\$	- 38,606	
Total assets	\$	5,925	\$	57,903	\$	38,606	
Liabilities Accounts payable	\$	765	\$	68	\$		
Total liabilities		765		68		-	
Fund Balances Nonspendable – endowments and similar funds Committed Employment and economic		-		-		38,606	
development		5,160		57,835		-	
Total fund balances		5,160		57,835		38,606	
Total liabilities, DIR, and fund		2,100				,	
balances	\$	5,925	\$	57,903	\$	38,606	