



ILLINOIS POWER AGENCY

**Large Customer Self-Direct Renewable Portfolio Standard Compliance Program
Proposed 2025-2026 Delivery Year Program Size**

January 15, 2025

Introduction and Stakeholder Engagement

Under Section 1-75(c)(1)(R) of the IPA Act, established through Public Act 102-0662, the Illinois Power Agency (“Agency”) is directed to “establish a self-direct renewable portfolio standard compliance program for eligible self-direct customers that purchase renewable energy credits from utility-scale wind and solar projects through long-term agreements.” As part of the self-direct renewable portfolio standard (“RPS”) compliance program, the Agency is required to “annually determine the amount of utility-scale renewable energy credits it will include each year from the self-direct renewable portfolio standard compliance program, subject to receiving qualifying applications.”¹ As further clarified, in making this determination “the Agency shall evaluate publicly available analyses and studies of the potential market size for utility-scale renewable energy long-term purchase agreements by commercial and industrial energy customers...”² In late 2022, to determine the program size for the 2023-2024 Delivery Year,³ the Agency first conducted outreach to potential participants in the program and other interested stakeholders through a series of requests for information (“RFIs”) to solicit additional information that would be relevant in developing this size determination. The Agency also conducted research as part of the development of the 2024 Long-Term Renewable Resources Procurement Plan (“Long-Term Plan”) to set the program size for the 2024-2025 Delivery Year. In December 2024, the Agency conducted outreach to solicit information on prospective project development in the upcoming 2025-2026 Delivery Year that may qualify for participation in this program in aiding the establishment of a target amount.

As discussed in greater detail below, the Agency has evaluated publicly available data and information concerning the potential market’s development, as well as responses from the December 2024 survey. **Based upon this evaluation, the Agency proposes that the program size for the 2025-2026 Delivery Year be set at 4.5 million Renewable Energy Credits (“RECs”).** This includes 1 million RECs from projects currently participating in the program and the opportunity for up to 3.5 million RECs from new program applicants. As defined in the Agency’s 2024 Long-Term Plan and in accordance with the IPA Act, the Agency will take applications for participation in the Self-Direct Program in the 2025-2026 Delivery Year during the application window of February 18 through March 14, 2025, and will approve applications which meet participation requirements up to the 3.5 million REC threshold in accordance with the provisions of Section 1-75(c)(1)(R) of the IPA Act.

¹ 20 ILCS 3855/1-75(c)(1)(R)(3).

² Id.

³ Delivery years are referenced based on their end date. For example, the 2024 Delivery Year ran from June 1, 2023 through May 31, 2024.

Stakeholders who seek to comment on the proposed program size should provide comments by email to IPA.ContactUs@illinois.gov by January 27, 2025. Responding stakeholder are requested to use the email subject line header “*Self-Direct Program DY2026 Response*”. The final program size for the 2025-2026 Delivery Year is expected to be published on January 31, 2025, along with program application forms.

Corporate Renewable Energy Contracting Background

The Self-Direct Program is established to provide a mechanism for RECs procured and retired by private entities to count toward RPS compliance for the Agency.⁴ The program size (i.e., the target number of RECs to be acquired through the Self-Direct Program) is based upon an assessment of the utility-scale renewable energy long-term purchase agreements that could be executed by commercial and industrial energy customers in Illinois during the forthcoming delivery year. The agreements typically involve large commercial and industrial (“C&I”) customer purchases of RECs or bundled renewable energy and RECs from utility-scale renewable resources through power purchase agreements (“PPAs”) or virtual power purchase agreements (“VPPAs”). PPAs are long-term agreements that require the producer or seller to deliver electricity to the buyer, offsetting some or all of the energy consumed by the buyer; while VPPAs are financial or synthetic transactions (i.e. not requiring physical delivery of energy). VPPAs typically provide corporate buyers greater flexibility, with the renewable resource often located at a different location than the buyer’s location, providing a financial hedge or offset from wholesale market prices.

RECs contracted by C&I customers through PPAs and VPPAs may be eligible for retirement and customer bill compensation if the customer participates through the Self-Direct Program. RECs obtained from eligible new utility-scale wind and utility-scale solar resources located in Illinois or the states adjacent to Illinois, with contract terms of at least 10 years and that meet at least 40% of the C&I customers’ usage during the previous year, are eligible to participate. Participation is capped at the target amount for the delivery year – which, through this process, is proposed to be 4.5 million RECs for the 2025-2026 Delivery Year.

Data Sourcing

The Agency has conducted research through examining various databases in an attempt to identify historic and prospective customer projects and associated PPA and VPPA contracts for eligible utility-scale wind and utility-scale solar projects in the 2025-2026 Delivery Year. The Agency has also completed analysis of this data to forecast potential renewable energy projects that may be contracted for by Large C&I customers beyond projects currently announced. The nature of these agreements, which are primarily conducted through two-party confidential negotiations and contracting, limits the insight the Agency has into these contracts, including project size, REC creation, and timing.

None of the sources and databases reviewed offered comprehensive data or information on the potential size of the self-direct market in Illinois. As a result, information identified and summarized below is largely general in nature and often backwards looking. Information released is often done by the customer or the developer following the energization of the renewable facility and offering little insight into future build and contracting plans. While details may be limited, this data has been evaluated to

⁴ Illinois Power Agency 2024 Long-Term Renewable Resources Procurement Plan, p. 130. [Microsoft Word - FINAL Compiled 2024 LTP 4-19-24 748pm.docx](#)

identify trends which can provide indication of future project development. It is in this approach that the Agency has developed its estimates for the target quantity of RECs that could be contracted for through the Self-Direct RFP Compliance Program and thus establishing the target for the forthcoming 2025-2026 Delivery Year.

The Agency utilized data provided by several third parties which provide information on the potential size of the market, timing and location of prospective projects, and relevant market drivers that could facilitate growth in renewables and PPAs and VPPAs with Large C&I customers.⁵ Further, the Agency collected the latest C&I customer consumption and utility-scale renewable generation data available through the U.S. Energy Information Administration (“EIA”) to define the overall size of the C&I electricity markets, as well as the amount of utility-scale wind and utility-scale solar capacity and generation in Illinois.⁶ Collectively, this data was used to inform the market development and sizing analysis, and ultimately establish the REC target amount for the 2025-2026 Delivery Year.

Market Development and Size Analysis

The EIA reported that for 2023, sales of electricity to end-use customers in Illinois for the Commercial Sector amounted to 45,576,290 MWh, down from 47,119,806 MWh in 2022. Similar statistics for the Industrial Sector amounted to 41,267,424 MWh in 2023, down slightly from 41,817,849 MWh in 2022. Table 1 below summarizes the historic electricity sales to C&I customers from 2020 through 2023.

Table 1. Electricity Sales to Illinois Commercial and Industrial Customers (MWh)⁷

Year	Commercial	Industrial
2020	45,486,577	40,362,204
2021	46,923,210	41,498,024
2022	47,119,806	41,817,849
2023	45,576,290	41,267,424

Generation from utility-scale wind and utility-scale solar projects for 2023 was reported as 21,808,000 MWh and 1,911,000 MWh, respectively⁸ based on totaled summer utility-scale wind capacity of 7,873.7 MW and utility-scale solar capacity of 1,376.4 MW (as of October 2024).⁹ The Agency was unable to identify any database which tracks or summarizes large C&I customer energy contracting, either through PPAs or VPPAs, for public dissemination. With regard to adjacent states, utility scale solar and wind generation are provided in the Table 2 below.

⁵ Source used include: S&P Global’s database on corporate renewable energy PPAs; the Electric Power Research Institute’s (EPRI) database on data center development, Wood Mackenzie datasets on solar PV development; and discrete communications from Meta, EDP Renewables N.A., and Google.

⁶ EIA end-use customer usage datasets: [Electricity Data - U.S. Energy Information Administration \(EIA\)](#)

⁷ EIA dataset used: [HS861 2010-.xlsx](#) (finalized data through 2023)

⁸ [Electricity data browser - Net generation for all sectors](#)

⁹ [Electric Power Monthly - U.S. Energy Information Administration \(EIA\)](#)

Table 2. Utility Scale Wind and Solar Generation (GWh)¹⁰

Year	IL	IL	IN	IN	MI	MI	MO	MO	WI	WI	IA	IA	KY
	Wind	Solar	Wind	Solar	Wind	Solar	Wind	Solar	Wind	Solar	Wind	Solar	Solar
2019	14,460	62	62,16	323	5,826	143	2,858	100	1,878	38	26,305	15	45
2020	16,226	79	6,288	359	6,735	155	3,345	101	1,763	93	34,182	22	43
2021	19,133	513	7,857	573	7,697	424	6,534	116	1,593	367	37,098	225	46
2022	23,494	1,548	9,985	1,082	9,151	859	7,525	152	1,816	805	45,761	386	47
2023	21,808	1,911	8,844	1,854	8,292	1,269	6,775	174	1,738	1,277	41,439	521	155

*At the time of this report, finalized EIA generation data is only reported through calendar year 2023.

Table 3. Utility Scale Wind and Solar Summer Capacity (MW)¹¹

Year	IL	IL	IN	IN	MI	MI	MO	MO	WI	WI	IA	IA	KY
	Wind	Solar	Wind	Solar	Wind	Solar	Wind	Solar	Wind	Solar	Wind	Solar	Solar
2019 ¹²	4,831.5	40.6	2,309.8	222.3	2,061.8	100.2	954.3	62.1	319.7	23.9	8,844.2	10.4	26.1
2020 ¹³	5,798.0	53.0	2,309.8	252.3	2,354.3	102.0	1,196.3	62.1	319.7	45.4	10,546.4	16.0	26.1
2021 ¹⁴	6,300.6	275.6	3,140.4	382.2	3,167.8	241.9	2,227.8	66.0	724.4	235.1	11,576.6	118.0	26.1
2022 ¹⁵	7,034.6	901.8	3,453.1	620.0	3,240.6	473.7	2,121.9	89.7	724.3	505.9	12,154.7	276.6	27.8
2023 ¹⁶	7,494.9	927.0	3,453.1	1,265.1	3,576.1	727.7	2,374.9	100.8	826.2	791.2	12,602.9	260.5	79.8
2024 ¹⁷	7,873.7	1,376.4	3,439.1	2,233.9	3,775.3	1,164.0	2,374.9	130.8	826.2	1,871.2	12,842.5	376.1	311.6

The EIA reported that in 2023 total wind and solar energy consumption by commercial and industrial end-users amounted to 25,316,000 MWh in the U.S. and 830,000 MWh in Illinois.^{18,19} Based upon these statistics, Illinois represents approximately 3.28% of the total solar and wind energy consumption in the U.S. The Clean Energy Buyers Association (“CEBA”) reported corporate renewable energy deals amounted to approximately 16.9 GW in 2022, 12.9 GW in 2023, and 6.9 GW through second quarter 2024.²⁰ CEBA notes that its deal tracker data represents approximately 91% of the corporate deals reported in the U.S.²¹ Applying the percentage of commercial and industrial renewable energy consumption in Illinois to the total C&I consumption of renewable energy in the U.S., adjusting the CEBA number to reflect the full corporate renewable energy market, and applying an average capacity factor

¹⁰ [Electricity data browser - Net generation for all sectors](#)

¹¹ [Electric Power Monthly - U.S. Energy Information Administration \(EIA\)](#). Capacity as of August in each year, released in monthly reports each October.

¹² [Electric Power Monthly with data for August 2020](#)

¹³ [Electric Power Monthly with data for August 2020](#)

¹⁴ [Electric Power Monthly with data for August 2021](#)

¹⁵ [Electric Power Monthly with data for August 2022](#)

¹⁶ [Electric Power Monthly with data for August 2023](#)

¹⁷ [Electric Power Monthly - U.S. Energy Information Administration \(EIA\)](#)

¹⁸ [Table F28: Wind energy consumption estimates, 2023. HTML and/or Excel version of this table.](#)

¹⁹ [Table F27: Solar energy consumption estimates, 2023. HTML and/or Excel version of this table.](#)

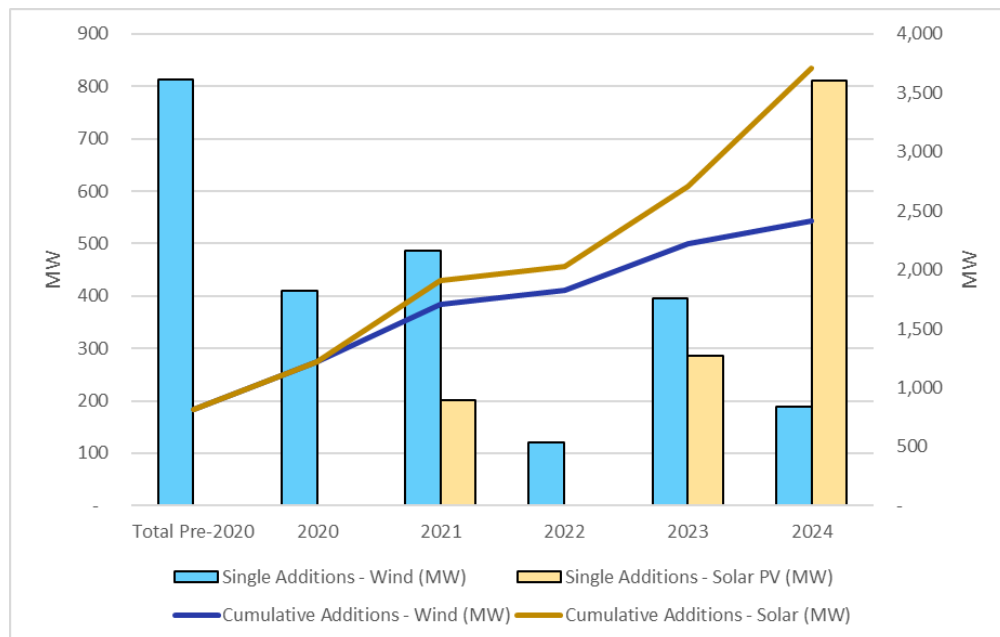
²⁰ Credit: Clean Energy Buyers Association (CEBA) - [v2-Client TAG -Deal-Tracker-blog-and-graphics-revisions Bar-Chart.pdf](#)

²¹ [CEBA Deal Tracker - CEBA](#)

of 30 % for wind and solar generation, the estimated quantity of RECs available in Illinois based on this data is 1,224,122 for 2023 and 653,321 for the first two quarters of 2024.

A review of S&P Capital IQ datasets²² identified corporate renewable energy capacity additions for domestic (US) entities, broken down between solar and wind resources, and an aggregate value for non-U.S. entities. Figure 1 below provides a summary of the domestic corporate renewable additions per year, totaling to approximately 2.4 GW of wind additions through 2024 and 1.8 GW of solar PV additions. Datasets also provided some insight into technology-specific entity renewable energy development – including entities such as Amazon, Meta, Microsoft, and Apple. Focusing specifically on these entities identified that approximately 45% of all renewable energy additions within this data set were from these technology companies, amounting to approximately 1.1 GW of wind and nearly 600 MW of solar PV. Additionally, non-U.S. corporation entity additions totaled to approximately 725 MW for wind and solar PV combined. Assuming the split between wind and solar PV for non-U.S. corporations aligns with domestic corporations, this results in approximately 440 MW of wind additions and 285 MW solar PV.

Figure 1. Domestic Corporation - Renewable Additions per Year & Cumulative



Through use of the detailed domestic corporation renewable energy addition statistics, the Agency derived compound annual growth rates (CAGR) for wind and solar PV. In aggregate, from 2021 through 2024 wind realized a 9% CAGR, while solar PV realized a 59% CAGR. The solar PV CAGR derived from the S&P dataset was corroborated with a summary Wood Mackenzie dataset that resulted in a 65% CAGR.²³ Importantly, the higher 65% Wood Mackenzie CAGR was used to support an upward bound on the

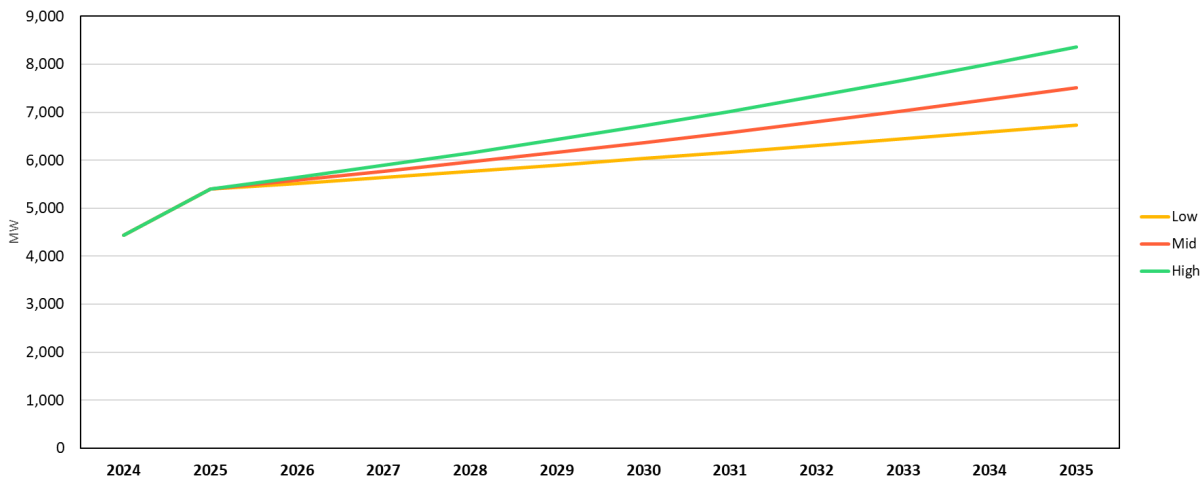
²² Underlying datasets used are from S&P Capital IQ, behind a subscription paywall and cannot be directly provided. All information above is aggregate information to protect confidentiality and subscription rules.

²³ Wood Mackenzie & Solar Energy Industries Association (SEIA), US Solar Market Insight Report - Q4 2024 (issued December 2024). (confidential dataset)

prospective market size. These CAGRs result in forecast 2025 additions of 218 MW of wind and 843 MW of solar PV.

In its research, the Agency identified multiple announcements from tech companies and developers highlighting new renewable energy project development in Illinois. These included Meta and RWE announcing construction of a 274 MW solar PV project,²⁴ Microsoft and EDP Renewables announcing a 110 MW solar PV project,²⁵ and Google and Swift Current Energy announcing a 593 MW solar PV project.²⁶ Many these articles linked the renewable resource to data center growth and other related tech company operations. With this link between data center growth and renewable energy resource development made, the Agency conducted research into the growth of data centers in Illinois to identify renewable energy development that may be driven as a result of data center growth not previously seen in prior years and therefore being missed in the retrospective renewable energy build statistics. Utilizing S&P Capital IQ and ERPI data,²⁷ there was approximately 4.4 GW of renewable energy build associated with data centers spread throughout Illinois. Further, the EPRI datasets defined a series of data center annual growth rate tracks of 5%, 7.5%, and 10%. Using the data center growth rates and the share of domestic tech company renewable projects versus domestic non-tech company renewable projects (45%, as identified previously), the Illinois-specific data center CAGRs of 2.23% (low), 3.35% (mid), and 4.47% (high) were derived. In 2025, based upon the three major renewable projects announced (previously discussed, Meta – 274 MW, Microsoft – 110 MW, and Google – 593 MW), the forecast 2025 data center-specific renewable energy projects sum to 5.4 GW. Applying the calculated low/mid/high CAGRs, the 2026 forecast data center renewable energy development grows to 5.52 GW, 5.58 GW, and 5.64 GW, respectively. Figure 2 below provides a summary of the renewable energy-specific additions projected through 2035.

Figure 2. Commercial & Industrial Renewable Project Trajectory (MW)



²⁴ [RWE signs long-term power purchase agreements with Meta to generate clean electricity from two solar farms with a combined capacity of 374 megawatts](#)

²⁵ [EDP Renewables North America and Volt Energy Utility Announce Solar Project with Microsoft Focused on Environmental Justice](#)

²⁶ [Swift Current Energy Secures Investment from Google for 800 MW Solar Project - Swift Current Energy](#)

²⁷ [Powering Intelligence: Analyzing Artificial Intelligence and Data Center Energy Consumption](#)

Based upon the results of the data center projects, coupled with the non-tech company additions, the cumulative forecast renewable energy development by large C&I customers is 6.2 GW, or a total of 1.75 GW of new build in 2025.

In summary, Agency analysis derived a range in new wind and solar PV development from 1.2 GW (aggregate CAGRs used) to 1.75 GW (incorporating for data center growth rates) in 2025. Table 4 below summarizes the results by resource type.

Table 4. Forecast Renewable Energy Development Using Aggregate and Data Center CAGRs

	New Renewable Energy Development - Aggregate CAGR (MW)	New Renewable Energy Development - Aggregate & Data Center-Specific CAGRs (MW)
Total	1,215	1,747
Wind-only	254	356
Solar-only	961	1,391*

*Primary driver are the three announced solar PV facilities (Meta, Microsoft, and Google).

IPA Outreach Requests for Information

To further support data gathering in support of the development of the 2025- 2026 Delivery Year REC target, the Agency developed an online survey soliciting information from renewable energy project developers, project owners and operators, large commercial and industrial customers, alternative retail energy suppliers (“ARES”) and brokers. Its intent was to gather data from stakeholders that may be interested in participating in the Self-Direct Program or those who have information on forthcoming projects that may be eligible for participation during this period. Self-Direct Program participants includes large C&I customers served by either Commonwealth Edison or Ameren Illinois that contract for renewable energy from utility-scale wind or utility-scale solar generating facilities.

The survey was issued virtually on December 10, 2024,²⁸ seeking responses from stakeholders by January 3, 2025. Throughout the course of the stakeholder comment period the Agency received no inquiries from any parties, and at its conclusion received one response. That one response was for an entity that would contract with a solar PV facility in MISO, with a projected REC production of between 200,000 and 250,000 per year. The respondent indicated their intent to apply to the program during the application period for the 2025-2026 Delivery Year period.

Self-Direct Program Size Analysis Summary and Determination

The Agency has reviewed publicly available data and information regarding the size of the corporate renewable energy market in Illinois. The research approach taken, analyzing aggregate Large C&I PPA/VPPA renewable energy statistics and data from data center-specific renewable energy projects, sought to create a range of potential new renewable energy development for utility-scale wind and utility-scale solar in 2025 and beyond. Additional information was also obtained from stakeholder responses to the December 2024 survey which was taken into consideration in the analysis to determine the size of the Self-Direct Program for the 2025-2026 Delivery Year.

²⁸ Announcement: [20241210 announcement-self-direct-survey.pdf](#)

Through a top-down analysis the Agency utilized EIA and CEBA statistics to derive the estimated historic market size of Large C&I contracted renewable energy development in Illinois, as translated to REC production. This resulted in 1,224,122 RECs in 2023 and 653,000 RECs through the first two quarters of 2024. Assuming similar development in the third and fourth quarters of 2024, the total estimated REC production grows to 1,306,642. If these results are extrapolated into 2025 REC production could grow to between 1.4 and 1.5 million. While the top-down approach is valuable to set an initial projection of renewable energy development and associated REC production, it is likely under projecting renewable energy development and associated Large C&I PPA/VPPA contracting for these projects.

A bottom-up analysis using S&P and EPRI datasets along with publicly announced projects in Illinois from Meta, Microsoft, and Google resulted in a forecast of new utility-scale wind and utility-scale solar PV development of between 1.215 GW and 1.747 GW. Utilizing average wind and solar capacity factors of 45% and 24%, respectively, resulted in projected REC production between 3.2 million and 4.3 million per year. A key consideration when establishing the target are the project specifics for those projects being announced and likelihood they would seek participation in the Self-Direct Program versus an alternative contracting option, such as participating in the Agency's Index REC procurements or private bilateral offtake agreements. If for example, the announced 593 MW Google solar PV project is removed from the dataset used to develop the Self-Direct Target amount – assuming it participates in an alternative program or contracting solution – the forecast new renewable energy development decreases to 1.141 GW resulting in just over 3 million RECs produced. This closely aligns with the aggregate forecast (also resulting in approximately 3.2 million RECs), indicating the 4.3 million REC value may be over-forecasting the market size. Conversely, information provided through the stakeholder survey process was limited, likely under-forecasting customer participation in the program. As previously discussed, the top-down approach deriving an estimated 1.3 million to 1.5 million REC production amount is also likely under-forecasting Large C&I-associated renewable energy development. Therefore, it is likely the 3.2 million REC target could be under-forecasting the market size.

Overall, the Agency recognizes that the aggregate forecast methodology may be under-forecasting the prospective Large C&I renewable energy PPA/VPPA market, while the data center-focused analysis may be over-forecasting the same market during the 2025-2026 Delivery Year. Based upon the analysis of information from various public sources the Agency has determined that 4,500,000 RECs (inclusive of 1 million REC from project currently participating in the program) is a reasonable size for the Self-Direct Program for the 2025-2026 Delivery Year.

The Agency welcomes feedback from stakeholders on the size of the Self-Direct Program for the 2026 Delivery Year. Comments should be sent to IPA.ContactUs@illinois.gov and are due by Monday, January 27, 2025. The IPA will announce the final program size for the 2025-2026 Delivery Year on Friday, January 31, 2025.