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January 16, 2018

Ms. Kathleen Burgess, Secretary New York State Public Service Commission Three Empire State Plaza Albany, NY 12223-1350

Re: Case 14-M-0094 – Proceeding on Motion of the Commission to Consider a Clean Energy Fund

Matter 16-01010 – In the Matter of the CEAC's Voluntary Investment & Other Market Development Working Group

Case 14-M-0224- Proceeding on Motion of the Commission to Enable Community Choice Aggregation Programs

Dear Secretary Burgess:

In its January 21, 2016 Order Authorizing the Clean Energy Fund Framework in Case 14-M-0094, the Public Service Commission (Commission) directed the Clean Energy Advisory Council (CEAC) to develop recommendations for incentives and/or other approaches that foster voluntary investments in clean energy technology that accelerate and increase achievement of the Clean Energy Standard and State Energy Plan (SEP). The attached filing was developed by the Community Choice Aggregation (CCA) Subgroup of the Voluntary Investment in Other Market Development (VIOMD) Working Group for the CEAC Steering Committee.

The CCA Subgroup was established to identify policy recommendations that will advance effective CCA activity while also advancing New York State's clean energy goals and the SEP. The Subgroup was tasked with developing the attached Community Choice Aggregation Policy Recommendations Report which describes a model for CCA in New York State and policy recommendations that address barriers that limit both the development of CCAs and effective CCA activity. On behalf of the CCA Subgroup, please find the Community Choice Aggregation Policy Recommendations Report dated January 12, 2018 attached for filing.

Sincerely, /s/ Kelly Strait Office of Markets & Innovation

Community Choice Aggregation Policy Recommendations Report

The following Report was developed by the Community Choice Aggregation (CCA) Subgroup of the Voluntary Investment in Other Market Development (VIOMD) Working Group for the Clean Energy Advisory Council (CEAC) Steering Committee

January 2018

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The CCA Subgroup would like to acknowledge and thank Caitlin Dufraine and Amy Mahl of Ecology and Environment, PC for their invaluable assistance in preparing this report.

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ACRONYM LIST

AMI Advanced Metering Infrastructure

APP Assistance Program Participants

C&I Commercial and Industrial

CCA Community Choice Aggregation

CCA Order PSC CCA Order Case 14-M-0224.

CEAC Clean Energy Advisory Council

CEC Clean Energy Communities

CEF Clean Energy Fund

CES Clean Energy Standard

CDG Community Distributed Generation

CLC Cape Light Compact

COG Councils of Government

CPUC California Public Utilities Commission

CRES Certified Retail Electric Supplier

DER Distributed Energy Resources

DG Distributed Generation

DOER Department of Energy Resources

DSIP Distributed System Implementation Plan

EAM Earnings Adjustment Mechanism

ESCO Energy Service Company

GEA Government Energy Aggregation

GHG Greenhouse Gas

IOU Investor-Owned Utility

LDC Local Development Corporation

LMI Low-Moderate Income

LSE Load Serving Entity

MAPC Metropolitan Area Planning Council

MEGA Municipal Electric and Gas Alliance, Inc.

NOPEC Northeast Ohio Public Energy Council

NYS New York State

NYSEG New York State Electric & Gas

NYSERDA New York State Energy Research and Development Authority

PPA Power Purchase Agreement

PSC New York Public Service Commission

RFIS Requests for Information
RFP Request for Proposals

REC Renewable Energy Certificates or Renewable Energy Credits

REV Reforming the Energy Vision

RPS Renewable Portfolio Standard

SB Senate Bill

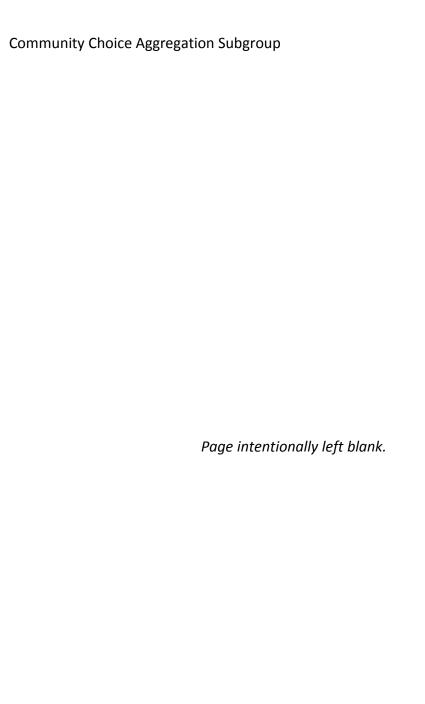
SBC System Benefits Charge

SEP State Energy Plan

SRECs Solar Renewable Energy Credits

UER Utility Energy Registry

VDER Value of Distributed Energy Resources



EXECUTIVE SUMMARY

The Community Choice Aggregation (CCA) Subgroup (Subgroup) was established to identify policy recommendations that will advance effective CCA activity while also advancing New York State's clean energy goals and the State Energy Plan (SEP). The Subgroup was tasked with developing this Community Choice Aggregation Policy Recommendations Report (Report), which describes a model for CCA in New York State (NYS) and policy recommendations that address barriers that limit both the development of CCAs and effective CCA activity.

From December 2016 to January 2018 the Subgroup discussed: the current status of CCA in NYS; the Public Service Commission's (PSC; the Commission) April 21, 2016 *Order Authorizing Framework for Community Choice Aggregation Opt-out Program*¹ (Order); lessons learned from the ongoing Westchester Power CCA; feedback from communities interested in developing CCAs; and NYS energy goals. The Subgroup identified policy-related barriers that have restricted current CCA activity in NYS and lessons learned from CCA markets, policies, and activities in other states.

This Report describes the Subgroup's current understanding of the limitations and barriers to CCA activity, based on an assessment of the existing regulatory and market context, and identifies policy recommendations that it believes are likely to advance CCA activity in NYS.

The Subgroup's analysis of CCA in both NYS and other jurisdictions culminated in the identification of a model comprised of three phases associated with the advancement of CCA policy and activity in the state: the Current Phase; Near-Term Phase; and Mid-Term Phase. The Subgroup is optimistic that, with regulatory changes, CCA can more effectively support renewable energy projects while also stabilizing or reducing energy costs. Policy recommendations pertain to state-level regulations, Order amendments, and funding directives. Each of these is briefly described here (see Section 5).

It is important to note that a diverse array of organizations participated in this Subgroup and held robust discussions regarding the recommendations below. Due to the range of perspectives present in the Subgroup, individual members' perspectives were not always able to align on policy or process recommendations. This report generally reflects the perspective of members that support the below recommendations, but also highlights areas where some members held differing or dissenting views.

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¹ Proceeding on Motion of the Commission to Enable Community Choice Aggregation Programs, Case 14-M-0224.

Policy Recommendations to Overcome Current Barriers and Advance from the Current Phase to the Near-Term Phase of CCA Policy and Activity

Energy usage data is valuable information that CCAs need to assess the economic and market viability of a CCA and to also administer a CCA. In the Order, the PSC directed utilities to provide a series of data sets to CCA Administrators once a CCA program is approved. To facilitate better access to CCA-related information during the developmental stage of a CCA program, the Department of Public Service, NYSERDA, utilities, and stakeholders are collaborating to develop a publicly-available utility energy registry (UER) that will provide access to high-level energy demographic data across New York State.² The Subgroup recommends that parties involved in this effort consider the importance of data access for advancing CCA activity. In particular, the Subgroup recommends that some level of CCA-relevant data be provided at no charge through the UER. In regard to data fees, the PSC should continue to consider the implications and timing of CCA data costs, the value of the data being requested, and invoicing for data fees. Any CCA-related data fees should be back-loaded so the bulk of the fee is due after energy service company (ESCO) contract execution.

Funding to cover CCA programmatic offerings such as local distributed generation (DG) and energy-efficiency products and services is limited and/or difficult to access. Some alternatives that should be considered are allowing CCAs to collect funds directly for these purposes or the creation of a dedicated source of funding (possibly through NYSERDA or other state agencies or authorities such as the New York Power Authority (NYPA)). The funds could support the development of CCA Implementation Plans, programs related to energy efficiency, and assistance program participants (APPs), as well as other programs that are consistent with state clean energy goals. It will be important, however, that CCA Administrators and distribution utilities coordinate such programs to avoid unnecessary duplication, customer confusion, and distorted price signals. Some participants think that the use of system benefits charge (SBC) funds by CCAs should be explored further while others note that NYSERDA's and utilities' share of SBC funds is limited and set to decline over time. Some participants also caution that this proposal would prevent CCA participants from taking advantage of established SBC-funded programs offered by local utilities and/or NYSERDA, as well as potentially impacting the effectiveness of SBC-funded utility offerings. In addition, some participants, but not all, think consideration should be given to exploring collaborative earnings opportunities between CCAs and utilities. Others believe that such an approach is inconsistent with the Commission's May 19, 2016 Order Adopting a Ratemaking and Utility Revenue Model Policy Framework.³

CCA presents an opportunity for communities to voluntarily invest in local clean energy and distributed energy resources (DER) while also reducing or stabilizing energy costs. Some members of the Subgroup believe that there is an opportunity to achieve higher penetration of

² In the Matter of the Utility Energy Registry, Case 17-M-0315.

³ Case 14-M-0101.

DER by integrating CCA and community distributed generation (CDG). Together these two programs could significantly increase electricity generation from renewable energy resources in NYS. Customers are currently able to participate in both programs in a number of ways. However, there is potential for customers to be confused about the intersection of CCA and CDG programs, the benefits they offer, how they are administered, and the likely impact on their bills.

To date, the PSC has only allowed CCA Administrators, DER providers, or ESCOs working with a CCA Administrator to bill a customer that elects, on an opt-in basis, to participate in a DER program or purchase a DER product separately. However, the PSC has stated that they would consider a CCA's proposal to bill customers for such services on an opt-out basis in the event that the CCA is able to work with a utility to develop a form of consolidated billing for those services. To facilitate the integration of CCA and CDG, some Subgroup members believe that the PSC should enable CCAs to enroll participants in CDG on an opt-out basis, rather than requiring customers to individually opt-in to CDG. The Subgroup acknowledges that the integration of CCA and CDG should maintain or enhance the benefits that CDG offers APPs and low-moderate income (LMI) customers. Some participants feel that using local authorizations for CCA as a proxy for customer consent for CDG should be examined by the Commission. Some participants are concerned opt-out CDG could pose a risk to customers and create confusion.

There are currently limited billing options for non-supply CCA services, such as energy efficiency and CDG. A CCA Administrator could work with its ESCO to incorporate charges associated with these services into a blended supply price that is collected via the utility bill, or alternatively, a separate bill could be sent to customers participating in efficiency or CDG. If these services are included in a blended supply price, there are options for including information about the CCA program and its offerings on the utility bill. For example, a CCA Administrator and its ESCO could work with the utility to include a message on the ESCO page of the bill. However, there are limited options for change to the utilities' bill formats to accommodate substantially different text fields or images. The Subgroup recommends that consideration should be given to including information on the utility bill that more clearly indicates whether the customer is enrolled in a CCA and/or CDG program.

Under current Commission directives, when customers sign up for CDG they are agreeing to pay two bills - the utility bill and the CDG bill. A CDG credit is displayed on the utility bill. The CDG charge, often called a subscription fee, is displayed on a separate CDG bill. Some Subgroup members believe that this two-bill arrangement is a limitation on the expansion of a CCA's scope and objectives beyond supply procurement, which could be addressed by a one-bill solution (see discussion of Near-Term Policy Recommendations for more detail). Additionally, some participants also recommend exempting CCAs from the CDG 1,000 kWh per year minimum supply limit to support the distribution of kWhs across the customer base, to better enable the

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⁵ Order Approving Community Choice Aggregation Program and Utility Data Security Agreement with Modifications, Case 14-M-0224, October 19, 2017, p. 18.

integration of CCA and CDG. They feel this would allow CCAs to start small and build towards more significant allocations of CDG credits to individual accounts over time. Related to this, if a CCA partners with more than one CDG project, some Subgroup members believe that the CCA members/end users should be allowed to obtain CDG credits for more than one CDG project. Some Subgroup members do not agree with the recommendation to exempt CCAs from the 1,000 kWh per year minimum due to concerns that the cost of enrolling the customer would outweigh any potential cost savings associated with the customer's participation in the CDG. All Subgroup members agree that opt-out enrollment in CDG is not advisable in the absence of a single-bill solution.

In addition to these recommendations, Subgroup participants recognize that the size of some municipalities can limit a CCA's bargaining power and ability to gain traction and leverage resources for CCA opportunities. The current Order encourages inter-municipal programs but does not allow counties to establish CCA programs on their own. Some, but not all, participants agreed that the PSC should consider seeking a determination from the NYS Department of State as to whether it would be inconsistent with General Municipal Law to enable counties to pass local authorizations for CCA, form a CCA, and sign contracts on behalf of member municipalities to reduce the amount of redundancy and inefficiency when small, resource-constrained municipalities in NYS try to aggregate.

Policy Recommendations to Overcome Near-Term Barriers and Advance from the Near-Term Phase to the Mid-Term Phase of CCA Policy and Activity

The Subgroup recognizes incorporating additional products and services, such as DER (including CDG), on the utility bill is currently being considered by the PSC via the value of distributed energy resources (VDER) proceeding. Some members of the Subgroup recommend creating mechanisms that allow for billing of DER fees, including those associated with CDG as well as energy efficiency products and services, on utility bills. These same members also recommend exploring how on-bill financing programs by/through a CCA program can be incorporated into utility billing. Other Subgroup participants believe that consolidated utility billing for DERs presents a complex array of financial, legal, and technical challenges that are not yet fully understood, and therefore, are not willing to support such a recommendation at this time. The Joint Utilities, for example, filed comments in the VDER proceeding indicating that a number of threshold questions must be resolved before a formal evaluation of the practicality, cost, and timeline for consolidated billing can be conducted. Importantly, the Commission has not evaluated whether non-utility charges should be permitted to be included on the utility bill.

⁶ In the Matter of the Value of Distributed Energy Resources, Case 15-E-0751.

⁷ Joint Utilities' Response to New York State Public Service Commission Order Requiring Utilities to File an Automation and Billing Report and an Evaluation of the Practicality, Cost, and Timeline for Implementing Consolidated Billing within Twelve Months, Case 15-E-0751, November 13, 2017, p. 2.

To enable CCAs to aggregate a larger load, some, but not all, participants agree that the PSC should consider allowing commercial and industrial (C&I) demand metered customers to be enrolled in CCA on an opt-out basis. Some, but not all, participants feel that doing so would have a positive effect on the economics of CCA by increasing aggregate load and thereby the ability of CCAs to effectively negotiate lower rates and generate revenue for CCAs via the administrative fees. Other participants believe that since the Subgroup did not contain representation from the C&I customer segment in New York, it is not appropriate to make such a recommendation without first hearing those customers' perspective on opt-out CCA or CDG enrollment and the potential impacts thereof.

Lastly, some participants suggest the State's CCA policy encourage and support offerings of value-added services by CCAs and also require standardized reporting regarding the ability of CCA programs to meet their objectives. Specific modifications to the reporting requirements should be identified once there are more CCAs in NYS and there are more lessons learned about how CCA may advance Reforming the Energy Vision (REV) and SEP goals. Some participants believe the state should require CCAs to offer value-added services, while others believe this may prevent some municipalities from establishing a CCA altogether, which in turn would deny those customers access to energy bill savings.

Based on the Subgroup's understanding of CCA in NYS, policy barriers, and the policy recommendations in this report, three overarching conclusions were identified:

- 1. CCAs must provide value to participants, in ways that support investment in clean distributed energy resources, and must be economically feasible.
- 2. Assuming CCAs are economically feasible and provide value, resources and support will be required to overcome challenges and costs associated with development.
- 3. For CCAs in NYS to effectively advance REV and SEP goals, state policy should permit and encourage CCAs to offer customers a range of choices, including clean energy products and services other than commodity supply contracts for non-renewable energy supply or renewable energy certificates/credits (RECs) generated by renewable energy located outside the state or CCA service area.

One of the Subgroup's key insights is that implementing various non-policy recommendations (e.g., providing additional technical and financial resources) may effectively advance CCA activity in NYS, especially if implemented in conjunction with the policy recommendations identified above and outlined in Appendix D.

The Subgroup recommends that it be reconvened after:

- Some of the recommendations identified in this Report have been implemented;
- CCA activity has increased; and/or

• When the PSC is considering or acting on issues directly related to CCA.

Reconvening the Subgroup would allow participants to re-evaluate NYS policy for CCA in a more mature market and to refine existing and/or identify additional policy recommendations.

1. Introduction

1.1 Statement of Purpose and Objectives

The Subgroup was established by the Clean Energy Advisory Council (CEAC) to examine CCA characteristics and capabilities, the degree to which these enable voluntary investment, and to identify policy and program considerations that will advance effective CCA activity while also advancing NYS clean energy goals and the SEP (see Order in Case 14-M-0224). The Subgroup was tasked with developing this Report that 1) describes models for CCA in the state; 2) provides actionable policy recommendations that address barriers to development of CCAs in NYS; and 3) identifies opportunities for increasing effective CCA activity, including voluntary investment in renewable energy and DER, including energy efficiency.

The Subgroup comprised a diverse group of stakeholders and subject matter experts who were interested in shaping the future of CCA in NYS. A complete list of Subgroup participants is included in Appendix C. Subgroup activities were facilitated by NYSERDA in a manner that fostered participant involvement, information sharing, and consensus building, where possible.

Subgroup meetings occurred approximately every three weeks starting in December 2016 and concluding in January 2018, with interim activities undertaken through electronic means. In July 2017 and September 2017, working sessions were held where participants met in-person and also participated via conference call and webinar.

To fulfill the assigned tasks, the Subgroup:

- Assessed the capabilities and characteristics of CCA in NYS by describing the current status of CCA in NYS based on the energy regulatory environment, including the CCA Order, lessons learned from the ongoing Westchester Power CCA, feedback from communities interested in developing CCAs, and NYS energy goals and plan.
 - Section 2 describes the current status of CCA in NYS.
- Assessed NYS policy for CCA and, in developing policy recommendations, analyzed
 the similarities and differences between other states and the current CCA policy,
 markets, and activity in NYS.
 - Section 3 identifies lessons learned from the comparison of CCA policy, markets, and activities in other states and NYS.
- Identified objectives and benefits associated with CCA in NYS; articulated the
 policy and program considerations that will advance effective CCA activity while
 also advancing the state's clean energy goals and the SEP, and discussed a number
 of factors that may impact CCA activity in NYS.

- Section 4.1 and Section 4.2 briefly describe objectives and benefits of CCA in NYS.
- Section 4.3 briefly describes factors that may impact CCA activity in NYS.
- Identified a model for CCA policy and activity in NYS and policy recommendations to help advance CCA policy activity while also advancing SEP and REV goals.
 - Section 5 discusses the model's three phases for advancing CCA policy and activity in NYS (current, near-term, and mid-term) and identifies barriers and recommendations associated each phase that should be addressed to advancing CCA policy and activity.

This Report reflects the Subgroup's current understanding of the limitations and barriers to CCA activity and identifies policy and non-policy recommendations that are likely to advance CCA activity in NYS (Section 4.3 and Section 5).

2. CURRENT STATUS OF CCA IN NYS

The following section briefly describes the current status of CCA in NYS.

- The CCA Order (2016) authorizes and regulates CCA activity in NYS.
- One CCA, Westchester Power, which was developed as a pilot project, exists in NYS (see Section 2.2).
- The PSC CCA Order and the development and implementation of Westchester Power have stimulated discussions about the potential for CCA.
- The PSC approved the Implementation Plan for Municipal Electric and Gas Alliance, Inc. (MEGA) to create a CCCA pilot program, in October 2017.
- Through NYSERDA outreach on the Clean Energy Communities (CEC) program, at least 100 municipalities have expressed interest in CCA.
- Education and outreach efforts related to CCA are under way and the capacity for developing and implementing CCA in NYS is growing.

In summary, implementation of CCA Programs in NYS has been limited. However, there is an interest in CCA and communities want to understand the Order and their options for establishing CCAs. Section 2.3 provides a general discussion of activities related to the potential development of CCAs.

2.1 PSC CCA Order

The April 21, 2016 Order authorized the establishment of CCA programs by municipalities statewide. The Order allows municipalities to establish a CCA where the municipality(ies) competitively select an ESCO to supply electricity or natural gas to all mass market (residential and small commercial) customers on an opt-out basis. The PSC acknowledged in the Order that a "one-size-fits-all" approach to CCA is not likely to be effective in NYS; therefore, the Order provides a construct for communities to develop innovative programs, products, and services that align with the NYS's energy goals and, more specifically, the objectives of REV and the Clean Energy Fund (CEF). Although the Order specifies requirements, terms, and conditions that CCAs need to follow, it also provides flexibility for CCAs to propose unique and varied approaches to CCA administration and programmatic offerings.

In NYS, villages, towns, and cities are eligible to form a CCA or an inter-municipal CCA. The Order prevents county governments from forming a CCA independent of the municipalities within the county, but a county can act as the CCA Administrator for a CCA formed within their boundary or otherwise assist in the organization, development, and/or implementation of CCA. The CCA Order also prohibits large C&I customers from being enrolled in CCA on an opt-out basis.

Communities interested in forming a CCA are required by the Order to file the following documents with the PSC:

- A CCA Implementation Plan (template available in the NYSERDA Toolkit);
- A Data Protection Plan; and
- Local law authorizations (template available in the NYSERDA Toolkit).

The Order identifies NYSERDA as an entity that is available to provide support to communities seeking to develop and implement a CCA. For example, communities can submit a draft Implementation Plan to NYSERDA for review before submitting it to the PSC. Once all the required documents are filed, including all local municipal authorizations, the PSC determines whether a proposed CCA complies with the Order. If deemed compliant, the PSC approves the proposed CCA and the community can proceed with implementation. The CCA Administrator is responsible for filing updates to the Implementation Plan with PSC for approval before the expiration of any CCA supply contract, when soliciting new contracts, when negotiating a contract extension, or for the termination of the CCA.

The PSC authorizes CCAs to collect an administration fee through the supply charge. This fee can be used to cover administrative expenses including wages for CCA staff (e.g., staff that support communications and outreach assistance, customer service, data management, establishing and managing supply contracts, and efforts to identify and pursue opportunities for DER). The money collected via administration fees can also be used to pay for legal fees associated with managing the program or for contractor payments. It cannot, at this time, be used to directly fund program costs or incentives for customers for other programs such as clean

energy or energy-efficiency programs. Administrative fees that a CCA collects and allocates towards administrative functions have to be identified in its annual reports.

Per the CCA Order, NYSERDA is tasked with providing communities interested in CCA with technical assistance advice pertaining to best practices for program design, resources, and support for community outreach efforts. NYSERDA is also tasked with assisting CCA Administrators in coordinating with utilities, ESCOs, and DER providers to develop innovative programs and products consistent with REV, the CEF, and the Clean Energy Standard (CES) (see Section 4.3 for non-policy recommendations pertaining to technical assistance for municipalities and CCA Administrators). NYSERDA has developed a CCA toolkit that provides resources to assist local governments and CCA Administrators. The toolkit is intended to provide up-to-date resources for communities interested in CCA and can help CCAs offer commodity supply, as well as energy efficiency and other DER opportunities to advance energy affordability and clean energy (see Section 4.3 and Appendix F for the Subgroup's suggested additions to the NYSERDA CCA Toolkit).

2.2 Westchester Power CCA Pilot Project

In February 2015, the PSC approved the Sustainable Westchester, Inc. (Sustainable Westchester) proposal to develop and administer the Westchester Power CCA pilot project (PSC Order Case 14-M-0564) as the first CCA in NYS. Sustainable Westchester is a 501-(c)(3) non-profit consortium of local governments (villages, cities, and towns) from Westchester County that facilitates sustainability initiatives, engages community stakeholders, and shares tools, resources, and incentives to create more healthy, vibrant, and attractive communities. This existing non-profit supported the development and implementation of the Westchester Power CCA pilot project. Sustainable Westchester is led by a Board of Directors that includes mayors, town supervisors, and professionals with experience in environmental or sustainability management. Westchester Power's development was also enabled by the pro bono work of energy market experts and attorneys. The Westchester Power CCA was launched in 2016 and, until October 2017 was the only authorized CCA in NYS.

Westchester Power currently has 20 participating municipalities that are within two utility service territories (Consolidated Edison (Con Ed) and New York State Electric and Gas (NYSEG)). More than 40% of the county's population (more than 110,000 customers), were originally enrolled in the CCA (Westchester Power n.d.). Sustainable Westchester maintains two contracts for Westchester Power, one for each of the two utility service territories in the county. Both ESCOs provide two supply options between which the municipalities and customers may choose: a base option comprising a mix of fossil fuels, nuclear, and renewable energy, or a 100% renewable energy option supplied by 100% Green-e certified RECs. At the time the energy supply bids were opened, both winning ESCOs included fixed energy supply rates for both the base rate and the 100% renewable rate that were lower than the average supply rate for each respective utility's service territories for the prior 12 months. One of the supply contracts has a three-year, fixed-rate term and the other has a two-year, fixed-rate term.

In 2016, Westchester Power began exploring options to promote DER opportunities to its municipalities and customers (Westchester Power 2017). Value-added services that Westchester Power is investigating include community or shared solar, as well as energy-efficiency programs, electric vehicle programs, micro grids, demand response, and advanced battery storage (Sustainable Westchester 2017). In 2017, Westchester Power launched emPowering Green Energy, a community education campaign to help residents and municipal leaders understand and take advantage of the supply options enabled by Westchester Power (PRWeb 2017). These characteristics of Westchester Power and the initiatives that it undertakes are likely to continue to evolve.

As the demonstration project for CCA in NYS, Westchester Power has and will continue to inform the requirements for CCA that are identified in the CCA Order. The CCA Order states that the PSC will also use lessons learned from this demonstration project to inform its review of and decisions pertaining to future applications for CCAs in NYS (PSC Order Case 14-M-0024). Westchester Power produced its first annual report in 2017, which has provided valuable information to other communities considering CCA.

Westchester Power CCA characteristics currently include:

- Characteristics required of all CCAs by the Order:
 - Municipalities must execute a CCA contract that enables CCA customers to save on or establish fixed energy costs or provide "green" energy options.
 - The utility retains its obligation to provide service in the event that the CCA suppliers fail to produce energy to meet the aggregations energy need.
 - Individual residential and mass market customers that do not have blocks on their utility accounts and that are not currently served by an ESCO are able to opt-out of the CCA aggregation of electric supply or gas or both and purchase energy through a utility or ESCO. Other customers can decide to opt-in to the CCA.
- Characteristics authorized, but not required, by the CCA Order:
 - Aggregation of both electric and natural gas purchases.
 - Being administered by a non-profit entity.
 - Maintaining contracts with more than one ESCO and offering different products (basic and 100% renewable).
 - Contracted energy at a fixed rate that can generate cost savings for participants.
 - Within the NYSEG territory the CCA fixed rate has been higher than utility rates costing customers, on average, \$22 more over a

- twelve-month period (Westchester Power 2017). The utility supply rate has varied from approximately \$.0516/kWh to \$.084/kWh during the current contract term.
- Within the Con Ed territory the fixed rate saved customers an average of approximately \$26 over twelve months (Westchester Power 2017). The utility supply rate has varied from approximately \$.063/kWh to \$.09/kWh

Westchester Power Supply Contracts

Westchester Power provides its customers, in each of its two utility distribution territories, two energy supply contract options (Westchester Power n.d. [b]).

Con Ed Distribution Territory

The supply contract with Con Ed Solutions is based on a rate that is fixed for 24 months (2016-2018).

- Basic supply rate \$0.07381/kWh
- 100% renewable supply is \$0.07681/kWh

NYSEG Distribution Territory

The supply contract with Constellation Energy, an Exelon company, is based on a rate that is fixed for 36 months (2016-2019).

- Basic supply rate \$0.06950/kWh
- 100% renewable supply is \$0.07085/kWh

Both the 100% renewable energy supply rate and the basic supply rate are lower than the utility's 12-month trailing average basic supply rate in 2015 associated with the default utility supply option for Westchester County customers. The supply contracts for 100% renewable energy supply have a slightly higher rate than the basic rate in both of the utility territories.

Municipalities may choose a default supply option for their customers within their municipality, and customers are able to select an option (e.g., a 100% renewable supply is the default but a customer may use the Westchester Power website to select the basic supply instead (Westchester Power n.d.[b]). Fourteen of the twenty participating municipalities chose the 100% renewable supply option as the default option. Therefore, the CCA Administrator automatically enrolls customers from those municipalities in this option.

In addition to administering Westchester Power, Sustainable Westchester administers various programs that are independent of the CCA and facilitates working groups that focus on topics that increase awareness and education on energy management within the community served by the Westchester Power CCA. Sustainable Westchester's actions, and existing institutional capacity and energy programming expertise, have enabled the Westchester Power CCA to draw upon extensive resources within the community.

The Sustainable Westchester website provides community toolkits, educational webinars, information about upcoming opportunities for community engagement, and example requests for proposals for energy procurements (Sustainable Westchester n.d.). Some of these resources align with resources found in the NYSERDA CCA Toolkit (e.g., examples of local authorizations for

communities participating in Westchester Power). The Westchester Power website offers information on the CCA program, including electric rates, energy choices, billing information (Westchester Power n.d.).

Some characteristics that limit the applicability of the Westchester Power approach to developing a CCA in other parts of the state include:

- The exceptional size of the Westchester Power aggregation within a geographically contiguous area, due to the demographics of that region;
- Existing local institutional capacity in energy programming; and
- CCA consultants provided pro-bono support, enabling Westchester Power to use 100% of the adder for program administration/development.

2.3 Other NYS CCA Activity to Date

Since the launch of Westchester Power and the issuance of the CCA Order, other communities have expressed interest in CCA. To date, over 100 municipalities have expressed interest in CCA and efforts (e.g., working groups and public meetings) related to CCA are under way in a number of communities. Per the Order, these communities and NYSERDA are deriving lessons learned from the Westchester Power CCA pilot project.

Entities exploring opportunities for developing a CCA include:

- Villages;
- Cities;
- Towns;
- Counties, including a NYSERDA Clean Energy Communities designated county;
- Council of Governments (COGs);
- Volunteers;
- Non-profits; and
- Third-party aggregators.

Efforts pertaining to CCA Program Organization have been initiated by:

- Municipal officials;
- COGs;
- Volunteers;
- Non-profits; and
- Third-party aggregators.

These entities have undertaken efforts and/or formed working groups or committees within communities to explore opportunities for CCA and undertake efforts to organize CCA and establish local authorizations for CCA.

Possible CCA administrative structures that have been discussed in communities currently considering CCA include:

- Using a local municipal departments and/or staff;
- Using a non-profit;
- Establishing a non-profit, including local development corporations (LDC), with a board consisting of elected officials from participating municipalities;
- Selecting a CCA Administrator; and
- Using a competitive search to solicit a CCA Administrator.

Communities have expressed an interest in developing a CCA to meet the following objectives:

- Lowering energy costs for residents (via lower rates and/or improved efficiency);
- Providing energy planning and mapping services;
- Increasing the percentage of energy from renewable energy sources;
- Providing energy services other than bulk purchase of energy that meet local needs and goals;
- Increasing local renewable energy development; and
- Promoting targeted investment in DER, including energy efficiency.

They also hope that in meeting their objectives they will be able to provide the following benefits:

- More stable and predictable energy rates;
- Equitable access to energy services; and
- Reduced greenhouse gas (GHG) emissions.

Most of the efforts associated with emerging CCAs are focused on aggregating communities that are located within a county. CCAs in NYS can also span one or more than one utility service area, as is the case with Westchester Power, and some emerging CCAs are considering this option. Opportunities to form aggregations across load zones that serve customers within geographically disparate communities that are located within the same utility service territory are also being considered. It should be noted a customer may only participate in a CDG project through utility bill crediting if the customer is located within the same utility load zone as the project. This may have implications for CCAs that span utility load zones.

Subgroup participants suggested that some communities interested in developing a CCA are currently apprehensive about proceeding with CCA development or unable to proceed without additional resources that are needed to develop more informed feasibility assessments, business plans, goals, objectives, and implementation plans. Without these resources CCAs may not able to be developed to achieve the objectives and benefits they desire.

Communities with low utility rates face particular challenges with respect to CCA. For example, the difference in price between the utility and a third-party supplier may be narrower

than in areas with higher utility rates. Before committing significant resources to CCA, these communities may require feasibility studies to determine whether a CCA can generate value sufficient to justify the effort.

3. CURRENT STATUS OF CCA IN OTHER STATES: LESSONS LEARNED

The CCA Subgroup analyzed policies that have enabled CCA in other states in an effort to identify lessons learned that could further inform policy and activity in NYS. The Subgroup's analysis of CCA included assessments of:

- The types of CCA policies;
- The type of CCA activity that has occurred as a result of these policies; and
- The lessons learned that may help identify barriers and limitations associated with CCA policy in NYS and that may be preventing CCA development statewide.

Appendix C - Comparison of CCA in Each State, includes a table containing the analysis of CCA policy and implementation in each state, including NYS. This analysis informed the development of the policy recommendations noted in Section 5 of this Report.

Overview of CCA in the U.S.

Seven states currently allow municipalities to form CCAs, and two states have nearly a 20-year history of CCA activity (Table 1-1). CCA policy, programmatic offerings, administration, and activity varies widely from state-to-state. However, all states with active CCAs employ CCA programs that involve clean energy options. In 2015, approximately 1.9 million customers in the U.S. participated in CCAs that offered renewable energy options, primarily involving the purchase of RECs to support large-scale renewables on the grid (note that this figure does not include New Jersey CCAs because New Jersey CCA data are not readily tracked or reported). CCA participants consumed more than 7.4 million MWh of renewable energy through CCAs in 2015 (National Renewable Energy Laboratory 2016).

Table 1-1 States that have CCA Legislation/Authority

State	Year Legislation / Authority was Established	Enacting Legislation / Authorization
Massachusetts	1997	Acts 1997, Chapter 164
Ohio	1999	Senate Bill 3; Senate Bill 221 (2008)
California	2002	Assembly Bill 117
Rhode Island	2002	House Bill 7786
New Jersey	2003	Assembly Bill 2165
Illinois	2009	House Bill 362
New York	2016	PSC Case 14-M-0224

Source: National Renewable Energy Laboratory 2016; National Conference of State Legislatures 2015.

Lessons Learned from CCA in Other States

Of the seven states that allow CCA the following states have demonstrated the following characteristics of CCA activity.⁸ See Appendix C for additional detailed information about the analysis of CCA in other states.

Table 1-2 Summary of Characteristics of CCA Activity in Other States

	Characteristics of CCA Activity	States
1)	CCAs provide cost-competitive and stable energy rates.	Massachusetts, California, Illinois, Ohio,
		New Jersey, and New York
2)	CCAs enable customers to participate in markets for renewable energy generation or clean power (i.e., through purchasing RECs) and/or energy efficiency initiatives for customers.	Ohio and Illinois
3)	· · · · · · · · · · · · · · · · · · ·	Massachusetts and California
	through direct procurement).	

Key lessons learned from the analysis of CCA in other states are described below (additional detail is provided in Appendix C).

⁸ Rhode Island has not demonstrated the characteristics that are described in Table 1-2.

Market constructs affect opportunities for CCA. Market price competitiveness and price fluctuation are important factors that influence the ability of a CCA to negotiate rates that are lower than the default supply rate to provide customers with cost savings. The margin of cost savings influences the ability of CCAs to generate revenue from administrative fees to fund CCA products and services in addition to administering supply contracts.

In some states (Massachusetts, Ohio, and Illinois) CCAs that have not been able to negotiate rates lower than the default supply rate have been disbanded or activity was suspended. In Massachusetts and Ohio, unlike NYS, CCAs can compare their supply contract rates to baseline utility rates that are fixed for a certain period of months. In NYS, the utility default rate varies each month.

California and Massachusetts, unlike NYS, enroll large C&I customers in CCA on an optout basis. These customer classes account for a large percentage of energy consumption and increase the total energy need. When residential and small and large C&I customers are aggregated, the load profile can be flatter and energy consumption more predictable compared with aggregations of solely residential customers; however, large C&I customers may also be more likely to leave a CCA in favor of energy contracts that can provide more competitive rates. A single large user leaving a CCA can significantly affect the load of a CCA and the revenue it can collect from administrative fees.

California is a partially-regulated market, and therefore, residential customers do not have an option to select an alternate energy provider; their only supply option prior to CCA was utility supply. Given the limited options for energy supply providers in California, CCAs serve as load-serving entities (LSEs), which create opportunities for CCAs to directly procure energy and to own energy generation. Therefore, CCAs are able to provide robust programmatic offerings. However, they are also required to assume significant administrative responsibilities.

Most CCAs in California are also currently able to provide cost savings for renewable energy because the cost of renewable energy has come down since the utilities entered their existing fixed rate supply contracts to meet the renewable portfolio standards (RPS). Given the cost savings that CCAs in California are able to provide, they are more likely to be able to collect revenue to cover administrative fees.

The market and policy differ in NYS, and, as a result, it may be more difficult for CCA in NYS to provide customers with rates that are lower. Therefore, it is important for municipalities in NYS to be able to effectively conduct feasibility assessments and business plans that assess the viability of CCA based on aggregation size and the ability to generate revenue from the administrative fee to support ongoing CCA operations (see Section 4 and the discussion of cross cutting issues and limitations that pertain to all CCAs).

If a CCA is unable to provide rates lower than the default rate, it is not clear, based on Westchester Power and CCA activity in other states, that a CCA can sufficiently sustain customer

participation and cover administrative costs. In Massachusetts, the Cape Light Compact (CLC) has successfully administered energy efficiency programs that, despite having a mixed record with supply rates, provide cost savings because the energy-efficiency program is funded by SBC and therefore entirely independent of the supply contract.

CCAs with robust program offerings have been implemented in communities where there are local entities/organizations with existing institutional capacity (e.g., technical resources, financial resources) to support the development of CCA programs.

In California, existing municipal agencies have provided the institutional capacity to help support creation of a local CCA authority to administer programs. For example, the Sonoma County CCA was supported by the Sonoma County Water Agency. In Massachusetts, the CLC was initially supported by Barnstable County. Also in Massachusetts, the Metropolitan Area Planning Council provides CCAs with the institutional capacity to develop more innovative CCAs. In Ohio, the Northeast Ohio Public Energy Council (NOPEC), a non-profit COG administers the largest CCA in the state. CCAs in other states that successfully administer diverse local clean energy programs are also geographically contiguous inter-municipal programs at a county scale or larger.

Lessons learned from Westchester Power also indicate that the institutional capacity provided by Sustainable Westchester played a key role in helping to establish and administer Westchester Power. It allowed the CCA to have fewer costs associated with consultants (some of the work was also done on a pro-bono basis), thereby making it possible for the CCA to capture a greater share of the revenue it generates.

System Benefits Charge (SBC) and other rate-payer-funded energy efficiency funds are used by CCAs to finance the administration of energy-efficiency programs; alternatively, CCAs can include an "adder" to fund programs.

In Massachusetts, the CLC is the only CCA that uses SBC dollars to fund the administration of energy-efficiency programs. Under Massachusetts rules, CCAs using the funds must meet the same requirements for designing and implementing an approved energy efficiency plan as the distribution utilities and fulfill the same administrative and reporting requirements. The Subgroup did not research whether the Massachusetts SBC was developed to specifically support utility-only energy efficiency and other DER activity, or the important distinction of whether use of these funds by entities other than the utility triggers an adjustment in the utility's goals, incentives, and earnings mechanisms. Another notable difference between NYS and Massachusetts policies is that CCAs in Massachusetts can include an adder or surcharge for a CCA-specific clean energy fund to support their programs.

In California, CCAs can elect to or apply to administer energy-efficiency programs that serve their customers or everyone in their service area (CCA or utility customers). In both states, CCAs collect the SBC from all customer classes (including residential, commercial, and industrial)

and CCAs administering these funds have the capabilities and resources required to effectively administer these funds.

Lessons can be learned from these states about how CCAs administer SBC funds for energy-efficiency programs. Unlike Massachusetts, CCAs in NYS are prohibited from collecting fees to support clean energy or public benefit programs. Further, CCAs in NYS may not currently be able to easily access SBC-supported clean energy program funding. As such, the current policy framework may make it difficult for CCAs to establish value-added energy efficiency and clean energy programs as CCAs in Massachusetts and California have done. Funds collected by CCAs in NYS would likely be more limited than in other states because C&I customers are not eligible for CCA on an opt-out basis.

In New York State, SBC and other funding mechanisms approved by the PSC directly support the established goals, incentives, and earnings mechanisms for utilities that are approved by the PSC. Extending direct access to these funds to CCA programs could have an impact on a utility's ability to meet the PSC's goals, and will preclude CCA participants from taking advantage of utility clean energy programs.

The interaction and coordination between utilities and CCA is important for successful CCA implementation.

In California, CCAs (which are LSEs) and utilities are competitors that both provide supply to customers. Therefore, the California Public Utilities Commission (CPUC) established a code of conduct as a policy framework to help manage competition between utilities and CCAs. This code of conduct regulates interactions between these entities.

As in NYS, several states have established policies for data transfer between CCAs and the utilities for CCA development and administration. In California, utilities are required to cooperate with CCAs in provision of data (e.g., appropriate billing and electrical load data, including, but not limited to, electrical consumption data and other data detailing electricity needs and patterns of usage) at all stages, including when communities are investigating the establishment of a program. In Illinois, summary utility data needed for CCA planning purposes are provided at no or nominal cost.

In NYS, CCAs and utilities do not compete to provide energy supply in the same way as in California; however, interactions and coordination between utilities and CCAs (e.g., energy planning, transfer of data) in both states is important for working toward achieving state energy goals.

CCAs and utilities can be partners. For example, CCAs can leverage existing utility energy-efficiency programs until they are able to secure funding for, and establish, their own value-added efficiency and clean-energy programs (assuming such initiatives are in line with the participating municipalities' objectives). A well-developed CCA customer education program, in partnership with community-based organizations, can help customers identify and enroll in existing utility-managed and other energy-efficiency programs that may be available to them. In

addition, a number of the State objectives for which utilities can receive earnings adjustment mechanisms (EAMs) are objectives that CCA programs may support (e.g., peak load reduction, energy efficiency, customer engagement, information access, and affordability).

Another important area in which coordination will be needed is in rate design. New timevariant rate designs are currently being explored in the VDER proceeding and in utility REV Demonstration Projects. These new rates may be beneficial to customers, the environment, and the utilities' electric distribution systems. As it stands now, integrating CCA customers in these rates may be a challenge; however, rate design may also present opportunities for CCA.

RECs can be used to support local renewable energy projects.

Massachusetts uses solar RECs to support local renewable projects. The CES requires that all LSEs obtain a certain amount of RECs from renewable energy projects in NYS. Therefore, CCAs in NYS, through supply contracts with ESCOs, can support renewable energy projects interconnected in NYS that sell their RECs in the NYSERDA auctions. CCAs in NYS, like those in Massachusetts, that have supply contracts including a percentage of CES Tier 1 RECs will advance REV and SEP goals. Being able to administer CCA programs that offer products and services other than RECs, however, may allow CCAs to make additional contributions that advance state and local renewable energy goals.

CCAs can advance the development and consumption of clean energy. However, depending on how policy, markets, and initiatives are aligned, it can also counteract other efforts to advance clean energy. NYS should consider the implications of state policy on CCA and of CCA policy on other initiatives.

CCAs in Massachusetts and California have demonstrated some of the ways CCAs can help advance clean energy consumption and development. However, Illinois is an example of how CCA can also counter efforts to advance renewable energy. In Illinois, the passage of the 2010 Municipal Aggregation Act, which allowed for the development of CCAs, did not complement the state's Renewable Portfolio Standards (RPS) policy. The significant number of customers participating in CCA caused the amount of funding for RPS to significantly decrease because the funding for RPS was calculated based on the amount of energy the utility sold (Environmental Law and Policy Center 2014). It also caused uncertainty for utilities because their number of customers was constantly in flux. Therefore, utilities were apprehensive about signing long-term power purchase agreements (PPAs); without PPAs, developers could not secure financing for their projects.

The RPS policy was reformed in 2016 to consolidate RPS funding into one fund. The money for the fund now comes from a line item charge on the electric bill, on the distribution side, rather than the supply (Maloney 2016). RPS funding is determined by the cost of complying with RPS milestones.

In NYS, if a CCA aims to just provide cost savings or rate stability it could in theory provide customers a supply contract mix that could be "browner" than the default mix.

The Illinois example emphasizes the importance of thoroughly evaluating all possible impacts of funding and other changes that may impact non-CCA activity, such as the potential negative impact on support for large-scale renewables. Decisions pertaining to CCA policy should evaluate all impacts on advancing state energy and other PSC goals.

4. KEY ELEMENTS OF CCA IN NYS

The Subgroup identified the key elements of CCA that the Subgroup hopes programs in NYS will be able to achieve, as well as certain considerations that affect CCA activity. These include: program objectives, benefits/beneficiaries, and cross cutting issues (Figure 4-1). The following section presents an overview of each of the key elements that were used to inform the Subgroup's development of a model for CCA policy and activity in NYS. Each key element is briefly described in subsequent sections (Section 4.1 Objectives, Section 4.2 Benefits, Section 4.3, Cross Cutting Issues and Limitations).

Objectives - Objectives are defined as the outcomes of a CCA (see Section 4.1). Overarching objectives of CCA in NYS that the Subgroup identified include:

- Advancing SEP and REV goals (e.g., clean energy, GHG emission reductions, energy affordability, energy efficiency, and resiliency);
- Informed energy consumption;
- Cost savings / rate stabilization; and
- Local decision-making about energy.

Benefits - Benefits represent the value that CCA can provide (see Section 4.2). Beneficiaries of CCA may include:

- CCA customers;
- Communities participating in CCA;
- Local economies within the CCA service territories; and
- The environment and climate both within and outside the CCA service territory.

Cross Cutting Issues - Cross cutting issues represent limitations and challenges that all CCAs need to overcome and may impact the ability of CCAs statewide to help achieve the state's energy policy goals. Acknowledging and addressing these limitations and challenges may increase CCA capabilities and the benefits they are able to provide statewide (see Section 4.3). It is important to note that the Subgroup identified these cross cutting issues based on the state's experience with CCAs to date. Further experience

with CCA programs will shape the Subgroup's perception of these limitations and challenges.

Each of the key elements is associated with various programmatic approaches and options for structuring, financing, managing, and administering a CCA. In NYS, CCA Administrators should administer CCAs that achieve the identified objectives and benefits. All of the various programmatic considerations and options for individual CCAs are not covered in this Report.

The current CCA policy allows flexibility in how a particular CCA is developed and implemented; however, there are existing cross cutting limitations and policy barriers that are associated with administering CCAs and achieving various objectives and benefits. These are identified in Section 4.3 and Section 5. A definition of each of these items is below.

Limitations – Limitations identify potential obstacles or challenges to CCA launch and implementation. Limitations are discussed in Section 4.3.

Barriers – Barriers identify things that are prohibited or not enabled by current policy that would require policy changes to be overcome. Barriers are discussed in Section 5.

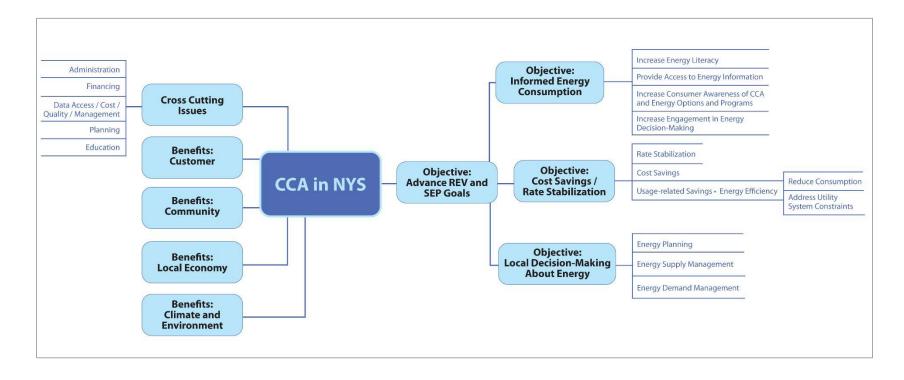


Figure 4-1 Key CCA Elements

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4.1 Objectives

Subgroup participants noted that CCAs in NYS should collectively advance REV and SEP goals, provide supply cost savings and /or rate stabilization, and contribute to energy literacy and informed decision-making. The objectives of individual CCAs will depend on the municipality or municipalities that are participating and the unique needs of the communities therein. For example, the objectives of a CCA may include providing clean energy in their energy supply portfolio, and/or other energy-related value-added products and services. The Order authorizes the development, implementation, and operation of CCAs that are able to undertake one or more of these objectives. Each CCA can decide which objectives to incorporate in their program and is able to design programs with default supply options as well as additional "opt-down" or "opt-up" options that customers can select.

4.1.1 Objective: Advance REV and SEP Goals

CCAs are expected to collectively advance REV and SEP goals, including increasing clean energy consumption, reducing greenhouse gas (GHG) emissions, improving energy affordability, increasing energy efficiency, and enhancing energy resiliency.

4.1.1.1 Objective: Informed Energy Consumption

Empowering customers to make individual and local decisions pertaining to energy is an important advantage of the CCA construct. The CCA Order (PSC Order Case 14-M-0024) requires a CCA Administrator to undertake robust, multi-faceted community outreach and engagement activities (public meetings, hearings, presentations, distribution of materials, etc.) over the course of no fewer than two months. These efforts are intended to inform and educate customers about CCA. Increasing the amount of informed energy consumption within a community can be accomplished through:

- Increasing energy literacy of customers and municipal officials;
- Providing access to and serving as a clearinghouse for trusted information about energy, energy efficiency etc.;
- Increasing consumer awareness and understanding of energy-related programs, services, and benefits; and
- Increasing engagement in energy use decision-making.

Each of these efforts are key to the development phase of CCA and throughout implementation and operation. CCA programs should educate, encourage, and empower communities and individuals, including LMI customers, to take control of their energy use through engagement with existing REV and CEF opportunities and the development of new DER and renewable energy programs.

4.1.1.2 Objective: Cost Savings / Rate Stabilization

CCAs in NYS should, at a minimum, stabilize rates and provide customers with energy-related cost savings, including opportunities to receive payments from the CCA for participation in programs and initiatives, as these objectives align with the REV goals of making energy more affordable. To the extent that CCAs programs deliver energy efficiency and other services that reduce customer costs for the long-term, CCA can contribute to the REV affordability goal for electricity and natural gas costs not to exceed 6% of household income. In the Affordability Order, the Commission recognized that ratepayer-funded bill assistance programs are currently the primary tool for achieving affordability, but NYS also has to "[I]everage REV tools to narrow the 'affordability gap' that needs to be filled with direct financial assistance." CCA programs are one of the REV tools that can help to fill the affordability gap, especially when bill / cost savings from a traditional aggregation model are combined with additional savings from energy efficiency and clean energy programs.

CCAs may achieve this objective by offering:

- Rate stability (e.g., via fixed price);
- Cost savings based on price per kWh;
- Usage-related savings (e.g., an overall reduction in energy costs by reducing the total consumption or providing other credits, payments, or incentives);
- A combination of both cost and usage savings; or
- More sophisticated energy procurement and pricing mechanisms that provide communities with greater flexibility in managing energy costs, i.e., portfolio management approach to purchasing or pricing that varies between a floor and a cap.

Energy Efficiency and Demand Management

In addition to increasing energy literacy, CCA programs are well-positioned to help customers understand and participate in energy efficiency and demand management programs, and there are options for CCAs to help advance this objective in conjunction with the utilities and NYSERDA. In the near-term, CCAs can partner with utilities and NYSERDA to boost local participation in existing energy efficiency and demand management programs or collaborate to create new services tailored to the community's needs. If existing offerings are not sufficient,

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⁹ Order Adopting Low Income Program Modifications and Directing Utility Filings ("Affordability Order"), Case 14-M-0565, May 20, 2016, p. 8.

¹⁰ Id., p. 40.

CCAs may be able to administer energy-efficiency programs to reduce consumption and, where needed, address utility system constraints.

4.1.1.3 Objective: Local Decision Making about Energy

CCAs in NYS may enable local decision-making about energy planning, energy supply management, and energy demand management.

Energy Planning

Successful CCAs may be able to influence local, regional, and utility planning efforts because they have a unique capacity to raise awareness of local energy-related interests and needs. They may be able to undertake their own energy planning efforts within the geographic boundaries of their participating municipalities to identify cost-effective opportunities for clean energy investments and strategies to promote those investments, consistent with sound land-use planning, and to help increase local energy reliability and resilience.

Energy Supply Management

CCAs may be able to make decisions pertaining to energy-supply management options including being able to:

- Procure supply contracts that have non-DER and/or DER options;
- Procure supply contracts that offer, but are not limited to, RECs;
- Procure types of renewable energy that meet the community's preferences (e.g., centralized large-scale renewable energy; medium-scale, small-scale, or renewable energy generated in NYS; local renewable energy; locally owned renewable energy such as solar, wind, geothermal, biomass, methane gas capture, etc.);
- Increase clean energy supply and/or renewable energy consumption;
- Increase investment and/or development of clean energy and/or renewable energy projects in NYS and locally;
- Offer customers renewable energy options that provide the most benefits for customers, the communities participating in the CCA, and positive externalities for other individuals and communities within the state (see Section 4.2 Benefits);
- Stimulate investment in and/or development of DER technology both in NYS and near or within the municipalities participating in the CCA;
- Implement innovative approaches to energy management using DER and emerging energy markets and technology;

- Enter long-term agreements with a renewable-energy generator to purchase electricity or RECs, thereby providing income assurance to renewable energy generators;
- Support opportunities for customer ownership of renewable energy generation;
- Serve customers who are enrolled in CDG and expand CDG opportunities for customers who are not;
- Own and operate local energy generation projects; and
- Serve as an ESCO.

Energy Demand Management:

CCAs may be able to make decisions pertaining to managing energy demand, including being able to:

- Implement innovative approaches to energy-demand management using DER and emerging energy markets and technology;
- Administer energy-efficiency programs to help address system constraints (e.g., pertaining to infrastructure and the grid) and consumption (e.g., pertaining to consumption behavior or technologies that reduce consumption);
- Provide education and outreach efforts and help facilitate the adoption of technology to reduce the consumption of gas and increase thermal efficiency (e.g., insulation and air sealing, air or gas heat pumps), thereby reducing GHG emissions; and
- Encourage clean-energy consumption.

4.2 Benefits and Beneficiaries

CCA programs in NYS should collectively help achieve REV, SEP, and CES goals and the benefits associated with these goals, as well as additional benefits that are not provided by the current energy market. This section describes key benefits that the Subgroup thinks CCA in NYS may be able to provide the following beneficiaries:

- CCA customers;
- Communities participating in CCA;
- Local economy within the CCA service territories; and
- The environment both within and outside the CCA service territory.

4.2.1 CCA Customers

CCAs can provide benefits to participants in a variety of ways, including:

- Providing energy savings for customers;
- Providing consumer advocacy and education (e.g., in regard to contracts and policies that are part of the of the CCA and/or impact CCA participants);
- Offering clean-energy options (renewable energy supply, opportunities for energy efficiency or for ownership of renewable energy etc.), that customers many not otherwise be able to afford. This is especially important for LMI customers and APPs:
- Empowering customers to make informed energy decisions;
- Securing provisions within supply contracts that are responsive to customers' needs and desires;
- Offering greener options and on better terms than are available to customers in the marketplace; and
- Offering stable energy prices and price predictability via fixed supply rates, which
 can be beneficial for LMI customers and APPs, when the stability results in lower
 average prices.

4.2.2 Communities Participating in CCA

CCAs may be able to provide the following benefits to participating communities, if desired:

- Advocacy for the needs and interests of communities (e.g., those encompassed by the CCA goals as well as advocacy related to policies that impact CCA customers);
- Supporting and participating in planning for strategic energy investments and infrastructure to meet current and future needs of the community (e.g., energy reliability, energy resiliency, economic development, public services, etc.);
- Participating in energy planning to help decrease communities' vulnerability to potential disruptions to energy supply and transmission;
- Reducing the need for upgrades to transmission and distribution infrastructure;
- Participating in energy planning to help increase grid resilience and reduce the risk of public health and wellbeing issues related to disruptions in energy service (e.g.,

need for cooling centers during hot weather or warming facilities during severe cold weather); and

• Reducing the emission of pollutants associated with energy supply and consumption, thereby helping to protect the local environment and public health.

4.2.3 Local Economy

CCAs may be able to provide the following benefits to the economy of participating municipalities, if desired:

- Strengthening the local economy and generating positive feedback loops to support the vitality of communities (including LMI and economically suppressed communities). For example, creating economic multiplier effects associated with money spent on energy consumption, economic activity resulting from money saved because of lower energy costs, as well as energy planning, and development that strengthen the local economy;
- Stimulating investment in and development of local energy generation, thereby creating local jobs (construction, operation, and maintenance) and revenue which keeps energy wealth within the communities the CCA serves; and
- Offering employment training and placement opportunities for clean energy and energy-efficiency related jobs to develop a local workforce able to support DER projects.

4.2.4 Climate and Environment

As outlined above, CCAs in NYS should be able to provide clean or renewable energy supplies and/or increase energy efficiency to reduce reliance on fossil fuels or other extracted energy sources. CCAs that facilitate the reduction of GHG emissions and meet state GHG reduction and clean energy targets will contribute to local and state efforts to mitigate the effects of climate change and may also help reduce impacts of pollution on water, air, and soil quality. CCAs can also help reduce the need for additional expansion and development of new energy transmission and distribution infrastructure.

4.3 Cross Cutting Issues and Limitations for CCA in NYS

The Subgroup identified five cross cutting issues that impact all CCAs in NYS. Each of these cross cutting issues present limitations and challenges for robust and statewide launch of CCAs that meet communities' goals:

- CCA Administration (including development, implementation, and operation);
- Financing;
- Data Access / Quality / Management;

- Planning; and
- Education.

Some of these cross cutting issues may be associated with challenges and limitations that are more persistent than others and therefore may more significantly limit CCA activity and, in turn, the ability of CCAs to achieve the desired objectives and benefits.

Non-policy related actions that would provide additional resources and support for CCAs in NYS are also likely to help overcome some of these the limitations. Non-policy recommendations are associated with the following seven categories:

- Technical Support;
- Technical Resources;
- CCA Handbook;
- Funding;
- Incentives;
- Education and Outreach; and
- Information Sharing and Coordination.

The limitations and non-policy recommendations associated with each of these cross cutting issues are presented in Appendix D, Tables D-1 through D-5.

In addition to the discussion in this section about how these cross cutting issues affect all CCAs in NYS, Section 5 also discusses barriers and policy recommendations associated with these topics that are likely to affect some, but not all, CCAs in NYS. Acknowledging and addressing these limitations and challenges, as well as the policy barriers identified in Section 5.1.2 and Section 5.2.2 may enhance CCA capabilities and the benefits that CCA is able to provide.

4.3.1 Administration

CCA Development

All CCAs in NYS are required, per the CCA Order, to adhere to the same process to be approved by the PSC and to standard requirements for implementation and operation. Organizing a CCA, regardless of the objectives a CCA seeks to accomplish or the administrative structure that is used, requires personnel with relevant experience and/or qualifications and capabilities. Individuals with knowledge of local communities and energy-related are needed to build trust within communities and demonstrate that a CCA is a reputable and credible organization that will advocate for and advance the interest of customers. However, the number of such individuals in NYS is limited.

Without qualified personnel, municipalities lack the technical competence to objectively assess the feasibility of options for CCA and to develop business plans that allow them to confidently pursue their goals. Municipalities and the CCA organizer may be limited in the

resources that are needed to assess the feasibility of options and to define and pursue goals (see Section 4.3.2, Financing and 4.3.3, Data Access/Data Quality/Data Management). With limited certainty about the feasibility of a CCA, it is difficult to gain buy-in and confidence from potential CCA organizers and municipalities to initiate CCA development.

CCAs are shaped by the objectives that they seek to achieve, the abilities and capabilities of the Administrator, and their administrative structure. The Administrator's perception of the importance of certain objectives, or whether they have prior experience with them will affect the outcomes of the CCA, as will the Administrator's ability to determine which of the developers and ESCOs provide products that will meet the community's interests. As supply contracts are often a foundational element of CCAs, being able to prepare an effective request for proposals (RFP) and to subsequently select the best contract option is very important for the success of a CCA. In spite of the resources that are currently available in the NYSERDA CCA Toolkit, some Subgroup participants see preparing RFPs and determining the best contract option as a potential challenge for CCA Administrators.

CCA Implementation and Operation

The available pool of prospective ESCOs with CCA, DER, and products and services CCAs are interested in is also somewhat limited in NYS. NYS's deregulated market participants have traditionally focused on simple discount-oriented products or green energy products based entirely upon RECs. Therefore, the technical capacities of many service providers currently lack significant DER development experience or knowledge. Service providers that are likely to respond to CCA RFPs may therefore present limited products and services in their proposals.

NYS CCA policy gives municipalities final approval authority over CCA contracts. For intermunicipal CCA programs, this requirement may be burdensome as there are multiple steps that each municipality has to undertake to participate in a CCA — especially CCAs that enter contracts that offer more products or services than just supply or that are negotiating multiple contracts.

Although the CCA Order states that "the Clean Energy Standard...will also offer CCA programs to support clean energy goals through self-initiated power purchase agreements with renewable energy generators or deployment of renewable energy resources," there is no clear regulatory path for CCAs to build or procure energy supply directly. There are several options for how CCAs can accomplish this, including CDG and local renewable energy stipulations in RFPs for ESCOs. CDG may provide a mechanism for CCAs to support local renewable energy projects. Some Subgroup participants support policy recommendations related to the interface of CCA and CDG that they feel will most effectively advance CCA activity in NYS (see Section 5). These Subgroup participants have also indicated that additional support for CCAs to assess the feasibility and merits of these options is needed. Some participants also noted that whether CCAs in NYS are feasibly able to: enter PPAs directly with generators, be ESCOs, or own energy generation may impact the ability of CCAs to advance REV and SEP goals. Additional evaluation of these options for CCAs to take on new roles in order to advance REV and SEP goals and meet local objectives

would allow stakeholders to better understand policy mechanisms and barriers and if additional policy recommendations would be appropriate.

4.3.2 Financing

During CCA Development

The development of a CCA is often labor- and resource-intensive, and requires convening meetings, traveling, preparing and distributing materials, and may include legal costs. CCA Organizers and Administrators have limited resources to fund the start-up costs that are incurred before administrative fees are collected.

There is also a limited amount of information about options for financing CCA programs, despite the resources that are currently available in the NYSERDA CCA Toolkit. This can limit the CCA Organizer or Administrator's understanding of financing options. Additionally, it can be difficult for CCAs to find lenders willing to finance CCA-related initiatives and projects because these entities are not familiar with CCA, and newly forming CCAs are not likely to be considered credit-worthy enterprises. Therefore, it can be difficult to finance early organizing efforts including public outreach, education, and engagement, let alone a CCA that requires more than a minimum amount of upfront capital or that wishes to provide energy-efficiency or DER programs. Therefore, organizations without dedicated resources that can be invested in developing a CCA may be discouraged or precluded from forming CCAs in NYS.

Some CCA Program Organizers are also struggling to empirically analyze the potential revenue stream of a CCA and whether that revenue would be sufficient to cover the costs of the objectives they hope to achieve. CCAs may need dedicated funding, financing options, financial incentives, or opportunities to pool funding between programs in order to gain traction; otherwise, these financial challenges could create a barrier to entry for certain organizations. This in turn could limit the options for CCA Program Organizers and Administrators in NYS and could also result in municipalities selecting CCA Programs and/or Administrators that have access to funding, rather than those that are well-aligned with their objectives.

During CCA Implementation and Operation

The costs that CCAs can include in the administrative charges that are passed on to customers and how the administrative fees can be used are limited by the Order. At this time the administrative fee cannot be used to directly fund program costs or incentives for customers for other programs, such as clean energy or energy-efficiency programs. Additionally, the current market pricing for energy in NYS may make it difficult for CCAs in NYS to provide significant savings, which may make it difficult for CCAs to generate as much revenue as CCAs in other states, such as California.

4.3.3 Data Access / Cost / Presentation / Management

Customer energy usage information is valuable data that CCAs need to assess the economic and market viability of a CCA. To build their value proposition, CCA Organizers and Administrators require locally applicable information that demonstrates the potential value the CCA offers without infringing on customers' privacy. In addition to being used to identify opportunities for CCA to effectively offer value, it can also be used to conduct initial outreach and education about a CCA program, help municipalities evaluate and refine their CCA objectives, and, later, assess the effectiveness of contracts and programs that are offered and implemented. In the CCA Order, the PSC directed utilities to provide a series of data sets to CCA Administrators beginning after the CCA's Implementation and Data Protection Plans have been approved by the PSC.

In the REV proceeding, the PSC directed utilities to expand access to customer data in order to facilitate growth of distribution-level markets for DERs. Accordingly, the Joint Utilities committed to provide a range of customer and system data in their November 2016 Supplemental Distributed System Implementation Plan ("Supplemental DSIP"). These data can be requested in a variety of formats. For example, third parties can request customized aggregated usage data subdivided by rate class / revenue class, on an annual and/or monthly basis, and at various scales (e.g., by community, zip code, county, census tract, or aligned with other census data). System-related information is also readily accessible on utility websites. Additionally, the utilities provide hosting capacity maps that can be used to inform interconnection and planning processes and to support a DER provider's understanding of more favorable locations for interconnections (i.e. where DER can interconnect without incurring additional costs).

In the Supplemental DSIP the Joint Utilities also committed to working with NYSERDA and stakeholders on development of a publicly-available Utility Energy Registry (UER) with aggregated data for municipalities across the state. The PSC opened a proceeding to consider UER-related matters in 2017 (Case 17-M-0315). To date, interested stakeholders have agreed that the UER should collect aggregated data for electricity and natural gas customers that will be segmented based on customer characteristics and geospatial parameters (e.g., zip code, municipal boundary). By providing free on-line access to energy demographic information this tool is expected to help address data-related limitations for early-stage CCAs. It will also provide communities with essential information to inform clean-energy planning, implementation, and assessment of local community-scale clean energy initiatives.

CCA Administrators and ESCOs working with municipalities to develop CCA programs may also be interested in more customized aggregated data pertaining to load profile information or energy cost by sector as well as customer analytics and market indicators such as supply costs,

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¹² It should be noted that once a CCA program has received PSC approval it still must adhere to the policies pertaining to the timing of requests for utility data and any costs associated with those data requests.

and information about existing renewable energy interconnections – prior to PSC approval of a CCA program. Such ad hoc data requests necessitate value-added analysis from utilities in order to be produced, and creates additional layers of costs above and beyond the aggregated data expected to be provided in the UER. Some members of the Subgroup support inclusion of this type of information in the UER. Others argue that requiring the utilities to support the UER with large volumes of more refined, customized information is equivalent to socializing the cost of a value-added analysis that may only benefit a portion of customers in the state.

Related to data access issues, CCA Implementation and Data Protection Plans must be approved by the PSC and must be accompanied by a Data Security Agreement executed by the CCA Administrator, ESCOs, and utilities in the service territories that a CCA will serve. These requirements were established to protect customer privacy and are intended to prevent a third party from misusing customer information or handling it in a manner that exposes it to unauthorized use. Nevertheless, some Subgroup members believe that the Implementation and Data Protection Plans as currently proposed are burdensome for CCAs and may make it more difficult for some CCAs to form.

Some members of the Subgroup, but not all, are concerned about potential challenges CCAs will face as data are shared between utilities and CCA Administrators (e.g., data cost, timing of payment for data if required and ability to fund data fees prior to collecting revenue from administrative fees, data availability, data standardization, data quality, data management, and maintaining data security and customer privacy). The Subgroup recognizes that the CCA data fees adopted in the PSC's recent Order Establishing Community Choice Data Access Fees (issued December 15, 2017 in Case 14-M-0224) almost entirely backload data fees so that a winning ESCO, and not a CCA Administrator or municipality, would be required to pay the fee. There is also a general recognition that the fees collected would offset the costs of providing the data, so that the customers making use of the data by participating in a CCA are generally the customers that will pay for the generation of the data. Some Subgroup participants nonetheless perceive a requirement for CCAs to pay for data needed to assess the economic viability of various CCA structures, as a potentially significant barrier to CCA development. Others believe that CCA data fees are consistent with the PSC's policies, established in the REV proceeding, that customers who stand to benefit from a CCA program should be required to shoulder at least a portion of the cost to develop value-added CCA data.

Finally, once customer-specific account data are provided to a CCA's ESCO following the opt-out process, the amount of data and the format of the data is likely to require significant data management capabilities and experience. As discussed previously, some municipalities and CCAs may have limited access to CCA Administrators with expertise pertaining to energy database maintenance and data analytics. Administrators with limited resources or experiences may benefit from shared technical resources and best practices.

4.3.4 Planning

As discussed in Section 3.1, energy planning is a facet of local decision-making to which CCAs in NYS may contribute. Participating in energy-planning can enable CCAs to demonstrate the value and benefits they may provide to their communities. Undertaking energy-planning initiatives, however, can be labor-intensive and requires technical capabilities to analyze and map DER opportunities to understand opportunities. Additionally, effective and impactful energy planning requires granular energy system data that can be used to assess economic and market feasibility. It also requires an understanding of financial resources that are or may be available to feasibly support development projects and energy programs. As mentioned previously, each of these are issues pertinent to all CCAs in NYS that affect the ability of CCAs in NYS to contribute to local and system-based energy planning.

4.3.5 Education

While there is a longer history of CCAs in other states, CCA is a new development in NYS and still not yet common practice in energy markets in the U.S. Therefore, there is a significant upfront requirement for education in order to inform consumers, municipal leaders, and other stakeholders about the potential opportunities and benefits of establishing CCA. As discussed in Section 4.1.1.1, informed energy consumption should be an objective of CCA in NYS, and educating and reaching out to various stakeholders is necessary to meet this objective.

Despite the extensive education and outreach pertaining to energy consumption and energy efficiency that has been conducted by utilities, community organizations, ESCOs, and DER suppliers, most customers are not well-versed in energy-related topics. Energy can be complicated and confusing. In NYS, the regulatory landscape and energy markets are rapidly changing, which can make these topics even more challenging for customers. Therefore, for CCA to provide a broad range of benefits in NYS, some level of municipal and consumer energy literacy is necessary. It can be difficult to establish a basic baseline understanding of these topics. Increasing energy literacy can be time-consuming, labor intensive, costly, and require technical resources. Successful CCA implementation requires experience in education and outreach, well-coordinated and articulated communication, consistent messaging about opportunities for CCA products and services that align with the interests and needs of specific communities. Further, such outreach, education, and messaging must not be inconsistent or at odds with NYSERDA or utility messaging, which would only increase customer confusion.

Education and outreach is necessary throughout CCA development and operation, and it needs to be continually adapted to align with a CCA's goals, objectives, supply options, and other programs. Awareness and understanding of opportunities for CCA throughout NYS is increasing. However, this will continue to be an issue that will need more resources. Some Subgroup participants feel that without resources for municipalities and CCAs to undertake these efforts, CCA implementation may be limited.

5. MODEL FOR CCA POLICY AND ACTIVITY IN NYS

The Subgroup identified a model for CCA in NYS that includes a three-phase progression for CCA policy and activity listed below.

- Current Phase of CCA policy and activity in NYS
- Near-Term Phase for CCA policy and activity in NYS
 - Increased CCA activity and capacity for supporting CCA, potentially enabled by implementation of non-policy recommendations and modification to NYS CCA policies as well as other related state policies.
- Mid-Term Phase for CCA policy and activity in NYS
 - More innovative and effective CCA activity, potentially enabled by modifications to NYS CCA policies as well as other related state policies.

These phases were used to identify policy recommendations that can help advance CCA in NYS. It is important to note that this approach to defining a model for CCA in NYS does not try to align the objectives or administrative structures of specific CCAs with the phases that are described. These phases describe an evolutionary path for CCA in the state as a whole rather than a timeline for individual CCAs.

The phases and their benefits are described in this section. Each phase is defined by the policy-related barriers limiting CCA advancement and recommendations to overcome these barriers. Policy recommendations pertain to state-level regulations, amendments to PSC orders, and agency funding decisions.

5.1 Current Phase of CCA Policy and Activity

The Current Phase represents the state of CCA in NYS today, as described in Section 2. The Order allows CCAs to propose various approaches to administration and programmatic offerings. However, CCA implementation to-date has been limited. The Subgroup has concluded that there is significant interest in CCA, and communities are trying to understand the Order and their options for establishing effective CCAs. During this phase additional CCAs may submit Implementation Plans or receive approval from PSC to implement a CCA, including CCAs that incorporate creative approaches to administration and the products and services that they provide.

Some participants expressed concern that CCA programs are not currently advancing the goals of REV or the SEP in a meaningful way. These members suggest that implementation plans should include details about how the proposed CCA will contribute toward the goals of the REV or SEP. These members believe CCAs that do not advance REV and SEP goals should be discouraged.

Some participants expressed concern about aggregations with large numbers of customers. While larger CCAs may possess more bargaining power, aggregations may become so large that only a small number of ESCOs or other service providers have the capacity to serve such a large scale. Smaller aggregations may, in some cases, be better positioned to advance the type of local, distributed generation that the CCA Order and the REV and SEP envision.

Integration of CCA and CDG Offerings

CCA presents an opportunity for communities to voluntarily invest in local clean energy and DER while also stabilizing or reducing energy costs. The Subgroup believes that there is an opportunity to achieve higher penetration of DER by integrating CCA and CDG in some fashion. Together these two programs could increase electricity generation from renewable energy resources in NYS.

As stated in the PSC's October 2017 Order Approving Community Choice Aggregation Program and Utility Data Security Agreement with Modifications, CCA programs may currently offer participants opportunities to enroll in CDG on an opt-in basis. Additionally, customers that live in a municipality that is part of a CCA program may be enrolled in the CCA while participating in an unaffiliated CDG project. Customers are therefore able to participate in both programs, in a number of ways. However, there is potential for customers to be confused about the intersection of these the CCA and CDG programs, the benefits they offer, how they are administered, and the likely impact on their bills.

The CDG component of a CCA may be approved by the PSC when it is included in the CCA's Implementation Plan or a plan amendment. It is important to note that CCA programs may only be established upon a decision reached by elected representatives after significant public outreach. According to the CCA Order, this approval "represents a reasonable proxy for customer consent, when coupled with consumer education efforts and individual customer opt-out processes." Based on stakeholder feedback, the Subgroup believes it is likely that some communities will want to establish a CCA program that offers CDG as part of its default service. In this sense, CDG may be fundamental to some communities' CCA objectives, and not a secondary opportunity or 'add-on' to a supply aggregation.

By incorporating CDG into CCA, mass-market utility customers including LMI households may pay less for electricity compared to what they would pay otherwise. ¹⁵ This outcome is possible due largely to efficiencies achieved with scale and the reduction in soft costs made possible with CCA bargaining power. By enrolling customers *en masse* on an opt-out basis, CCAs could, in theory, almost eliminate CDG customer acquisition and management costs. However,

¹³ Order Authorizing Framework for Community Choice Aggregation Opt-Out Program Case 14-M-0224, April 20, 2016, p. 20.

¹⁵ CCAs are able to receive separate information from the utility pertaining to APPs, therefore incremental benefits from CDG may be available for APPs that participate in CDG via a CCA.

in such cases it would be essential to carefully consider and apply consumer protections to ensure that customers are not passively enrolled in a DER-related program that could raise their total energy burden above what it would be if they had opted out of the CCA.

To facilitate the integration of CCA and DER, especially CDG, some Subgroup members believe that the PSC should consider changing its policy to enable CCAs to enroll participants in CDG on an opt-out basis, rather than requiring customers to individually opt-in to CDG. Some participants feel that using local authorizations for CCA as a proxy for customer consent for CDG should be examined by the Commission. Some participants are concerned opt-out CDG could pose a risk to customers and create confusion. Some Subgroup members are not prepared to support this recommendation without further development and input from a wider array of stakeholders, including customer advocacy organizations. However, all Subgroup members agree that the integration of CCA and CDG – whether as a default or 'add-on' service – should maintain or enhance the benefits that CDG offers APPs and LMI customers.

Consolidated Utility Billing for CCA Programs

Under current regulations, when customers enroll in a CDG program they are agreeing to pay two bills – their utility bill and a separate bill from the CDG Sponsor. A CDG credit is displayed on the utility bill. The CDG charge, often called a subscription fee, is displayed on the CDG sponsor's bill. During the Subgroup's discussions, the topic of incorporating CCA charges (including CDG charges) onto the utility bill came up frequently. The Subgroup recognizes that the feasibility of incorporating additional products and services, such as DER (including CDG), on the utility bill is currently being considered by the PSC via the VDER proceeding.

Some members of the Subgroup members recommend that the PSC consider adopting a policy that requires utilities to include CDG and other DER fees (e.g., CDG, energy efficiency products and services) on utility bills. For these members, a one-bill solution for utility, CCA and DER charges is expected to contribute significantly to the success of REV by increasing customer participation in DER programs and services. A one-bill solution would also be necessary for an opt-out CDG program in order to reduce customer confusion and the risk of non-payment. Some Subgroup members also recommend exploring how on-bill financing programs by/through a CCA program can be incorporated into utility billing.

Other Subgroup participants believe that consolidated utility billing for DERs presents a complex array of financial, legal, and technical challenges that are not yet fully understood, and therefore are not willing to support such a recommendation at this time. The Joint Utilities filed comments in the VDER proceeding indicating that a number of threshold questions must be resolved before a formal evaluation of the practicality, cost, and timeline for consolidated billing

can be conducted.¹⁶ Allowing DER charges on utility bills is a significant policy change that must be considered carefully. This is especially true if charges would be subject to termination.

Additional Considerations for Integrating CCA and CDG

Additionally, some Subgroup participants, but not all, recommend exempting CCAs from the PSC's CDG program requirements for 1,000 kWh per year minimum supply. This would allow for the distribution of CDG credits across a broader customer base, which would better enable the integration of CCA and CDG. Other participants are concerned that a lower threshold would decrease the benefits to be gained by each subscriber, while increasing the complexities associated with billing subscribers and managing the host and subscriber relationships.

Finally, if a CCA program chooses to partner with more than one CDG project, some Subgroup members believe that the CCA members/end users should be allowed to obtain CDG credits from multiple CDG projects. To promote the availability of CDG to many subscribers, each subscriber is limited to enrollment with one CDG host according to the CDG Order.¹⁷

The Subgroup believes that increased CCA activity during the Current Phase and progressing to the Near-Term Phase is not predicated on policy changes; additional resources and support may help increase CCA activity. Policy recommendations that will remove significant barriers, including those that make it difficult for CCAs to support DER and procure local renewable energy, are included in Table 5-1.

5.1.1 Benefits

The PSC review and approval of CCA Implementation Plans provides CCA Organizers and Administrators the opportunity to propose various new and innovative approaches to achieving CCA objectives and administering CCAs in NYS. This includes taking advantage of programs developed under REV, the CEF, and related proceedings (e.g., DER including CDG).

CCA policy currently enables CCAs to offer DER options (e.g., locally sourced DG or energy efficiency) to their customers on an opt-in basis. Westchester Power's program exemplifies some of these options, including offering more than one supply option. Although the CCA Order may not limit CCA from pursuing certain additional activities, other state policies may make it difficult to feasibly implement the more expansive CCAs programs that some communities hope to establish (see Table 5-1).

There is a growing understanding of CCA, the benefits it may provide, and how it can be incorporated with other programs and opportunities in NYS. The DER industry may be in a better

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¹⁶ Joint Utilities' Response to New York State Public Service Commission Order Requiring Utilities to File an Automation and Billing Report and an Evaluation of the Practicality, Cost, and Timeline for Implementing Consolidated Billing within Twelve Months, Case 15-E-0751, November 13, 2017, p. 2.

¹⁷ CDG Order, p. 17

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position today than five years ago to participate as innovators for CCA programs in NYS. The Subgroup believes that there is potential for CCA activity and innovation to increase, and identified the following policy recommendations (Table 5-1) to advance to the Near-Term Phase of CCA, which it hopes will enable CCAs to more effectively achieve state and local energy goals.

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5.1.2 Barriers Associated with the Current Phase and Policy Recommendations for Advancing to the Near-Term Phase

Barriers and policy recommendations, as well as limitations and policy recommendations, that should be addressed to advance CCA activity are presented in Table 5-1. It should be noted that the below table documents a range of ideas discussed by the Subgroup. Not all Subgroup members support the recommendations outlined below, as explained in the preceding sections of this report.

Table 5-1 Barriers Associated with the Current Phase and Policy Recommendations for Advancing to the Near-Term Phase

Limitations	Policy Recommendations
Limited access to customer data that can be used to assess the feasibility of a CCA proposal and identify appropriate CCA objectives, prior to PSC approval. This includes access to data and data fees. (Value / Economic Feasibility, Development)	 Efforts associated with developing the UER should consider the implications for advancing CCA activity (e.g., CASE 17-M-0315 – In the Matter of the Utility Energy Registry). Some level of CCA-relevant data should be provided at no charge through the UER. For example, this could include kWh, installed capacity (ICAP) capacity tags, count of accounts, and count of CCA-eligible accounts by customer category (residential, small commercial, and other) and by geography (municipal tax ID and/or zip code. Some Subgroup members believe the PSC should order utilities to provide more detailed, granular information in the UER, such as aggregations related to customers on time-variant rates. Other participants believe that expanding the scope of the UER in this way would lead to subsidization of CCA programs by non-participating customers, who are not able to benefit from CCA offerings. Others respond that the UER is not meant to serve CCA programs only and that this information could be valuable to communities for other reasons. Proceedings pertaining to utility data fees should continue to consider the implications of data fee costs and the timing of any such costs for advancing CCA activity. For non-policy recommendations see Appendix D, Table D-3.

Table 5-1 Barriers Associated with the Current Phase and Policy Recommendations for Advancing to the Near-Term Phase

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- Limited availability of / access to funding to cover programmatic offerings such as DER, local DG, and energy-efficiency products and services. (Value / Economic Feasibility, Advance REV / SEP Goals)
- The administrative requirements for CCAs to use the SBC are onerous.
 (Value / Economic Feasibility, Advance REV / SEP Goals)
- Some participants believe that the lack of mechanisms for compensating CCAs should they implement programs that assist the utility in meeting its targets is a limitation.

(Value / Economic Feasibility, Advance REV / SEP Goals)

- Explore the use of SBC funds by CCAs. This review should include an analysis of:
 - The impact on the use of the funds to support PSC-approved utility targets for energy-efficiency, earnings mechanisms, and other programs;
 - The administrative requirements of the CCA; as well as
 - Methods to access the funds, including potentially creating an ongoing open solicitation for CCA projects and programs that wish to access SBC funds.
- Some Subgroup members are concerned by the idea to extend use of SBC funds to CCAs, because it would prevent CCA customers from taking advantage of established utility clean energy programs, and could lead to distorted or inefficient price signals in parts of a distribution system that either needs or does not need additional capacity.
- Explore creation of a dedicated source of funding (possibly through NYSERDA or other state agencies or authorities such as NYPA) to create incentives and/or financial assistance to support the development of CCA Implementation Plans, CCA energy efficiency programs, initiatives supporting APPs and LMI customers, and other programs consistent with state energy goals.
- Some participants, but not all, think consideration should be given to collaborative earnings opportunities between CCAs and utilities for efforts that advance state policy goals. Some participants have expressed concern about how this would be implemented.

cause customer confusion.

Table 5-1 Barriers Associated with the Current Phase and Policy Recommendations for Advancing to the Near-Term Phase

There are limited billing options for CCA services other than existing Retail Access billing models (i.e., dual bills or consolidated utility billing with purchase of receivables). If a CCA program were to offer DERrelated services in addition to supply, it could result in CCA customers receiving more than one bill—and potentially multiple bills—for the various services/products that they receive. This has the potential to

 There are limited opportunities to change the format of utility bills to include information not already available to ESCOs under consolidated utility billing. It should be noted, however, that CCAs and their ESCOs are currently able to work with utilities to place messages on the supply page of the bill, and/or to provide inserts to be mailed with the utility bill. (Value / Economic Feasibility, Advance REV / SEP Goals)

- Consider:
 - Improving clarity of information on the utility bill about whether they are enrolled in a CCA program, and where customers can find information out about their CCA program.
- See Table 5-2 for a related policy recommendation. For non-policy recommendations see Appendix D, Table D-2.

Table 5-1 Barriers Associated with the Current Phase and Policy Recommendations for Advancing to the Near-Term Phase

Barriers

There are barriers to the integration of CCA and DER. In particular, barriers to CCA and CDG integration include:

- Enrolling participants in CDG on an opt-in basis, which some Subgroup members believe will limit CDG enrollment; and
- Dual billing arrangements. Under current PSC rules a CDG subscriber receives two separate bills – one from the utility and one from the CDG Sponsor. If a customer does not pay their CDG bill, the CDG Sponsor is responsible for de-enrolling the customer from the CDG program and attempting to collect any remaining balances.
- Some Subgroup members believe that the lack of consolidated utility billing for CDG in New York is a barrier to enrolling customers in an integrated CCA / CDG program on an opt-out basis. Other perceived barriers discussed by the Subgroup include:
 - The 1,000 kWh per year minimum supply limit may restrict CCA participation in CDG; and
 - CCA participants may only obtain CDG credits from one project.
- Integration of CCA and other DER may have similar limitations. (Value / Economic Feasibility, Advance REV / SEP Goals)

- Some subgroup members think that the PSC should enable CCAs to enroll participants in CDG on an opt-out basis, using the local authorizations of CCA as a proxy for customers consent, rather than requiring customers to individually opt-in to CDG. Other participants feel that using local authorizations for CCA as a proxy for customer consent for CDG has not been sufficiently evaluated, could pose a risk to customers without appropriate consumer protections, and could create confusion.
 - All Subgroup participants agree that integration of CCA and CDG should maintain or enhance the benefits that CDG offers APPs and LMI customers.
- Some members, but not all, recommend exempting CCAs from the CDG 1,000 kWh per year minimum supply limit to support the distribution of CDG credits across a large customer base.
- If a CCA program partners with more than one CDG project, some Subgroup members think the PSC should allow the CCA members/end users to obtain CDG credits from multiple projects.
- Explore the impact of the costs of these changes on non-participating ratepayers.

Table 5-1 Barriers Associated with the Current Phase and Policy Recommendations for Advancing to the Near-Term Phase

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The size of municipalities can limit a CCA's bargaining power and ability to gain traction and leverage resources for CCA opportunities. Small, resource-constrained communities face particular challenges meeting the administrative requirements of CCA, as well as, with aggregating enough accounts to attract competitive bids from third-party suppliers and for other CCA services. The current CCA Order encourages intermunicipal programs but does not allow counties to establish CCA programs on their own. (Value / Economic Feasibility, Development)

- Some, but not all, subgroup members agreed that the PSC should consider seeking a determination from the NYS Department of State as to whether it would be inconsistent with General Municipal Law to enable counties to pass local authorizations for CCA, form a CCA, and sign contracts on behalf of member municipalities to reduce the amount of redundancy and inefficiency when small, resource-constrained municipalities in NYS try to aggregate. Consideration should be given to how this would affect customers and if this is required to advance CCA activity and REV and SEP goals.
- Some, but not all, subgroup members recommend exploring options, including state legislation, to allow the elected representatives of county government to enroll their constituents into CCA.

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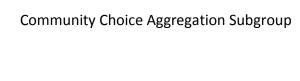
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5.2 Near-Term Phase for CCA Policy and Activity

The Near-Term Phase should include increased CCA activity and capacity for supporting CCA. Municipal, customer, and stakeholder understanding and awareness of CCA should be greater than it is in the Current Phase. This phase will be informed by and offer more examples of CCA in NYS than the Current Phase. In the Near-Term Phase CCAs throughout the state should be implementing various administrative structures and pursuing a variety of objectives to support the REV and SEP. The implementation of CCAs should demonstrate the financial viability of CCAs in NYS that are successfully achieving at least some of their desired objectives, including but not limited to, cost savings, rate stabilization, and providing access to local renewable energy. With more CCAs collecting and applying administrative fees toward CCA operations and CCA Administrators gaining experience and capacity, CCAs should be undertaking more robust programs and offering more products and services. Implementation of policy recommendations that were identified in Table 5-1 (e.g., those related to data fees and data access, and enabling the integration of CCA and CDG) may assist in reaching this level of CCA activity and innovation. Barriers associated with the Near-Term phase and policy recommendations that will help overcome these barriers and advance CCA policy and activity to the Mid-Term phase are identified in Table 5-2.

5.2.1 Benefits

As CCA Administrators become more familiar with the requirements for CCA administration and the lessons learned from CCAs throughout the state, it will likely be easier to assess the feasibility of new CCAs or new CCA programs and to develop Implementation Plans and business plans. Increased public knowledge about CCA will increase the understanding of the value that CCA may provide and may help change the perception that forming or participating in a CCA program is risky. It may also help build credibility and creditworthiness, resulting in additional funding and partnership opportunities for CCAs. Therefore, the Near-Term Phase is likely to result in more innovation and greater variety in the types of CCA initiatives. The development of more CCA Implementation Plans (initial plans, or plan updates) that incorporate innovative elements, and the review of these plans by the PSC will present more opportunities to identify policy modifications that will enable CCA to continue to advance SEP and REV goals.



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5.2.2 Barriers Associated with the Near-Term Phase and Policy Recommendations for Advancing to the Mid-Term Phase

Barriers and policy recommendations, as well as limitations and policy recommendations, are presented in Table 5-2.

Table 5-2 Barriers Associated with the Near-Term Phase and Policy Recommendations for Advancing to the Mid-Term Phase

Barriers	Policy Recommendations
Lack of consolidated utility billing for DERS in New York State (Value / Economic Feasibility, Advance REV / SEP Goals)	 The Subgroup recognizes this topic is currently being considered by the PSC in the VDER proceeding. Some Subgroup members recommend creating mechanisms that allow for billing of CDG fees and other DER products and services on utility bills, provided that such mechanisms include customer protections. Other Subgroup members believe that issues related to consolidated billing for DER cannot be fully understood at this time, and therefore do not find it appropriate to make a recommendation until the feasibility and cost of consolidated billing for CDG, at a minimum, can be thoroughly evaluated. The impact of allowing third parties to put charges on the bill must be evaluated for customers. Explore how on-bill financing programs by/through a CCA program can be incorporated into utility billing, including review of customer protections and billing fees. Explore the ramifications, including customer protection issues, of permitting CCAs to charge an adder in the rate charged to the customer that would then enable a fund to support local clean energy (including energy efficiency) programming.
Larger C&I customers are excluded from CCA on an opt-out basis, but can participate on an opt-in basis. This may affect the economics of CCA by reducing the aggregate load and thereby the ability to effectively negotiate lower rates and generate revenue for the CCA via the administrative fee. (Value / Economic Feasibility)	 Some, but not all, Subgroup members agreed that the PSC should consider allowing C&I (demand metered) customers to be enrolled in CCA on an opt-out basis. Consideration should be given to: Whether benefits of CCA for C&I customers can be demonstrated; How opt-out enrollment of C&I customers would impact this customer segment as well as other stakeholders; If opt-out enrollment of C&I customers is required to advance CCA activity to achieve REV and SEP goals; and Allowing customer groups the opportunity to provide their perspective.

Barriers	Policy Recommendations			
• The current Order does not provide guidelines for CCA program evaluation or reporting pertaining to a CCA's ability to achieve its objectives. As more CCAs develop, this may present challenges for assessing the effectiveness of CCAs in achieving SEP and REV goals. Having a reporting requirement pertaining to a CCA'S ability to meet its goal may increase accountability to customers and help validate the value proposition of CCAs. (Advance REV / SEP Goals)	 The PSC should require some form of standardized reporting regarding the ability of CCA programs to meet their objectives. Specific modifications to the reporting requirements should be identified once there are more CCAs in NYS and there are more lessons learned about how CCA is advancing REV and SEP goals. The State should host a centralized clearinghouse resource containing reports from CCAs including annual reports and reports regarding their ability to meet their objectives. 			
The current Order acknowledges that CCA should provide additional benefits to participants through value-added services; however, the Order does not elaborate on how CCAs can provide these benefits. (Advance REV / SEP Goals)	• Some Subgroup members believe that the Order should be expanded to include requirements for CCAs to provide additional value-added services. Specific requirements should be identified once there are more CCAs in NYS and more is learned about how CCA is advancing REV and SEP goals. Other Subgroup members raised concerns that this could have a dampening effect on CCA penetration if the objectives (or means) of some municipalities do not include clean energy projects or programs. This in turn would deny customers in those municipalities from the benefit of cost savings under a supply-only CCA program.			

5.3 Mid-Term Phase for CCA Policy and Activity in NYS

The Mid-Term Phase for CCA policy and activity in NYS would be enabled by modifications to CCA policies and other related policies. It would include more experienced CCA Administrators as well as more innovative and effective CCA activity. In this phase it should be possible for CCAs to implement more advanced, comprehensive, and innovative clean energy programs. CCAs should be able to effectively bill customers for various clean energy products and services and leverage synergies with other initiatives to implement programs (e.g., CDG) that provide and/or operate local renewable energy generation and/or other DER (supply/demand). Policy characteristics and barriers for CCA associated with the Mid-Term model will be dependent on CCA activity and policy that occurs during the prior two phases. As CCA in NYS moves through these phases, CCA activity and policy will dictate what barriers emerge and policy recommendations are necessary to advance beyond the Mid-Term phase of CCA activity in NYS.

5.3.1 Benefits

CCA activity and policy in NYS should seek to support local renewable energy generation and customer ownership of DER. CCAs should be actively helping drive the market for DER and making it competitive or preferable to renewable energy supplies that are based solely on RECs offered by supply contracts. Removing policy barriers (Table 5-2) to advance to the Mid-Term Phase for CCA in NYS (e.g., billing barriers) will create opportunities for communities to administer CCA and DER programs to effectively drive market transformations at a local scale, while also achieving local energy goals and benefits for customers. By identifying and developing elements of CCA—local energy development, shared renewables, demand management, customer equity, and more resilient and reliable energy that differentiate CCA from other energy supply options—CCAs may be able to more effectively compete with low energy prices within the market and support state energy goals and initiatives. CCA in NYS could serve as a leader among states that allow CCA, providing examples of how CCA can support the development of DER to achieve energy goals.

6. CONCLUSION

There are currently a number of limitations to CCA in NYS and opportunities for the state to help support and facilitate the development of additional CCA programs. Some of these limitations apply to all CCAs and others are specific to certain programmatic components that some CCAs may wish to pursue. There are also barriers that prevent CCAs in NYS from conducting certain activities. Changes to state policy will likely increase the potential for CCA programs to effectively provide benefits to communities in NYS while also advancing progress toward SEP and REV goals.

The following is a summary of the Subgroup's conclusions and the type of recommendations that are associated with each.

- 1) For CCAs to develop and advance REV and SEP goals, CCA in NYS must provide value to participants, in ways that support investment in clean distributed energy resources, and must be economically feasible.
- CCA has to offer value to customers (e.g., cost savings and rate stabilization, and may offer other energy-related benefits) to gain and retain participants (e.g., participating municipalities and customers).
- CCAs must be able to generate enough revenue to be able to support CCA administration.
- The amount of revenue and funding that is available will impact programmatic offerings and the ability to achieve objectives and provide benefits.
- To advance REV and SEP goals, CCAs must be able to use the administrative fees, access other funding, or collect payment from customers to support programmatic offerings.
- Currently, there is uncertainty about the economic feasibility of CCA and various CCA programmatic structures/offerings.

Non-Policy Recommendations to help prospective and existing CCAs conduct economic feasibility analyses and develop economically feasible business plans and implementation plans pertain to:

- O Access to data;
- o Funding;
- o Technical resources; and
- o Technical support.

Policy Recommendations to support economic feasibility of CCA pertain to:

- o Access to data;
- Modifications that would reduce financial risk associated with CCA;
- Enabling CCAs to access additional financial resources;
- o Ability for CCA to interface with CDG;
- Evaluation of options for enabling CCAs to have more billing options for value-added products and services other than supply; and
- Modifications to the Order that would improve the economic feasibility of CCA.

In each phase, CCA policy and activity will shape the economic feasibility of CCA. CCA activity in the Current Phase is limited by the current capacity and resources that are available to assess the economic viability of CCA, as it pertains to specific CCA aggregations and programmatic offerings. As capacity for CCA in NYS increases more lessons will be learned about the economic viability of CCA in NYS, making it possible to more effectively assess the feasibility of CCAs that offer more innovative products and services.

2) Assuming CCAs are economically feasible and provide value, resources and support will be required to overcome challenges and costs associated with development.

- With limited time to generate lessons learned about CCA in NYS to-date, communities considering developing CCA require support.
- CCA development requires specific capabilities and significant efforts and resources.
- Support for the development of CCAs will help increase CCA activity and encourage innovative CCAs, which will generate lessons learned to advance CCA policy activity in NYS.

Non-Policy Recommendations to help prospective and existing CCAs develop and implement CCA programs pertain to:

- Coordination and information sharing;
- Education and outreach targeted at municipal and county officials;
- o Access to data;
- o Funding;
- o Technical resources; and
- O Technical support.

Policy Recommendations to support CCA development and implementation pertain to:

- o Access to data;
- o Enabling CCAs to access additional financial resources; and
- Providing support and financial resources for organizations that help advance CCA activity.

Several limitations have hampered the development of CCA in NYS. Providing resources and support to help CCAs develop will be important for advancing to the Near-Term Phase for CCA policy and activity in NYS. Current policies make it difficult or prevent CCAs from providing programmatic offerings that effectively advance these goals, or it may not be economically feasible.

The potential for CCA to support state and local energy goals via local renewable energy development and energy efficiency are several of the reasons communities in NYS are interested in CCA. If unable to pursue these objectives, some communities have expressed that they will not proceed with efforts to form CCAs. To advance effective CCA activity while also advancing the state's clean energy goals and the SEP, CCAs will need to be able to offer a variety of products and services (e.g., local renewable energy and energy efficiency).

- 3) For CCAs in NYS to effectively advance REV and SEP goals, state policy needs to enable CCAs to offer customers clean energy products and services other than supply contracts for "basic" supply or RECs for renewable energy located outside of NYS.
- CCAs offering supply contracts for "basic" supply or RECs from renewable energy located outside of NYS will not effectively advance REV and SEP goals.
- Supply contracts containing a percentage of Tier 1 RECs that exceeds the CES will help advance REV and SEP goals.
- CCA Administrators need to be qualified and able to administer programs that advance REV and SEP goals.
- CCAs can promote existing utility energy efficiency or new utility REV programs to provide participants energy efficiency benefits.
- There are not currently mechanisms to fund, finance, or otherwise pay for CCAadministered energy efficiency programs.
- Enabling integration of CCA and CDG will help advance REV and SEP goals.
- The CCA Order states that the "Clean Energy Standard... will also offer CCA programs to support clean energy goals through selfinitiated power purchase agreements with renewable energy generators or deployment or renewable energy resources."
- CCAs would like a clearer path to support local or new development of clean energy supply.
- CCAs cannot feasibly / are not enabled to enter into PPAs directly with generators or to procure supply directly; they must enter such agreements through an ESCO or be an ESCO to do so. Therefore, CCAs require:

Non-Policy Recommendations to help prospective and existing CCAs establish programs that offer products and services that advance REV and SEP goals pertain to:

- o Access to data;
- o Funding;
- o Technical resources; and
- o Technical support.

Policy Recommendations to enable CCAs to leverage mechanisms that support increased clean energy consumption, clean energy development, and energy efficiency pertain to:

- o Access to data;
- Enabling CCAs to effectively serve CDG customers;
- Enabling CCAs to access additional financial resources that can be used to develop programmatic offerings (e.g., DER including energy efficiency);
- Evaluating options for enabling CCAs to have more billing options for value-added products and services other than supply; and
- Enabling ESCOs that provide product and services that CCAs can offer to advance REV and SEP goals.

- ESCOs capable and willing to offer such products and services, that are trusted; or
- o The ability to integrate other programs such as CDG.

One of the Subgroup's key non-policy recommendations is that, at this time, providing additional technical and financial resources may effectively help advance from the Current Phase to the Near-Term Phase of CCA activity in NYS. Two recommendations for providing additional technical resources include: 1) developing a CCA Handbook to help increase understanding about programmatic options for CCA (see Appendix F); and adding resources to the NYSERDA CCA Tool Kit (Appendix H). State-administered, up-to-date, accessible, interactive, and intuitively accessible information may help facilitate the development of CCA in NYS.

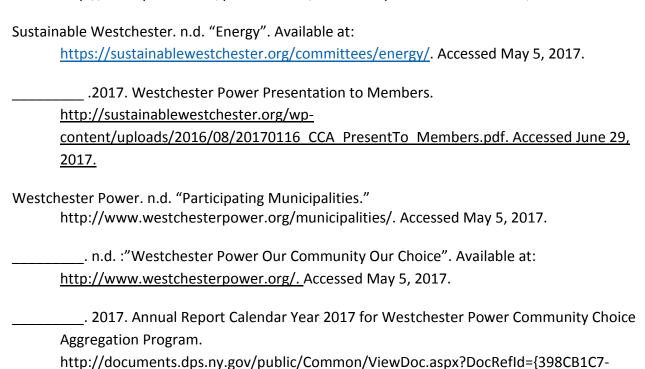
As CCAs continue to develop in NYS, the state will be able to more effectively assess value propositions associated with these policy recommendations and identify additional recommendations for advancing effective CCA activity statewide. Therefore, the Subgroup recommends it be reconvened after:

- Some of the recommendations identified in this Report have been implemented;
- CCA activity has increased; and/or
- When the PSC is considering or acting on issues directly related to CCA.

Reconvening the Subgroup would allow it to re-evaluate NYS CCA policy and potentially generate additional recommendations (see Appendix E for topics identified by the Subgroup that may warrant additional discussion).

APPENDIX A REFERENCES

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- Maloney, Peter. 2016. "How the Illinois Energy Reform 'Fixed' the State's RPS, Promising a Renewables Boom." Utility Dive. http://www.utilitydive.com/news/how-the-illinois-energy-reform-fixed-the-states-rps-promising-a-renewab/432877/. Accessed July 28, 2017.
- National Renewable Energy Laboratory. 2016. "Status and Trends in the U.S. Voluntary Green Power Market (2015 Data)." http://www.nrel.gov/docs/fy17osti/67147.pdf. Accessed March 28, 2017.
- PRWeb. 2017. Westchester Power Launches "emPowering Green Energy". Available at: http://www.prweb.com/pdfdownload/14199968.pdf. Accessed June 29, 2017.



8984-43E0-9EB6-626BB4D0BAA3}. Accessed June 29, 2017.

APPENDIX B RESOURCES

New York State

PSC Case 09-E-0115 – Proceeding on Motion of the Commission to Consider Demand Response Initiatives, issued February 17, 2009

PSC Order in Case 09-E-0115 – Demand Response Initiatives, Order Instituting Proceeding, issued February 17, 2009

PSC Order Instituting Proceeding 14-M-0101– Reforming the Energy Vision, issued December 12, 2014

PSC Order in Case 14-M-0094 – Proceeding on the Motion of the Commission to Consider a Clean Energy Fund, issued January 21, 2016

PSC Case 15-E-0302 – Proceeding on Motion of the Commission to Implement a Large-Scale Renewable Program and a Clean Energy Standard, issued January 25, 2016

PSC Order in Case 14-M-0224 – Order Authorizing Framework for Community Choice Aggregation Opt-out Program, issued April 21, 2016.

PSC Case 15-E-0751 – The Value of Distributed Energy Resources Order, issued March 9, 2017

PSC Case 16-M-0411 – In the Matter of Distributed System Implementation Plans, issued March 9, 2017

New York State Energy Research and Development Authority (NYSERDA). 2015. Community Distributed Generation.

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nTAhWmiVQKHUu9BiAQFghGMAU&url=https%3A%2F%2Fwww.nyserda.ny.gov%2F-%2Fmedia%2FNYSun%2Ffiles%2FMeetings%2F2015-08-27%2FCDG-

<u>Webinar.pdf&usg=AFQjCNGkrtNQH6zR8SkSddcNcVjwpa8Elw&sig2=VF0ls7G7lOn0ANQEn_9vw_A.</u> Accessed May 22, 2017

Westchester Power

http://www.westchesterpower.org/



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APPENDIX C CCA IN OTHER STATES ANALYSIS

	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
Legislation / regulation authorizing CCA	CASE 14-M-0224, April 21, 2016; Proceeding on Motion of the Commission to Enable Community Choice Aggregation Programs	Chapter 164 of Acts of 1997; The Restructuring the Electric Utility Industry in the Commonwealth, Regulating the Provision of Electricity and other Services, and promoting enhanced consumer protections therein. Chapter 169 of Acts of 2008; Green Communities Act, which established a new, second bill adder to fund energy efficiency programs, which CCAs also have access to, in addition to the SBC.	123 rd General Assembly, Senate Bill 3, July 6, 1999 127 th General Assembly Senate Bill 221, July 31, 2008	Assembly Bill 117, January 22, 2001; Electrical restructuring: aggregation Senate Bill 790, October 8, 2011; Electricity: Community Choice Aggregation Two major CPUC decisions in proceeding: rulemaking R03-10-003 Phase 1 decision Implementing Portions of AB 117. 04-12-046 12/2004 Concerning Community Choice Aggregation. Phase 2 Decision on Community Choice Aggregation 05-12-041. 12/2005	H-8124 Substitute BC, August 7, 1996; Rhode Island Utility Restructuring Act House Bill 7786, Relating to Public Utilities and Carriers, February 27, 2002	90 th General Assembly House Bill 362, Electric Service Customer Choice and Rate Relief Law of 1997 Note: it is referred to as "municipal aggregation" instead of CCA.	P.L. 2003, Assembly Bill 2165, Chapter 24, February 27, 2003; An Act concerning government energy aggregation, amending and supplementing P.L. 1999, c.23 and repealing section 44 of P.L. 1999, c.23. Note: legislation calls it Government Energy Aggregation (GEA), instead of CCA.
State objective / reason for authorizing CCA	To advance SEP and REV goals including clean energy, DER, and energy affordability related goals	The enabling legislation does not specifically reference any particular objective. It is up to the community. According to a Metropolitan Area Planning Council (MAPC) factsheet, most CCAs' goals are cost savings and price stability. More communities are becoming interested in CCA as a means of procuring cleaner power. Some CCAs seek to offer	Cost savings	Solve problems associated with the California energy crisis. Cost savings Rate stabilization Renewable energy Energy efficiency Note: Local development/ job creation is a common objective of CCA programs.	Cost savings. In the first year the price a CCA offers must be lower than current rate a customer would pay outside the CCA unless it is guaranteed to be lower in subsequent years. Renewable Energy: CCAs are exempt from the cost savings requirement if higher costs are	Cost savings and price stability. Cost Savings and price stability are the primary goals. However, some municipalities have chosen supplies from wind, or suppliers that limit their supplies from coal, nuclear, and combined gas and offset GHG	Cost savings: The energy price has to be equivalent or below that supplied by the utility at the time of signing a contract with a third party supplier, plus pro-rata value of cost of compliance with RPS. Renewable Energy: Higher rates are permitted if the CCA includes a higher percentage of green energy than is

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	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
		greener power or support development of local generation (Melrose, Lancaster, and Nantucket).			attributed to the purchase of renewable energy.	emissions through REC purchases.	required by the current NJ renewable portfolio standard.
Commodities CCA can offer	Electric and/or Gas	Electric Legislation for gas has been proposed.	Electric and/or Gas	Electric	Electric and/or Gas	Electric	Electric and/or gas fixed contracts for up to 24 months.
Default energy option / supply structure for customers that do not live in a municipality that participates in a CCA.	The default option for customers is to receive bundled transmission and supply services from the utility, or they can select an ESCO for supply service.	The default option is to receive bundled transmission and supply services from the utility, or to select a retail supplier. For residential and small commercial customers, utilities publish fixed prices (basic service rates) which are 6-month terms. These rates are procured in two 12-month overlapping procurements. Larger accounts (labeled as industrial) are subject to prices that are fixed for 3 months (though the monthly price for each of those three months is shaped seasonally).	The default option for customers is to receive bundled transmission and supply services from the utility that serves their territory, or they can select a Certified Retail Electric Supplier (CRES) for supply service.	The default option for customers is to receive bundled transmission and supply services from the utility that serves their territory.	The default option for customers is to receive bundled transmission and supply services from the utility that serves their territory, or they can select a competitive supplier for supply service.	The default option for customers is to receive bundled transmission and supply services from the utility that serves their territory.	The default option for customers is to receive bundled transmission and supply services from the utility that serves their territory.
Baseline data about CCA activity	One CCA, Westchester Power, provides two supply contract options to 20 participating municipalities; 14 of the 20 have	approved .CCA plans. As of 2017 as many as 60 programs were active (this includes the 20 towns and 2 counties	 More than 350 CCAs successfully launched. The largest CCA, managed by 	 CCA retention rates have been around 78-89%. To-date no CCAs in California have terminated service. Most CCAs have successfully provide competitive or lower rates than utilities. 	No current CCA activity.	 More than three- quarters of the communities in Illinois started participating in CCA between 2012 and 2014. 	There are 44 GEAs in New Jersey. There may be other communities that have GEA but neither the State nor its utilities maintain a

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New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
chosen the 100% renewable supply option as the default option for their community. The Implementation Plan for the MEGA CCA program pilot was approved by the PSC in October 2017.	23 municipalities that are participating in the Southeast Regional Planning and Economic Development District CCA program, and 15 municipal programs). A 2013 Tufts University study found that "any savings are modest and unpredictable," based on rate comparisons of 6 programs (including CLC). At the time of the study, at least three towns, Lunenburg, Ashland, and Marlborough, suspended their programs because they couldn't beat the utility price (all three of these programs were active as of 7/31/2017). Melrose suspended it program as of July 2017 because the utility was able to offer their customers a better price. According to CLC staff, rates are not predictable. Current CLC rates compared to utility: residential is slightly lower (0.2%).	Northeast Ohio Public Energy Council (NOPEC), aggregates almost 500,000 customers in 13 counties.	 8 active CCAs are directly responsible for more than 50 MW of solar generation. 8 CCAs preparing for service in 11 counties in 2018. 5 CCAs anticipated in 2019. As a result of CCA, the load served by investor-owned utilities is expected to decrease from 183K GWH in 2014 to 65K GWH in 2021. 118,000 GWHs to be served by CCA by 2021. 2016-2018 is 80K GWH for CCA. 		 Over 700 communities are being served by a CCA. Over 2,000 communities are active, inactive, or have a referendum passed to allow CCA. In 2016, 1.9 million individual customers were served. CCAs have been terminated or suspended as a result of energy market price fluctuations. 	comprehensive, publicly available list.

	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
Administrative Structures	 Opt-out CCAs are allowed to use administrative structures including: third-party CCA Administrator/con sultant, local government, non-profits including LDC. Westchester Power is administered by a non-profit. 	 Opt-out small and large customer classes. Towns, cities, and counties can form a CCA. CCAs are allowed to use administrative structures including: third-party CCA Administrator/ consultant; local government; and non-profits. Most CCAs are administered by third-party CCA Administrators /consultants. Most CCAs represent a single municipality. The CLC was formed through an intermunicipal agreement (IMA) which gave CLC the authority to negotiate contracts on behalf of members. The contracts are signed by the CLC Administrator. CLC was staffed through an Administrative Services Agreement with Barnstable County: All staff are County employees, funded entirely through the supply contract (if they work on supply) or the 	 CCAs are allowed to use administrative structures including: third-party CCA Administrator/ consultant; local government; and non-profits including LDC. Most CCAs are administered by third-party CCA Administrators /consultants. 	 Opt-out (residents, businesses, and municipal facilities) CCAs are allowed to use administrative structures including: third-party CCA Administrator/consultant; local government; and non-profits. CCAs are LSEs that have autonomy to facilitate whole purchase and retail sale of electricity Few if any CCAs are administered by third-parties. Most are administered by a local entity, which allows the CCA to represent community interests better than a traditional utility provider. Examples of local CCA Administrators: Public agencies that are governed by a public board of directors, city council, or commission. Boards are comprised of elected officials from each participating municipality. Inter-jurisdictional joint powers authorities (JPAs). Single city or county. 		 Both opt-out and opt-in CCA programs are managed by both public organizations and private sector companies; local governments facilitate the aggregation contract, but do not assume day-to-day administration of the program. The corporate authorities of a municipality, township, or county board of a county may adopt an ordinance under which it may aggregate residential and small commercial retail electrical loads located, respectively, within the municipality or the unincorporated areas of the county. 	 Opt-out (residential customers); opt-in (non-residential customers) CCAs are allowed to use administrative structures including: third-party CCA Administrator/ consultant, local government, non-profits including LDC. The local government must act to hire a contractor or consultant.

	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
		SBC (if the work on energy efficiency programsthe majority of CLC staff.) Programmatically, CLC was/is entirely independent of the county. The relationship between Barnstable County and CLC was recently severed.					
Program Offerings	Westchester Power provides energy planning guidance and energy efficiency education, and conducts active community outreach throughout participating municipalities. Westchester Power recently began promoting DER opportunities to municipalities and residents.	 Most CCAs focus on achieving cost savings and stable rates through supply contracts. Some CCAs provide 100% renewable supply options associated with the purchase of RECs. In the last year, the City of Greenfield offered a 100% green option 	 CCAs primarily focus on delivering lower electric and natural gas rates. Some CCAs provide 100% renewable supply options associated with the purchase of RECs. The largest CCA in Ohio, managed by NOPEC, has negotiated an earmarked amount of revenues from their supplier NextEra to develop new renewable energy. Some CCAs provide energy efficiency 	 CCAs offer customers at least two options, a basic mixed energy portfolio (typically 35% to 75%), or a 100% renewable energy option. CCAs have focused on providing clean energy options and the development of local renewable energy projects, as well as the integration of distributed energy resources. Many offer feed-in-tariff incentives for medium and large-scale local solar projects, energy efficiency programs, and demand response programs. CCAs can elect or apply to administer energy efficiency programs. CCAs are serving LMI communities. Net metering programs. 	None.	Most CCAs focus on cost savings and stable rates, which are delivered by supply contracts.	Clean Energy Fund: of \$300 million, eligibility includes CCAs, administered by LDC. Consumer education program to educate residential, small business, and special needs consumers. Information should educate consumers to make informed choices. Legislation does not make any provisions specific to LMI customers.

New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
	is advocating for this). These programs are newMelrose and Dedham (since January 2016) and Brookline's contract started in July 2017. (Note: Melrose suspended its CCA program as of July 2017). MA has an SREC carve- out, which may enhance the ability of CCAs to support local generation. The Town of Lancaster is building its own 500 KW solar facility. The CCA's supplier will support this development by buying SRECs through a long-term contract. Procurement of renewable energy supplies from regional or local generators and investment in CCA generation may be an objective of some CCAs. Nantucket CCA offers a solar rebate program	services to their service customers.	Electric vehicle incentives and offers.	(2002)	Illinois (2003)	New Jersey (2009)
	for customer-sited installations of \$2,500, paid for by an additional bill adder.					

	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
Administrative / Programmatic Financing	Administrative: CCA Administrators may collect an administrative fee that can be used to cover administrative costs that have been included in a PSC approved Implementation Plan.	Administrative: CCA Administrator is responsible for initial fees for start-up and implementation. CCA Administrators can collect a fee from customers to cover administration / consultant costs associated with administration. They can also include an additional adder for a clean energy fund to use for their own programs (see Nantucket example). Programmatic: CCAs can access the SBC if they meet the same requirements for designing and implementing an approved energy efficiency plan as the distribution companies and fulfill the administrative and reporting requirements. CCAs can apply to the Massachusetts Clean Energy Technology Center for funding from the Renewable Energy Trust Fund. CLC uses funds from both adders for energy	Administrative: CCA Administrators can collect a fee to cover administration / consultant costs associated with administration.	Administrative: Participating municipalities may need to provide loans or loan guarantees to enable the JPA to secure bank loans for initial working capital for the CCA. Sonoma Clean Power obtained a loan from a local bank. Marin Clean Energy got a personal loan from a high net worth individual. Programmatic: Can use revenue to finance worthy public benefit programs such as solar projects and energy efficiency. CCAs can elect to/or apply to administer energy efficiency programs. If they are limited to non-state-wide program funds and can only serve their customers. If they apply, they are able to serve everyone in their service area (CCA or IOU customers). Revenue bonds may be issued to finance energy efficiency and renewables.			Administrative: Utilities are eligible to recover "all reasonable costs" associated with implementing the CCA as well as "all reasonable costs" incurred in assisting local governments considering a CCA program. Costs may not be recovered through the utility's shareholders or ratepayers. Programmatic: Fees for education outreach may be recovered from customers.

	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
		efficiency programming, with a total annual 2016- 2018 budget of \$40 million.					
Are CCAs required to pay data fees?	Utilities are allowed to charge a fee for providing a CCA with aggregated data. Until the PSC reaches a conclusion on the tariff, CCAs and utilities are authorized to negotiate individual agreements for data fees. Amendments to CASE 14-M-0224 Proceeding on Motion of the Commission to Enable Community Choice Aggregation Programs, to implement fees for Community Choice Aggregation Data Services has been postponed until December 1, 2017.	Aggregated data is provided to a CCA Administrator prior to an Order being issued. Once the municipality provides an authorized letter to the utility, twelve months of usage by rate class is provided. CCAs do not have to pay to receive these data. Additionally, there are no special fees charged to ESCOs upon contract award.		Yes, fee structures are established in utility tariffs. Sonoma Clean Power paid \$27K for data for ~200-250K accounts Data used by CCAs includes electrical load data including, but not limited to data detailing electricity needs and patterns of use.		Ameren has no fee for data. Data are accessed through an online portal (developed for CCA); ComEd has a nominal charge (by community) and uses a onepage e-mail form. Both utilities provide three types of data: a preliminary premise list (to verify addresses are within a CCA's jurisdiction); summary customer usage report (summary customer load data for use for bidding); and detailed customer usage report (for customer enrollment).	A utility may disclose and provide in electronic format, without the consent of a residential customer, a residential customer, a residential customer's name, rate class, and account number, to an aggregator or consultant to a government aggregator, if the information will be used to establish a CCA. The number of residential customers and their rate class, and the load profile of non-residential customers who have opted-in may be disclosed to the government aggregator for bids and may be disclosed upon awarding a contract. A proposal was made in the New Jersey Register in December of 2016 to require the utility to provide aggregate capacity

	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
							obligation, aggregate transmission obligation, and aggregate usage data by residential rate class for residential customers, to GEAs providing electric service. For GEAs providing gas service, the utility must provide aggregate usage data by residential rate class.
Data security protocols	CCAs must ensure the same level of consumer protections provided by utilities and ESCOs. These standards were defined by the Department of State and the affected utilities in the standard Data Security Agreement which, includes data security protocols and restrictions to prevent the sale of the data or its use for inappropriate purposes, such as advertising. CCA Administrators will file a Data	No data security requirement.		To get the data, a chief elected official of a municipality of the CCA has to state that it is pursuing CCA. A non-disclosure agreement is signed.		NDA signed with utility.	The public utility is required to provide "appropriate customer information" to the CCA Administrator once a supply contract has been signed. The public utility shall not disclose information about a non-residential customer prior to their opting into the program.

	New York (2016)	Massachusetts (1997)	Ohio (1999)	California (2002)	Rhode Island (2002)	Illinois (2003)	New Jersey (2009)
	Protection Plan which must be consistent with the standard Data Security Agreement.						
Completed an Advanced Metering Infrastructure (AMI) Roll Out		The state has required that IOUs deploy smart meters. These plans are currently being rolled out by utilities. National Grid installed 1,500 in a pilot in 2015 and plans to install 1.3 million by 2020. 43,000 had been installed by investor-owned utilities by 12/2015.	Roll out started in 2017	AMI was established state-wide. It is important for CCA because it creates a time-of-use architecture for DER. It's a long-term asset. Not much value to date.		Roll out started in 2016	AMI has not been rolled out.
Evaluation	Annual reports are required to include: number of customers served; number of customers cancelling during the year; number of complaints received by the CCA liaison; commodity prices paid; value-added services provided during the year; and administrative costs collected.	Department of Energy Resources (DOER) requires an annual report that shows the number of customers served, kWh served, price charged to consumers, etc. be submitted by active aggregations. For CCAs administering the SBC, there are extensive reporting requirements. CLC has consistently met and recently exceeded its energy efficiency targets.		There are reporting requirements for the CPUC to the Legislature. Primary metrics are rates, RPS level, energy efficiency levels, and customer participating in DER. Future metrics will be load reform impacts. JPA provide audited financial statements to member municipalities every two years.			Legislation stipulates that there should be criteria to judge the success of the education program in enhancing customer understanding of retail choice.

APPENDIX D CROSS CUTTING ISSUES: LIMITATIONS AND NON-POLICY RECOMMENDATIONS

Acknowledging and addressing these limitations and challenges, as well as the policy barriers identified in Section 5.1.2 and Section 5.2.2 may enhance CCA capabilities and the benefits that CCA is able to provide.

Table D-1 Cross Cutting Issues: Administration

Limitations	Non-Policy Recommendations
Limited availability of and/or access to experienced and qualified CCA Administrators, staff, and volunteers.	,

Table D-1 Cross Cutting Issues: Administration

Limitations	Non-Policy Recommendations
• Limited access to information and experienced personnel required to effectively assess the feasibility of a CCA and to create a business plan and Implementation Plan.	• Technical Resources: Provide technical resources (e.g., NYSERDA staff involvement, solar technical experts) to assess the potential level of effort and costs associated with a CCA and its objectives.
The energy regulatory environment is congested, REV initiatives are not fully implemented, and REV markets have not developed. This causes confusion and limits the advancement of CCA programs and the model for CCA in NYS.	for CCA that addresses common questions and concerns and will help CCA Program Organizers and Administrators better understand opportunities for CCA.
• There is a lack of existing CCAs in NYS from which to derive lessons learned, best practices, and policy insights. There is also uncertainty about the financial viability of CCA in NYS.	 Funding/Technical Support: Provide incentives for the near-term submittal of Implementation Plans to encourage the establishment of additional CCAs. Technical Resources: Provide support and templates for RFIs to help municipalities and CCA Program Organizers understand the economic viability of CCA in NYS.
 The market of CCA Administrators and vendors is limited. The few existing options represent different approaches to CCA and have not been tested or proven in NYS. Limited access to CCA Administrators with experience advancing DER. 	• Funding: The state should create incentives to encourage the development of Implementation Plans and subsequent development of CCAs using local CCA Administrators and third-party CCA Administrators with performance-based contracts. This would encourage communities with existing institutional capacity and vendors with experience with CCA in other states to be early adopters of CCA in NYS that can generate lessons learned.

Table D-2 Cross Cutting Issues: Financing

Limitations	Non-Policy Recommendations
	•
Limited availability of /access to funding to cover:	• Funding/Incentives: Create a dedicated funding stream or financial incentives to
CCA start-up costs (financial budget drives CCA)	help fund CCA start-up costs as well as implementation and operation.
development and implementation).	• Technical Support: Engage lending entities (banks and credit unions) and entities
o e.g., wages, legal fees, costs for travel and meetings,	with funding that could support CCA start-up costs and initial project investments.
brochures /marketing outreach materials, website	Technical Resources: Provide state support for developing and distributing (possibly)
development and maintenance, data management	via the NYSERDA CCA Toolkit) educational resources to lending entities to diversify
services, etc.	the type and increase the number of institutions aware of opportunities to provide
CCA implementation and operation (financial budget drives)	capital or funding for CCAs.
CCA implementation and operation).	
o e.g., resources to incentivize / finance energy efficiency	
upgrades, or to establish new DG projects.	
o Communication / education / outreach to customers.	
Currently NYSERDA and other state solicitations for project	• Funding/Incentives: Solicitations for project proposals for competitive funding
proposals for competitive funding opportunities often do	opportunities should be reviewed to determine if CCAs should be eligible entities,
not clearly indicate whether CCAs are eligible entities.	and the solicitations should be revised to clearly state if CCAs are eligible.
Limited understanding of options for billing for CCA value	• Technical Resources: Further studies on how value-added products and services can
added-product and services, other than commodity supply,	be included on utility bills is required to understand the feasibility of billing for these
via the ESCO supply line item on the utility bill. ESCOs vary	products and services.
in their ability to include value-added products and services	• Handbook / Technical Resources / Technical Support: Clarify options for billing for
in the supply commodity that is included on the utility bill,	CCA services (e.g., provide opt-up services with billing separate from the utility bill)
and the possible options are not well understood.	via a CCA Handbook, webinars, and discussions about CCA administration.
Options and information about DER financing is limited.	• Handbook / Technical Support: Include information about DER financing options in
Therefore, it is difficult for CCA Administrators to facilitate	a CCA Handbook or other DER-related document/s designed for communities
adopting DER technology in their communities.	seeking DER.
	Technical Support: Leverage NYSERDA data and resources to assist CCAs in mapping
	DER opportunities and resources.
	• Technical Support: Provide state personnel that can provide technical support to
	CCA Administrators, helping to educate them and to navigate the process of
	securing financing for DER projects.
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Community Choice Aggregation Subgroup	Community	Choice	Aggregation	Subgroup
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•	Technical Support / Resources: Provide information on the conditions necessary for
	a CCA to enter into PPAs.

 Table D-3
 Cross- Cutting Issues: Data Access / Cost / Presentation / Management

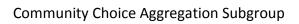
Limitations	Non-Policy Recommendations
Developing CCAs have limited access to local energy data, including aggregated usage data, to assess the feasibility of their CCA and to identify appropriate CCA objectives, prior to PSC approval of their program.	 Coordination and Information Sharing: Efforts associated with developing the UER should continue to consider implications for advancing CCA activity in NYS. Technical Support: Help CCAs leverage data provided by utilities and other sources (e.g. distributed system implementation plans [DISP]). Coordination and Information Sharing: Data-sharing efforts should continue to advance the amount of utility information available to parties as it relates to systems-based planning and operation of the electric grid (e.g., historical load levels, reliability performance, and forecasts) and also at a granular level and in a format that CCAs can use.
 Utility data aggregation fees. Some CCAs may need upfront funding to pay for aggregation data or to make an arrangement with a supplier, ESCO, or municipality to have them pay utility data fees. There is uncertainty as to what costs associated with data fees CCAs could feasibly afford in the start-up phase, prior to contract execution or could feasibly be paid for by an ESCO when a supply contract is executed. 	Funding: Consider providing funding, in the near-term, to help CCAs cover any upfront utility data fees (e.g. incentives, loans, etc.) until they are able to generate revenue to cover costs associated with data fees.
During CCA operation a large volume of data that needs to be managed to meet customer service and reporting requirements. Managing data is likely one of the biggest costs for CCA.	• Technical Support/Technical Resources: Help CCA Program Organizers and Administrators understand data management requirements and options. Provide technical resources (templates, tutorials) and support. Identify best practices.

Table D-4 Cross Cutting Issues: Planning

Limitations	Non-Policy Recommendations
 Some communities have limited access to experienced personnel able to effectively undertake community energy planning, including assessment of opportunities for DER. They may also lack access to technology (e.g., geographical information system [GIS] software) or staff experienced in using the technology for energy planning purposes. 	Technical Support: NYSERDA/NYS/regional planning organizations could provide technical assistance, training, and information to help communities identify and map opportunities for DER.
No current NYS DER Feasibility Studies account for existing and / or potential CCA programs.	 Technical Support/Funding: NYS could provide expertise, funding, or share data (e.g., pertaining to DG and energy efficiency, such as existing renewable energy generation, sites suited for generation, and information about customers that had had energy audits) to assist CCAs in mapping DER opportunities, setting targets and goals, and developing programs to meet those targets and goals. This state assistance would also enable feasibility studies of regional grid infrastructure and/or jurisdictions with decision-making authority. Technical Resources: The state could endorse trusted, neutral, third parties to conduct these studies.

Table D-5 Cross Cutting Issues: Education

Table D-5 Cross Cutting issues. Education	
Limitations	Non-Policy Recommendations
 Awareness and understanding of the existing opportunities and benefits that CCA programs and DER can provide to the communities and customers is limited. Typically, municipalities are not familiar with the energy industry and may not feel they have the appropriate level of understanding of energy-related topics and opportunities to make informed decisions for their communities. 	 Technical Resources: The state should provide educational resources to foster the initial and continued interest in CCA and the advancement of DER. Technical Support: Provide state support for municipalities to help municipal officials understand the energy industry and how to assess energy related opportunities associated with CCA.
There is a limited understanding of the roles, responsibilities, interests and objectives of the various energy market stakeholders.	 Coordination and Information Sharing: The state should host regular energy planning and knowledge-sharing meetings for stakeholders to facilitate an understanding of the roles, responsibilities, and new opportunities of an engaged and motivated community. CCA Handbook: A CCA Handbook may help address common questions and concerns and increase the understanding municipalities and potential CCA Administrators or partnering entities have about options for CCA.
 The energy system and energy markets can be confusing and may be difficult for some customers to understand. Despite existing education and outreach, customers may not be well-informed about opportunities to be more energy-efficient. Customers may not understand the individual and local benefits associated with a decentralized/clean energy grid (e.g., related to climate change, public health, energy reliability and resiliency, local development, energy equity etc.). 	 Education and Outreach: The state or a regulatory authority should develop resources or work with CCAs to facilitate the communication/outreach/education for energy awareness for both the municipalities and for the consumers and describe how these topics relate to CCA. Education and Outreach: The state could help CCAs develop and/or conduct community campaigns to educate consumers on behavior changes and efficiency improvements. These campaigns may include resources and information about access to financing for efficiency improvements and should work in coordination with utility programs. Coordination and Information Sharing: Utility energy efficiency programs (e.g., those related to behavior changes) could be targeted at communities participating in CCA, at little cost to the CCA.



Draft Report

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APPENDIX E TOPICS FOR ADDITIONAL DISCUSSION

Topics that were briefly discussed by the Subgroup that may warrant additional discussion include:

- how rate design proceedings and development of time of use rates relate to CCA; and
- identifying CCA customers as a sub-class to allow CCAs to sell resources and to leverage capacity tags and measurements of performance.

APPENDIX F HANDBOOK TOPICS

A CCA Handbook should provide a full spectrum of options for CCA decision-makers in NYS, so they can have some independent basis for deciding on the goals, objectives, and administration of CCA. This Appendix includes a list of topics identified by the Subgroup that should be considered for inclusion in a CCA Handbook.

- 1 Introduction
 - 1.1 Statement of Purpose and Objectives
 - 1.2 Background
 - The 2015 State Energy Plan and Reforming the Energy Vision Initiative
 - 1.3 Overview: CCA in New York
 - 1.3.1 CCA: Aligned with Achieving REV Goals
 - 1.3.2 PSC CCA Order
 - 1.3.3 Existing Energy Stakeholders, Services, and Programs
 - 1.3.3.1 Utilities
 - 1.3.3.2 Partners
 - 1.3.3.3 CCAs in NYS
 - Existing CCAs in NYS Case Studies and Lessons Learned
 - O Lessons Learned from Communities in NYS that are Considering CCA
- 2 CCA Key Elements
 - 2.1 Objectives
 - 2.1.1 Advance REV / SEP Goals
 - 2.1.1.1 Informed Energy Consumption
 - o Public Outreach and Engagement
 - o Consumer Education
 - Potential Roles and Responsibilities for Stakeholders involved in Education and Outreach
 - Existing Energy Education and Outreach Programs and Initiatives
 - Potential Topics for Education and Outreach to increase energy awareness and literacy
 - 2.1.1.2 Cost Savings / Rate Stabilization
 - o Rate Stabilization
 - o Cost Savings
 - O Use Related Savings
 - 2.1.1.3 Local Decision Making about Energy sourcing
 - O Energy Planning
 - Regional and Local Energy Planning
 - Utility Energy Planning

- o Energy Supply Management
 - DER
 - O Information about DER financing options and considerations
 - Renewable Energy
 - Examples of Programs and Initiatives in NYS
 - RECs
 - Non-DG Renewable Energy
 - DG/Local Renewable Energy
 - o CDG Comparison of CCA and CDG and opportunities for alignment and integration
 - o customer-sited distributed generation
 - o Energy Efficiency
- o Energy Demand Management
 - Demand Response/Management
 - Storage and Batteries
- 2.2 Benefits and Beneficiaries
 - 2.2.1 Customers
 - 2.2.2 Community
 - 2.2.3 Local Economy
 - 2.2.4 Climate and Environment
- 2.3 CCA Phases, Structures and Administration
 - 2.3.1 CCA Development
 - 2.3.2 CCA Implementation
 - o Administrative Structures
 - Non-Profit
 - Local Development Corporation
 - Municipally Run
 - CCA Administrator
 - 2.3.3 CCA Operation
 - o CCA Management
 - Staffing
 - Financial
 - Planning
 - Program development (other than supply contract)
 - Education & outreach
 - o Roles and Responsibilities for Supporting and Conducting CCA Activities
 - Municipalities

- NYS Energy-Related Agencies and Authorities
- Utilities
- Energy Services Companies (ESCO)
- CCA Partners
- 2.4 Cross Cutting Issues (considerations, challenges, and limitations)
 - 2.4.1 Administration (resources and capabilities
 - 2.4.2 Financing (including guidance for financial feasibility assessments and options for billing)
 - 2.4.3 Data Access / Costs / Quality / Management

APPENDIX G SUGGESTIONS FOR ADDITIONS TO THE NYSERDA CCA TOOLKIT

- Provide a frequently asked questions and answers pertaining to CCA for CCA Administrators and participants.
- Template RFIs for supply with provisions for support of local DER (including CDG).
- Template RFPs for:
 - Selecting CCA Administrators
 - Selecting ESCOs to provide:
 - 1) Cost savings;
 - 2) Renewable energy;
 - 3) Local renewable energy (including CDG); and
 - 4) Local renewable energy from a specific local energy generator.
- Educational materials and training options (e.g. webinars or training modules) to help:
 - CCA Administrators effectively manage and educate staff and volunteers;
 - Lending entities (e.g. banks and credit unions) and entities with funding understand
 CCA and opportunities to provide capital to CCAs; and
 - Municipal officials understand the energy industry and how to assess energy-related opportunities associated with CCA.
- Provide technical resources (templates, tutorials, best practices) pertaining to data management associated with CCA operation.
- Templates or tools to help emerging CCAs develop business plans and assess financial feasibility.
- Data resources for mapping local DER potential for CCA planning
- Incorporate a "clearinghouse" component, to document and highlight updates and revisions to REV programs that pertain to the CCA Order or other development that may pertain to CCAs.
- Centralized "clearinghouse" for documentation about the activity of CCAs including:
 - Implementation Plans; and
 - Annual CCA reporting, including information about CCAs' ability to meet the objectives of their programs.