



Community Choice Aggregation (CCA)

PRESENTATION TO THE SHELTER ISLAND TOWN BOARD

MICHAEL J. BEBON, P.E.

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Presentation Outline

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Suffolk County CCA Task Force

CCA Task Force

- ▶ In 2019, as interest increased in creating CCA in Suffolk County, the County Legislature authorized the formation of a Task Force, sponsored and led by Legislator Bridget Fleming.
- ▶ Legislator Fleming's district includes the South Fork of Long Island where local towns experiencing impacts from a changing climate had already begun exploring CCA as an option to offer choices in renewable energy supply.
- ▶ This presentation drew heavily from the work of the Task Force

Acknowledgments:

Members of the Task Force

- ▶ Hon. Bridget Fleming, Legislator County of Suffolk, 2nd Legislative District & Chair of CCA Task Force
- ▶ Hon. Mike Bebon, P.E., Council Member, Town of Shelter Island, NY
- ▶ Hon. John Bouvier, Council Member, Town of Southampton, NY
- ▶ Lisa Broughton, Energy Director, Suffolk County Department of Economic Development and Planning
- ▶ Daniel Busi, Managing Director, US Green Building Council-Long Island
- ▶ Tim McCarthy, Business Representative, IBEW Local 25
- ▶ Frank Messina, Grant Technician, Town of Riverhead, NY
- ▶ Paul Pallas, Village Administrator, Village of Greenport, NY
- ▶ Gordian Raacke, Executive Director, Renewable Energy Long Island

Vocabulary of Electric Power

The Vocabulary of Electric power

- ▶ **Generation** – production of electrical energy - fossil fueled (coal, oil, natural gas) or nuclear central station steam power plant; renewable generation (solar, wind, hydroelectric, tidal); smaller “peaking” power plants (gas turbine, diesel generators)
- ▶ **Transmission** – conveying electrical energy from a generation facility to a local distribution system; usually at high voltages 345,000 volts (345kV) or 138kV
- ▶ **Distribution** – local systems operating at lower voltages (4.16-69kV) that distribute electric power within a locality to the point of use (homes, businesses, etc)
- ▶ **The Grid** – the nationally inter-connected system of generating facilities, transmission and distribution systems
- ▶ **Wheeling** – moving electrical energy across the systems of different utilities from generating facility to point of use
- ▶ **Investor-Owned Utility** – private sector company that operates a utility systems
- ▶ **Deregulation** – process of eliminating the monopoly aspect of utilities and allowing consumers to “shop” for electrical energy to increase competitiveness; started in NY in the early 1990s; typically prevented utilities from owning both generation and transmission

The Vocabulary of Electric Power

- ▶ **NY Independent System Operator (NYISO)** – a not-for-profit corporation that operates New York's bulk electricity grid, administers the state's wholesale electricity markets, and provides comprehensive reliability planning for the state's bulk electricity system.
- ▶ **NY Public Service Commission** -the public utilities commission of the New York state government that regulates and oversees the electric, gas, water, and telecommunication industries in New York
- ▶ **Reforming the Energy Vision (REV)** - a set of multi-year regulatory proceedings and policy initiatives. The end goals of REV include reducing carbon emissions from the electric sector and opening up new markets in New York state for emerging energy technologies.
- ▶ **New York Power Authority (NYPA)** - a New York State public-benefit corporation. It operates 16 generating facilities and more than 1,400 circuit-miles of transmission lines. NYPA owns and operates the state's two largest hydroelectric plants at Niagara and on the St. Lawrence River **Public Service Electric and Gas (PSEG)** – a New Jersey based investor owned utility that operates LIPA's electric infrastructure on LIPA's behalf

The Vocabulary of Electric Power

- ▶ **NY Department of Public Service – Long Island (DPS-LI)** - responsible for securing and building accountability and transparency to LI electricity customers. The Department is tasked with obtaining high quality electric service, informing of changes to LI electric service, and overseeing reliable and safe service at reasonable rates.
- ▶ **Long Island Power Authority (LIPA)** - a municipal subdivision of the State of New York that owns the electric transmission and electric distribution system serving all Long Island and a portion of New York City (the Rockaways). ***LIPA is not regulated by the PSC.*** LIPA's policy is guided by a 9-member board of trustees.
- ▶ **National Grid (NG)** –the utility company that owns and operates the former LILCO generating assets. LIPA purchases power from NG (and others) to supply LI.
- ▶ **Public Service Electric and Gas Long Island (PSEG-LI)** – the utility that operates the LIPA transmission and distribution system under contract to LIPA.

The Vocabulary of Electric Power

- ▶ **Power Purchase Agreements (PPA)** – Contracts between a utility and a generating company (Merchant Generator); usually long term contracts
- ▶ **Power** – Watts; 1 kilowatt (kW) = 1,000 watts; 1 megawatt (MW) = 1,000kW (1 MW provides power for about 650 homes)
- ▶ **Energy** – typically expressed in kilowatt hours (kWh); 1 kWh = 1,000 watts for 1 hour (average home energy use in US is 10,649 kWh)
- ▶ **Demand** – The instantaneous amount of power being consumed; usually expressed in megawatts (MW) or kilowatts (kW)
- ▶ **Peak Demand** –the highest demand measured during a given year
- ▶ **Consumption** – cumulative amount of electricity consumed over a period of time (the integral of demand over time); expressed in megawatt hours (MWh) or kilowatt hours (kWh)

The Vocabulary of Electric Power

- ▶ **Market Supply Charge (MSC)** - the price the utility pays for the pure electricity we consume
- ▶ **Merchant Function Charge (MFC)** - covers other costs involved with default service, such as billing and collection charges, responding to service interruptions and outages.
- ▶ **Merchant Generator** - a company that own generating facilities and sell power
- ▶ **Renewable Energy Certificate (REC)** - a renewable energy generator creates a REC for each MWh of energy produced; RECs can be purchased to certify that an individual, business or community is purchasing electricity from a renewable source; RECs are "used" only once.
- ▶ **Energy Services Company (ESCO)** - a business that provides a broad range of energy solutions including designs and implementation of energy savings projects, retrofitting, energy conservation, energy infrastructure outsourcing, power generation and energy supply, and risk management.



Sources of LI's (Nassau and Suffolk County) Electric Power

Where does Long Island's electrical power come from? – On Island Generation

- Long Island's 2019 peak demand was approx. 5,300MW; expected to decline by 750MW by 2030 due to conservation and additional solar installations
- Supplied by a combination of on-island power plants, LIPA's share in an upstate NY plant and purchased power delivered by undersea cables, and ties to the Con Ed system

| Power Plants: On-Island | Capacity MW | Plant Type | Owner |
|----------------------------------------|-------------|-----------------------|------------------|
| Northport | 1,552 | Central Steam | National Grid |
| Port Jefferson | 383 | Central Steam | National Grid |
| E.F. Barrett (Hempstead) | 385 | Central Steam | National Grid |
| Caithness (Yaphank) | 350 | Combined Cycle | Caithness Energy |
| Peaking units various locations | 1,370 | Diesels, Gas Turbines | National Grid |
| Solar Power Plant BNL | 32 | PV panels | LI Solar Farm |
| Various residential & commercial solar | Growing | Typically PV panels | Private |
| Other: LIPA 18% Share of NMP2 | 224 | Nuclear | LIPA |

Where does Long Island's electrical power come from?

► Undersea Cables

| Cable | Capacity MW | Owner | Notes |
|------------------------|-------------|------------------------------|---------------------------------|
| Y49 | 600 | NYPA | Westchester to Glenwood Landing |
| Y50 | 600 | Co Ed/LIPA | Westchester to Glenwood Landing |
| Neptune | 600 | Neptune Regional Transm Syst | Sayreville NJ to Jones Beach |
| Northport – Norwalk CT | 300 | CT Light & Power/LIPA | |
| Cross Sound | 330 | Cross Sound Cable Co | New Haven to Shoreham |

► Tie-Lines between Con Ed and LIPA

What are the plans for future generation in New York State?

- ▶ With the Climate Leadership and Community Protection Act, New York State committed to the most aggressive clean energy and climate agenda in the country
- ▶ The law includes a timeline and specific targets:
 - ▶ 85% Reduction in GHG Emissions by 2050
 - ▶ 100% Carbon-free Electricity by 2040
 - ▶ 70% Renewable Energy by 2030
 - ▶ 9,000 MW of Offshore Wind by 2035
 - ▶ 3,000 MW of Energy Storage by 2030
 - ▶ 6,000 MW of Solar by 2025
 - ▶ 22 Million Tons of Carbon Reduction through Energy Efficiency and Electrification

As NY State pursues these goals, the “next generation” of electric power generating facilities on Long Island will be very different from those of our past!

LIPA plans to retire 400-600MW of steam plant capacity and 64MW of peaking units as early as 2022 and integrate 3,000MW of offshore wind by 2035



Community Choice Aggregation Concept

The CCA Concept

- ▶ CCAs are **local not-for-profit public** programs that take on the decision-making role about sources of energy for electricity generation. The NYS Public Service Commission, on April 21, 2016, approved a "Motion to Enable Community Choice Aggregation".
- ▶ On May 20, 2020, LIPA authorized CCA in their service territory.
- ▶ Community Choice Aggregation ("CCA") is an **energy procurement strategy** allowing local communities to choose their source of energy.
- ▶ By pooling, i.e. "aggregating", **local community electricity demand**, CCAs are able to negotiate a fixed-rate energy supply with competitive suppliers and developers, rather than the traditional utility business model based on a single energy supplier.

The CCA Concept

- ▶ In a CCA service territory, the incumbent utility continues to own and maintain the **transmission and distribution infrastructure** and provides **metering, and billing services, planning and outage response**.
- ▶ CCAs become the default energy provider for the **power mix**.
- ▶ New York CCA programs enroll all eligible customers within the community, but **individual customers have the ability to opt-out** of the CCA program and remain full-service customers of the utility

Status of CCA Activity

Current CCAs in NYS

▶ As of July 2019:

- ▶ There were 80 municipalities with a local law authorizing CCA and with certification of local authorization submission to The Department of Public Service (DPS) under a CCA Administrator's approved CCA Implementation Plan.
- ▶ There were 60 municipalities, with an estimated total of around 160,000 electric accounts, receiving CCA supply in New York.

CCA Activity on Long Island

- ▶ **CCA on Long Island - As of July 2020, the following municipalities have demonstrated interest in CCA:**
 - ▶ **Town of Southampton** - Enabling Legislation adopted, Administrator retained
 - ▶ **Town of East Hampton** - Public Hearings on Enabling Legislation were held on June 4, 2020 and September 17, 2020
 - ▶ **Town of Brookhaven** - Enabling Legislation adopted
 - ▶ **Town of Hempstead** - Enabling Legislation adopted

The CCA Process

The CCA Process

- ▶ **Expression of Interest** - Typically, the process starts with the municipality expressing interest in CCA by passing a non-binding resolution. This step is optional.
- ▶ **Adoption of Enabling Legislation** - Each municipality intending to implement a CCA program must pass legislation exercising its Municipal Home Rule Law authority, after holding a public hearing.
- ▶ **MOU with Administrator** - For CCA programs where a third party acts as CCA administrator, municipalities may enter into a Memorandum of Understanding (MOU) with the CCA administrator to commit to participate in the CCA program

The CCA Process

- ▶ **Inter-Municipal Agreement** - Where a municipality acts as CCA administrator, the municipality may enter into Inter-Municipal Agreements (IMA) with participating municipalities to create a CCA program.
- ▶ **Public Outreach and Education** -The Municipality/Administrator conducts public outreach and education.
- ▶ **Receipt of Customer Data** - Administrator receives and reviews aggregate customer data from the utility.
- ▶ **Public Outreach and Education** -The Municipality/Administrator conducts public outreach and education.

The CCA Process

- ▶ **Receipt of Customer Data** - Administrator receives and reviews aggregate customer data from the utility.
- ▶ **Requests for Proposals** - Administrator issues Request for Proposals for energy supply from ESCOs.
 - ▶ The Administrator reviews responses and can reject proposals or select acceptable proposals.
 - ▶ If no proposals are deemed responsive and competitive, the municipality has no obligation to offer a CCA program.
 - ▶ If proposals are selected, the Administrator enters into contract(s) with the selected ESCO(s). CCA power supply contracts are typically multi-year contracts with a locked-in fixed rate energy price.

The CCA Process

- ▶ In addition to power supply, the CCA can also enter into contracts for other services such as community solar, demand response and energy efficiency programs, energy storage, and bulk purchase programs for solar rooftops or electric vehicle chargers.
- ▶ **Customer Notification** - Administrator notifies customers of CCA plan and opt-out provisions.
- ▶ **CCA Program Launch** - The CCA Program begins.
- ▶ **Annual Reporting** - Annual Reporting is conducted.

The CCA Regulatory Process -NY State

[Not applicable to LI/LIPA]

- ▶ **NYS Public Service Commission's Role:** The Public Service Commission (PSC) Framework Order on CCA sets forth the requirements, terms, and conditions under which CCA programs can proceed through implementation.
- ▶ **The PSC Order** requires that the following documents be filed with and approved by the PSC
 - ▶ CCA Implementation Plan
 - ▶ Data Protection Plan
 - ▶ Local Law Authorization
- ▶ Once these documents have been filed, the PSC will determine whether they comply with the requirement of the PSC's CCA Order and issue an approval.

HOW WOULD IT WORK ON LI?

[Not fully defined at this time]

- ▶ While the LIPA decision on May 20th to adopt a CCA tariff enables CCA on Long Island, certain **procedural steps** need to be taken to better define how DPS-LI and PSC will process a municipality's CCA implementation plan.
- ▶ Long Island municipalities seeking to establish CCA programs will need to submit the required documents (Implementation Plan, Data Protection Plan, etc.) to DPS-Long Island, which will review the documents and consider them for PSC approval, and must execute a Data Security Agreement with LIPA's service provider, PSEG Long Island.

Long Island Choice & Green Choice Programs/ESCOs on LI

▶ LI Choice Program –

- ▶ PSEG-LI program that allows customers to purchase electricity directly from other energy service companies (ESCOs).
- ▶ PSEG-LI Partners with 1 residential and 4 commercial ESCOs.

▶ Green Choice

- ▶ PSEG-LI program which allows customers to purchase renewable energy certificates (RECs).
- ▶ PSEG-LI partners with two “Green ESCOs”
- ▶ Additional charge on electric bill
- ▶ Increased cost estimated at \$9-19/month for typical residential customer

Potential Benefits of CCA

Potential benefits of CCAs

- ▶ **Financial Benefits** - Cost savings for ratepayers have been achieved through the CCA model. CCAs have successfully negotiated lower rates across the country as well as in New York, most notably in Westchester County.
- ▶ **Greater rate stability** -through longer-term fixed rate procurement, which is not subject to the fluctuations of fossil fuel prices. CCAs typically enter into longer-term power supply contracts with ESCOs, providing customers with more predictable budgeting of year-over-year energy expenses.
- ▶ **Other Programs Savings** - CCAs can go beyond procurement of lower cost energy by offering additional energy efficiency, demand reduction, or solar bulk purchase programs that help participating customers reduce utility bills, keeping more money in the local economy.

Potential benefits of CCAs

▶ Community Benefits

- ▶ Participating communities can benefit in a number of ways, including involvement and representation in decision-making at the local level, and participation in long-term energy planning.
- ▶ Community involvement in planning and supporting a transition to a cleaner, more sustainable and resilient energy system can yield significant long-term benefits
- ▶ CCA programs and community outreach activities also raise awareness, and promote greater energy literacy and more informed civic engagement on energy issues.

Potential benefits of CCAs

▶ Economic Opportunity & Job Creation

- ▶ The clean energy industry is a burgeoning employment sector, with growth rates almost 3 times that of the overall economy, and potential increased growth if attention is given to training in technical skills and industry-specific knowledge.
- ▶ CCAs that seek to develop local energy generation like community solar arrays, larger solar farms, or energy efficiency retrofit programs for buildings, support local job creation and other economic activity, contributing to the economic health of the region.
- ▶ Increased demand for clean energy supply will encourage job growth and the creation of new industries, and will serve to promote economic development by allowing the region to attract, support and retain new businesses.

Potential benefits of CCAs

▶ Climate and Environmental Benefits

- ▶ The CCA model offers local communities the opportunity to engage in critically important action to protect and defend our natural environment.
- ▶ As communities across Long Island experience increasingly detrimental impacts of climate change, interest has grown within local communities to explore ways to reduce fossil fuel emissions.
- ▶ CCAs offering green energy products such as renewable energy sources, and/or programs to improve the energy efficiency of customers' homes and buildings, serve a critical environmental function by helping to reduce emissions of harmful air pollutants and greenhouse gases.



Challenges to CCA on Long Island

Challenges to CCA on Long Island

- ▶ LIPA is a public-private **nonprofit** that provides power supply to customers **at LIPA's cost of service**. LIPA also has access to very **low interest debt**.
- ▶ In comparison to the **investor-owned utilities** in the rest of New York State, ESCOs on Long Island may find it difficult to offer a competitive energy price, below the price offered by LIPA.
- ▶ Historically, a significant portion of ESCO savings came from a County and local government sales **tax exemption** under State law, meaning that customers that bought energy from an ESCO were exempt from paying County and local sales taxes that they would have to pay if they bought energy from PSEG Long Island. This **exemption was eliminated in 2019**. With utility and ESCO service both now paying County sales taxes, it will be more of a challenge in terms of CCAs being able to serve customers cost-effectively.

Challenges to CCA on Long Island

- ▶ LIPA purchases about 90% of its capacity needs through **long-term contracts** (power purchase agreements). The ability of ESCOs to contract with **merchant generators** is limited by this practice. As a result the opportunity for competitive procurement of energy is limited.
- ▶ Capacity on the power cables serving LI is limited, making purchasing merchant power off Long Island challenging.
- ▶ The **Public Service Commission has limited the products ESCOs can offer in New York**. This requires them to make additional disclosures to regulators and require comparisons to utility prices on a customer's bill. This requires all ESCOs to clearly show each customer how much he or she is being charged for what service.
- ▶ LIPA's cost even under a CCA will still include the **Shoreham debt**.

Challenges to CCA on Long Island

- ▶ **The ESCO market is less developed on Long Island** than in other parts of the state and ESCOs on Long Island may need to operate under different rules regarding NY Independent System Operator **on-island capacity** requirements and LI Choice Tariff charges and credits.
- ▶ The **number of ESCOs** currently licensed to work with the local utility on Long Island is **limited**. As of September 25, 2020, there is only **one ESCO** company licensed to work with PSEG Long Island residential customers and **three ESCO** companies licensed to work with all PSEG Long Island commercial customers
- ▶ LIPA's contractor, PSEG-LI, currently lacks the ability for "consolidated" billing (issuing a single bill to CCA customers for both ESCO and LIPA/PSEG-LI charges).



Suffolk County CCA Task Force Recommendations

CCA Task Force Recommendations

[For Municipalities]

- ▶ 1. Municipalities should consider CCA as a potentially powerful tool to offer 'green' electricity at competitive and stable pricing to customers in their jurisdiction. Additionally, CCA may also be used to offer other value-added services (see recommendation 3. below).
- ▶ 2. Municipalities adopting a CCA program should seek to offer at least one green energy product with 100 percent renewable energy as part of a roster of products, and preferably as the default product.
- ▶ 3. Municipal CCAs should consider offering local programs such as offering bulk purchase opportunities to customers interested in solar electric systems (aka Solarize programs), electric vehicles, energy storage systems, access to community solar, energy efficiency, smart energy management programs and other clean energy initiatives. Municipalities should work with NYSERDA to establish a funding source for such programs.

CCA Task Force Recommendations

[For Municipalities]

- ▶ 4. Municipal CCAs should offer consumer-friendly terms allowing customers to opt out and return to the incumbent utility provider without having to pay a penalty or fee.
- ▶ 5. Municipal CCA programs should conduct a broad and effective public education and outreach program to inform the public about all aspects of a CCA program. This process should start at the point where a municipality begins to consider CCA as an option.
- ▶ 6. Municipalities could also consider alternatives to CCA programs, such as offering an opt out green electricity product (via Renewable Energy Credits). This may be possible by designating large-scale renewable energy projects such as a solar farm or offshore wind project as an optout Community Distributed Generation (CDG) project.

CCA Task Force Recommendations

[For Municipalities]

- ▶ 7. Municipalities should join New York State's Clean Energy Communities (CEC) program and seek to become a designated Clean Energy Community by completing High Impact Actions. This allows access to technical assistance and grant opportunities offered by NYSERDA. Establishing a CCA and offering a default 100% renewable energy product qualifies as a High Impact Action.
- ▶ 8. Municipalities should consider the economic opportunity and the possible job creation in clean energy and the broader economic development this industry brings to a community.
- ▶ 9. Municipalities with an interest in CCA should encourage NYSERDA to support the formation of, and join, a statewide CCA peer-to-peer network and industry association once established

CCA Task Force Recommendations

[For Communities]

- ▶ 1. Communities, their civic organizations, advocates and leaders, should seek information about CCA as a potential tool to educate their community about energy issues, offer more and better energy choices, and facilitate the transition to a more distributed, renewable and resilient energy system.
- ▶ 2. Communities should inform and encourage their elected officials to join NYSERDA's Clean Energy Community ("CEC") program and to implement at least four of the ten High Impact Actions (including a CCA program), in order to have access to technical and financial support as well as access to CEC Coordinators.
- ▶ 3. Communities should contact existing CCAs in their utility service territory or across NYS in order to learn from their experience.
- ▶ 4. Communities with an interest in CCA should consider joining a statewide CCA peer-to-peer network and industry association once established.

Next Steps for Shelter Island

What should our next steps be on Shelter Island?

- ▶ **Task the Green Options Committee to:**
 - ▶ Closely monitor developments affecting CCA on Long Island.
 - ▶ Establish and relationships with CCA advocates in East Hampton, Southampton and Brookhaven to stay aware of the status of their CCA efforts to develop a better understanding of the process and to identify possible Inter-Municipal Agreement opportunities for Shelter Island.
 - ▶ Develop a Public Outreach and Education initiative on energy in general and CCA

What should our next steps be on Shelter Island?

- ▶ **As part of the Comprehensive Planning Update process:**
 - ▶ Integrate CCA evaluation into the Comprehensive Plan Update process, specifically tasking the Infrastructure and Utilities Topic Working Group.
 - ▶ With minimal potential for cost savings unless things change, survey the Shelter Island community for interest in pursuing CCA (or Green Choice) primarily to increase the renewable energy mix; e.g. do we want to become a 100% renewable energy consuming community.
 - ▶ Explore ESCO or other options to secure financing for energy conservation projects with a real payback.

Questions?