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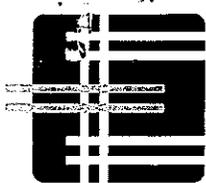
# Municipal Electricity Aggregation Standards and Best Practices for Issuing a REQUEST FOR PROPOSAL for An Electricity Supplier

May 31, 2011 DRAFT

Note: This is not a draft RFP but instead suggested design elements that should be consider for inclusion in an RFP

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May 31, 2011 DRAFT



## **1 Purpose**

The purpose of this document is to provide community choice aggregators with procurement standards, best practices, and innovative options for preparing a request for proposal (RFP) for energy supplies required to meet the needs of a CCA program's customers. . This document also provides strategic guidance for mitigating risks and ensuring that communities maintain the ability to pursue ancillary services and cleaner generation, a key consideration for aspiring CCA programs within Illinois.

The framework presented herein can be used to facilitate the achievement of a CCA's unique goals and objectives, which may be focused on one or more primary concerns, including increased utilization of clean, renewable energy options, efficient and reliable energy supplies, rate stability and/or cost-effective energy procurement among many other potential interests. Succinctly defining these goals and objectives will be the responsibility of community leadership in concert with residents, businesses and various interest groups; the goals and objectives identified by individual communities pursuing CCA programs may vary significantly and will frame the energy procurement efforts related thereto.

Community choice aggregation (CCA) can enable local communities to partner with their residents to procure cleaner, more efficient electricity in competitive markets and participate in ancillary service markets to further lower costs. Essentially, this policy reform enables residences and small businesses to join together to gain more purchasing power in pursuing competitive, cleaner electricity. The community aggregation law in Illinois is a first step towards giving communities the power to obtain the exact services their area needs and give residents/businesses access to participate or earn revenue from supplying market services.

The State of Illinois recently passed House Bill 0722<sup>1</sup>, which paves the way for community aggregation. Creating this legislation, however, is only the first step.

## **2 The Benefits of CCA**

CCA has some clear advantages. First and foremost, local governments have a core competency for successful aggregation. Their experience in procuring analogous services, such as garbage collection and municipal water, demonstrates they have the skills and resources to complete successful procurement processes, related contract negotiations and enterprise oversight. Extending this expertise to address the electric service needs of local residents and businesses presents many opportunities for local governments that can be used to support local policy objectives while providing economic incentives for these constituents.

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<sup>1</sup> Illinois General Assembly. (2010, January 1). The Illinois Power Agency Act, Sec. 1-92. Aggregation of electrical load by municipalities and counties. *HB0722* .



Another important factor to consider is that local government officials are accountable to their constituents and open to public scrutiny in a way that utilities are not. Furthermore, community aggregation does not exclude market segments, such as low-income groups, that are typically unattractive to suppliers. But most importantly, residents can always opt out of a CCA, giving the public true freedom to determine their energy needs. This is a distinct difference when compared to the current electric service model, which does not provide customer service options.

Once a local government establishes the authority to aggregate electricity procurement, they can work with their residents and small businesses to:

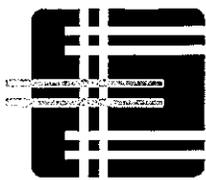
- Leverage aggregate energy demands of local residents and businesses to pursue reduced power costs
- Purchase cleaner and more efficient generation sources without raising costs appreciably thereby reducing the environmental impacts of power generation. Many consumers don't realize that cleaner more efficient power does not have to cost more.
- Provide consumers with the option to purchase more expensive renewable or green power to further reduce environmental impacts of power production
- Reduce peak demand and influence load profiles, thereby reducing the cost to supply local energy requirements and related customer rates
- Generate shared savings by participating in demand response, capacity, day-ahead markets, and other ancillary services offered by the Independent System Operator
- Engage in power purchase agreements to build new, competitively priced clean generation, creating new jobs and local power resources
- Establish measurable, community-wide energy efficiency programs

Most electricity customers don't realize that they can purchase cleaner more efficient power for less. Lower cost electricity generation that is cleaner, lower carbon or more energy efficient includes hydro; wind from states with higher utilization such as western Minnesota; nuclear; and high efficiency natural gas. The United States is awash in clean natural gas fired generation, enough to displace the entire U.S. coal fueled fleet (Energy Information Association, Annual Energy Outlook 2010).

Recently the Illinois Institute of Technology signed a competitive three year contract for "zero carbon" electricity (see Attachment 1).

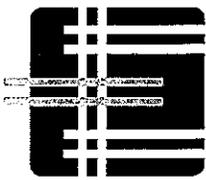
As a result, each city should request that suppliers disclose efficiency and environmental performance and include this in the evaluation process (See Section 7.9). Many cities may be surprised that the lowest bidders may be the cleanest and most efficient. In some cases a "no carbon" option may be within a tenth of a cent of the lowest cost bid.

In addition, cities can request an optional green or renewable option that allows consumers to choose a higher cost renewable generation option that would further improve their sustainable footprint. In some cases, a city may have reasons to pay more for cleaner and more efficient generation, while staying below the current utility default rate.



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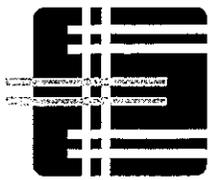
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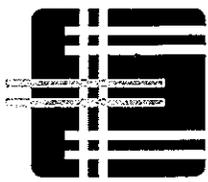
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### **3 List of Acronyms**

CCA	Community Choice Aggregation
FFSEI	Fossil Fuel Source Energy Intensity
ISO	Independent System Operator
KW	Kilowatt
KWh	Kilowatt Hour
Mill/MWh	One millionth of a dollar per MWh or \$1/MWh
mmBTU	British Thermal Unit
MW	Megawatt
MWh	Megawatt hour
RFP	Request for Proposal



## **4 Introduction**

CITY ABC is seeking proposals for electric power supply services to reliably serve retail customers that will participate in a community choice aggregation program (CCAP) within its jurisdiction. Qualified suppliers of electricity are invited to submit conforming proposals to reliably meet the electric energy requirements of the jurisdiction's CCAP. CITY ABC has established the following broad-based goals for its CCAP, each of which will be considered during the evaluation of responses to this RFP.

- Lower rates than those currently offered to similarly situated customers under the current utility service model
- Rate stability/certainty for a minimum X-year period, aligned with the effective term of the proposed energy supply agreement
- Cleaner, more efficient electricity generation sources
- Renewable generation of X% through direct procurement or requisitions/certificates

This RFP seeks proposals for the supply of full-requirements electric services, including all scheduling services necessary for delivery of firm electric energy to meet the varying needs of participating retail customers. Proposals are also requested for renewable energy and resource adequacy capacity.

At full enrollment, total potential peak demand for the CCAP is projected to be approximately XXX MW; total potential annual energy requirements are projected to be approximately XXX GWh; and total potential retail service accounts are projected to be approximately XX,XXX.

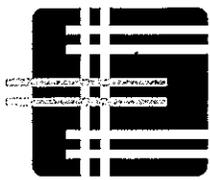
This solicitation serves as a first step toward providing residents and businesses with potentially lower cost, more efficient, and cleaner power generation and serves as a means for future CCA program expansion to:

- Develop cleaner generation resources leveraging power purchase agreements.
- Provide residents and businesses access or the ability to earn revenue through providing ancillary services such as demand response.
- Provide residents and businesses with greater means to implement energy efficiency improvements.

CITY ABC will be utilizing responses to this RFP to select qualified suppliers for its CCAP and to ascertain the cost and availability of renewable energy sources needed to supply the CCAP. Respondents *must* bid to provide the Products requested in this solicitation in accordance with the requirements described herein.

This RFP is divided into the following key sections

- Inputs or Basis for Bids – A brief description of the project and the RFP process
- RFP Schedule – A list of key dates in the RFP process



- Requirements – A description of the minimum requirements to be considered for eligibility
- Evaluation Criteria – An explanation of the criteria that will be used to evaluate proposals
- Instructions – An explanation of how to construct and submit a proposal
- Forms – The materials needed to submit a proposal

## 5 Inputs or Basis for Bids

CITY ABC estimates that its total potential peak demand to be approximately \_\_\_MW; total potential annual energy requirements are projected to be approximately \_\_\_MWh's; and total potential retail service accounts are projected to be approximately \_\_\_\_. CITY ABC will award the chosen bidder with a contract of no less than \_\_ years. More information about the municipality's electricity usage can be found in Table 1.

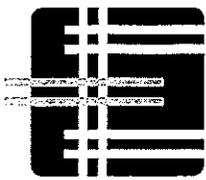
CITY ABC will be reviewing the responses to the RFP to select a qualified supplier for its CCA program. Respondents must adhere to the guidelines set forth in this RFP to be considered for selection. Multiple suppliers may be selected to satisfy the criteria.

1. CITY ABC retains the right to remove any proposal from consideration at any time.
2. In compliance with all applicable federal and state laws and regulations CITY ABC does not unlawfully discriminate in employment, contracts, or any other activity.

**Table 1 Estimated total annual load for CITY ABC**

Class	Accounts	Annual Aggregate Consumption (MWh)	Annual Average Consumption Per Account (MWh)	Demand, MW	Assumed Utilization, %
Residential					
Small commercial					
Streetlights					
Municipal buildings					
Medium Commercial*					
Large Commercial*					
Industrial*					
Other					
<b>Totals</b>					

\* Not applicable or part of Illinois CCAP, per legislation



## **6 RFP Schedule**

CITY ABC has established the following schedule for the RFP process. The following dates are set forth as estimates and may be subject to change:

Announcement of RFP	
Pre-bid conference	
Deadline for questions	
Deadline for responses	
Short List Announcement	
Short List Interviews	
Contract Negotiations	
Contract Approval	

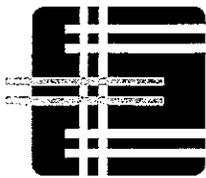
## **7 RFP Requirements**

This section provides standards and best practices for the key requirements of a CCA RFP. These requirements fall into four broad categories:

- Full requirements energy and energy requirements guarantee – A description of all the requirements that must be fulfilled to deliver power to the participants of the CCA, including capacity and other ancillary services
- Pricing variations
- Clean Power Rating
- CCA implementation and administration per legislation (Optional)

The following are recommended minimum requirements that each applicant should satisfy to qualify for consideration.

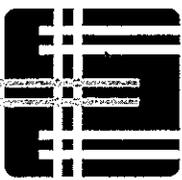
1. Provide a copy of your standard contract terms.
2. Respondents must provide 12- and 24-month pricing terms with an option to extend for a year.
3. Respondents must understand that CITY ABC retains the right to negotiate with multiple bidders.
4. The proposal should address any exceptions to this RFP
5. Have sufficient sources of power to provide retail firm power to the CCA.
6. Proposals should provide a description of the sources of power including geographic and fuel source details (see standard forms).
7. Maintain a license as a Federal Power Marketer with the Federal Energy Regulatory Commission.



8. Maintain a certification from the State of Illinois as a certified retail electric supplier and any and all other licenses or certifications required by Illinois law.
9. Register as a retail electric supplier with ComEd.
10. Disclose in your proposal all payments to consultants and other parties associated with your services to CITY ABC.
11. Specify customer termination charges and fees, for those customers that opt-out before this contract expires.
12. Keep all customer data confidential and return all such information while destroying any customer information records within your company upon termination of the contract.
13. Maintain a Service Agreement for Network Integration Transmission Service under Open Access Transmission Tariff.
14. Maintain the necessary corporate structure to sell retail firm power to the ComEd residential and small commercial retail customers in the City and the Aggregation Group.
15. Maintain appropriate scheduling coordinator certification(s) or designate an appropriately certified scheduling coordinator to function on respondent's behalf, if required by ISO; provide copy of applicable scheduling coordinator services agreement, if respondent will not be self-providing these services.
16. Maintain an Electronic Data Interchange computer network that is fully functional at all times and capable of handling the ComEd residential and small commercial retail electric customers in the City and the Aggregation Group.
17. Maintain the marketing ability to reach all ComEd residential and small commercial retail customers in the City to educate them on the terms of the Aggregation Program and the Act.
18. Maintain a call center capable of handling calls from Members of the Aggregation Group.
19. Maintain a local or toll-free telephone number for customer service and complaints related to the City's Aggregation Program.
20. Agree in a binding, written agreement between the City and the Provider to hold the City financially harmless and fully indemnifying the City from any and all financial obligations arising from supplying power to the Aggregation Group.
21. Satisfy the credit requirements of the State of Illinois and the City.
22. Have the binding authority (to the satisfaction of legal counsel for the City) to execute the Power Supply Agreement with the City and be fully bound by all of its terms and conditions.

### ***7.1 Full Requirements Energy***

The supplier shall include all costs to deliver power to the customer meter in their bid. This includes but is not limited to all charges by the Independent System Operator, local utility, and state associated with the delivery of electricity to a customer's meter in UTILITY X territory. This includes but is not limited to energy, transmission, electricity losses, capacity charges,



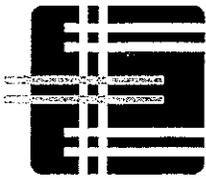
renewable portfolio obligation, and energy efficiency obligation, as applicable. Some examples include:

1. **Shaped energy** – all considerations involved in supplying power to the customers participating in the CCA Program. The supplier will have to deliver sufficient power to meet the needs of participating customers, which will be estimated by meter readings supplied by UTILITY X. The supplier will be expected to meet the shifting power demands of CITY ABC throughout the day – supplier will be expected to provide load balancing services to match inter-hour variations in customer energy use.
2. **Ancillary services** – all ancillary services required to efficiently and reliably deliver power to CCA customers. Ancillary services will also include all reserves and other such considerations for ISOs.
3. **Distribution losses** – all distribution losses associated with supplying power to all CCA customers. Distribution losses shall be calculated using data from UTILITY X.
4. **Independent system operator (ISO) scheduling coordination** – all ISO interface services, which includes the filing with the ISO of all schedules and meter data reports required to be filed by the scheduling coordinator for meters enrolled in the program and the submission of schedules and bids for the shaped energy, resource adequacy capacity, and renewable energy in accordance with the obligations of a scheduling coordinator as defined by the ISO.
5. Reserve capacity requirement, if required by the ISO.
6. Renewable electricity requirements, if required by the state.
7. Energy efficiency requirements, if required by the state.

## **7.2 Pricing**

### **7.2.1 Fixed Price Banded Volumes Requirements**

1. **Fixed price** – The bid shall include:
  - a. A firm fixed price for all electricity in cents/kWh
  - b. A separate baseload fixed price and non-baseload fixed price in cents/kWh, if advanced meters are installed for all participants
2. Respondent pricing for shaped energy will be based on the loads described in the information supplied by the local utility, assumptions of load profiles based on prior experience with similar customer classes, and/or actual load data when available. Respondents must also provide separate prices for all of the defined customer classes as well as all of the classes combined. Prices will be firm and fixed and shall apply to all volumes within 20 percent of projected monthly energy use.
3. Ancillary service costs and other charges levied by the ISO shall be directly passed to customers with no alteration or add-ons or mark-up. Proposals must include a good-faith estimate of these costs expressed in \$/MWh's.



4. Resource adequacy pricing shall specify the \$/kW/month for system resource adequacy requirements (RAR) and for the local RAR capacity. Prices will be firm and fixed.
5. Renewable energy pricing will be based on the \$/KWh premium. Respondent should separately identify the renewable energy premium applicable to such purchases. CITY ABC anticipates procuring a minimum XX percent of its energy requirements from renewable energy resources. Prices will be firm and fixed.
6. Scheduling coordinator costs shall be offered on a \$/MWh basis and shall reflect all of seller's costs associated with performing such services on behalf of CITY ABC; scheduling coordinator costs shall not include any charges billed or passed through by the ISO on the utility bill.
7. Distribution losses will be calculated using data from UTILITY X.
8. Prices must be provided for each year of the proposed contract term.

### **7.2.2 Take or Pay**

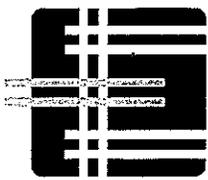
The city load estimates and load profile are a rough approximation and can vary significantly due to the residents and small businesses ability to opt-out of the program. In addition, CITY ABC may encourage and facilitate resident or small business participation in ISO ancillary services, day-ahead, pricing, and/or demand response. As such, all bidders shall require no more that 50% of the total annual or daily usage or demand be paid for or taken regardless of actual usage/demand. Bidders requiring less than 50% annual or daily usage/demand will be scored higher.

### **7.2.3 Alternative Price Proposals**

In addition to the pricing systems outlined above, respondents are encouraged to promote alternative pricing structures, portfolio compositions and/or procurement arrangements consistent with CITY ABC's stated goals and objectives for the CCAP. As previously noted, the goals and objectives generally entail the intent to provide customers with affordable, cleaner, and more efficient energy to the participants of the CCA. Pricing structures that incorporate combined fixed and indexed prices, laddered hedges, or other alternative methods are desired. Ultimately, CITY ABC is looking for proposals that minimize risk while offering competitive prices for competitive clean and efficient energy.

### **7.3 Resource Adequacy Capacity**

CITY ABC seeks proposals that include qualifying capacity needed to satisfy the jurisdiction's Resource Adequacy Requirements (RAR). Qualifying capacity will be determined by the most recent applicable rating of generating units for resource adequacy purposes. RAR capacity is needed to meet XXX% of the CCAP's forecast monthly peak demand (MW). A portion of the Capacity supplied shall qualify as Local Capacity in quantities sufficient to satisfy the Local Resource Adequacy Requirements applicable to the CCAP. Bidders shall identify the percent of RA capacity that will be supplied from generation owned by bidder. The minimum requirement has been calculated as 115% of the estimated monthly peak demand in MW. The bidders shall identify the % of the power supplied from generation that the supplier owns.



#### **7.4 Financial and Operational Capabilities**

The respondent must provide sufficient evidence of financial, technical, and operational capabilities for the performance of the requested services. The respondent should supply the following:

- Audited financial statements from the previous two years or a web link where such information is accessible.
- If available, a credit rating from two of the following: Standard & Poor's, Moody's, or Fitch Investor Services from the most recent rating agency report.

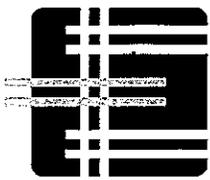
Respondents should describe the company and its history as an organization including number of customers served in Illinois, including related energy volumes, peak demand, number of customers and customer classes served..

Respondents should provide a plan for financing the acquisition or development of the supply options contained within their proposal, including, if available, demonstration of access to reasonable levels of performance security commensurate with provision of the requested services.

#### **7.5 Implementation and Administration**

In addition to the services requested in connection to the delivery of power to the CCA, CITY ABC requests that respondents fulfill the following to facilitate program implementation and administration:

- The Retail Electric Supplier shall create and maintain a secure database of all Members. The database will include the name, address, Commonwealth Edison account number, and Retail Electric Suppliers' account number of each active Member, and other pertinent information such as rate code, rider code (if applicable), most recent 12 months of usage and demand, and meter reading cycle. The database will be updated at least quarterly. Accordingly, the Provider will develop and implement a program to accommodate Members who (i) leave the Aggregation Group due to relocation, opting out, etc. (ii) decide to join the Aggregation Group; (iii) relocate anywhere within the corporate limits of the City, or (iv) move into the City and elect to join the Aggregation Group. This database shall also be capable of removing a Member from the Aggregation Group who has duly opted out of the Program. The Provider will use this database to perform audits for clerical and mathematical accuracy of Member electric supply bills. This database shall be created in an open source platform and sent to the CCA every month and upon termination of the contract.
- Provider shall hire and maintain an adequate customer service staff and develop and administer a written customer service process that will accommodate Member inquiries and complaints about billing and answer questions regarding the Aggregation Program in general. This process will include a description of how telephone inquiries will be handled, either internally or externally, how invoices will be prepared, how Members



may remit remittance payment, and how delinquent accounts will be addressed including collections and terminations of service if required.

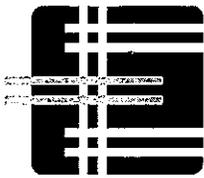
- Each residential and small commercial retail customer of ComEd within the corporate limits of the City shall be sent notification by U.S. Mail stating: what the municipal Aggregation Program means, the procedure which must be followed to Opt-out of the Aggregation Program, the estimated price of electricity for Member of the Aggregation Program, and the deadline for returning the Opt-out form. Respondents must also make good faith efforts to reach all potential customers, including those with known visual impairments, lack of English fluency, and other considerations. The supplier shall comply with city requirements regarding the number of notices prior to and post service cutover.
- The Provider shall cooperate with the City to provide opportunities for educating residential and small commercial retail CE customers in the City about the Program and their rights under the applicable law and rules and regulations.
- Preparation and submittal of requisite regulatory and legislative reports, if required by state law.
- The Provider will provide updates and disclosures to the City and Members as mandated by State law and applicable rules and regulations as amended from time to time.
- If the provider attempts to deny service to a participant, the reasons must be submitted to CITY ABC and be open to a process of adjudication to the extent permitted under applicable law.

### ***7.6 Activation of Service***

After a notice is mailed to all residential and small commercial retail electric customers in the City providing an opportunity to opt out of the Program within XX days, all customers who do not opt out in writing will be automatically enrolled in the Program. Customer enrollment with the Provider will occur thereafter without further action by the customer on terms set forth in the Power Supply Agreement and according to the retail tariffs of UTILITY X.

### ***7.7 Changes, Extension, or Renewal of Services***

The Power Supply Agreement with the Provider will provide when service shall begin and end. If the Power Supply Agreement is extended or renewed, customers will be notified as to any change in rates or service conditions and other information required by law. The Power Supply Agreement shall describe the terms upon which a customer or non-customer will be given an opportunity to opt into or out of the Program, and reasonable notice will be provided. This includes identifying termination fees for customers who choose to opt out of the program during the contract period.



### **7.8 Termination**

In the event that this Power Supply Agreement is terminated for any reason prior to the end of the scheduled term, each Member of the Aggregation Group will receive prompt written notification of termination of the Program at least sixty (60) days prior to termination of service under the Agreement. If the Agreement is not extended or renewed, Members will be notified in a manner determined by the City and any applicable law, prior to the end of any service. Members will also be notified of their right to select an alternate retail electric supplier and of their ability to return to ComEd provided supply service upon termination of the Agreement. All customer information shall be sent to the city in a database format and be removed in its entirety from all supplier electronic systems, hardcopy, and any other format for customer privacy and protection.

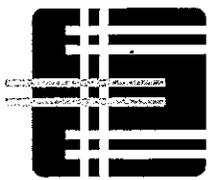
### **7.9 Clean Power Requirements**

Most electricity customers don't realize that the United States is awash in clean natural gas fired generation with about 300 GW of natural gas generation currently sitting idle (Energy Information Association, Annual Energy Outlook 2010). Lower carbon or cleaner generation sources include nuclear, hydro, and lower cost wind from states with higher utilization wind such as western Minnesota. Recently the Illinois Institute of Technology signed a competitive three year contract for "zero carbon" electricity.

As a result, each city should request that the suppliers propose the cleanest possible generation portfolio subject to the stated economic goals and objectives of the CCAP. Suppliers must complete the following table, which will allow CITY ABC to evaluate the environmental impacts of the bidder's potential supply portfolio. Suppliers should as a minimum provide three separate prices:

- Lowest price generation mix
- No-carbon generation mix
- X% renewable option

For those cities interested in full disclosure regarding the efficiency and environmental attributes of the electricity being supplied see Section 5.9.1.



**Table 2 - Clean Power Attributes**

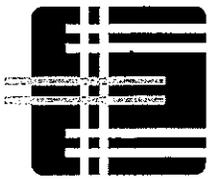
Generation Source	~Carbon Footprint, lbs./MWh	% of Mix or MWh	% or MWh Supply Owned by Supplier	Other Considerations
Nuclear	0*			
Coal	~2,200**			
CCCT	~800***			
Simple gas	~1,300***			
Hydro	0			Low head river or high head dam/lake Confirm that green power credit has not been sold to another party
Wind	0			Confirm that green power credit has not been sold to another party
Other renewable	0			List type Confirm that green power credit has not been sold to another party
From market (no specific source )	?			
<b>Total</b>		<b>100%</b>		
Total Green Requisitions in MWh****				

\* Nuclear power has waste and other issues that may be a concern for the customer

\*\* Coal fired generation also has significant NOx, SOx, and particulate emissions, as well as, toxin emissions, solid waste, and water emissions

\*\*\* Natural gas has lower levels of NOx and particulate emissions compared to coal fired generation, less water consumption, and no solid waste.

\*\*\*\* In terms of green power certificates, credits or requisitions. It is important to understand that you do not get the wind power from a requisition or certificate. You instead get credit for subsidizing this renewable generation. The green attributes come to you (i.e. assigned to you, not the wind power) while the actual renewable power goes to someone else. As such, cities should recognize that when buying certificates/requisitions, you could be procuring 100% coal generation through your power contract and responsible for the associated environmental impacts. As such a green power certificate is not buying green power, only subsidizing it and having the green attributes assigned to you. The customers you serve can get credit in LEED for buying power with 35% green power credits.



### 7.9.1 Clean Power Rating

The Clean Power Rating (CPR) system provides a means to effectively rate bulk power suppliers in terms of how cleanly and efficiently the electricity they provide is generated.<sup>2</sup> This CPR system enables users to rate their microgrid and bulk power supplier(s) against others based on a generally available and measurable number of metrics intended to indicate overall performance. These metrics include:

- Fossil Fuel Source Energy Intensity (FFSEI), total mmBTU of fossil fuel consumed per MWh delivered, corrected for the following:
  - The grid losses by dividing the generator FFSEI by (1 - % distribution/transmission losses to the microgrid meter). The national average for grid losses is 7%.
  - The useful thermal energy recovered from those generation sources by subtracting the recovered thermal energy in mmBTU from the generator input fuel in mmBTU.
  - Nuclear generation is assigned by EPA a source energy value of 11.5 mmBTU/MWh. The source energy value assigned by EPA.
- Carbon intensity, lbs. emitted per MWh delivered. The final coal and natural gas carbon intensities should be increased by 20% and 10% respectively to account for methane released in the extraction and distribution processes.<sup>3,4</sup>
- NOx intensity, lbs. emitted per MWh delivered.
- SOx intensity, lbs. emitted per MWh delivered.
- Water consumption intensity, gallons of water consumed per MWh delivered. See Attachment 2 for examples of typical water consumption indices for various types of power plants/cooling methods. If actual consumption data is not available the values from Appendix B can be used as default values for approximating water consumption intensity based on typical values.
- Solid waste recycling, % of total waste recycled.

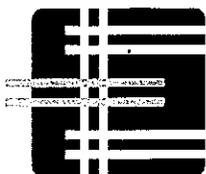
CITY ABC will be using CPR to evaluate the proposed supply portfolios of each bidder. As such, bidders must complete the tables provided in Section 8.3.2 to facilitate this evaluation.

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<sup>2</sup> Galvin Electricity Initiative. (2011). *Perfect Power Seal of Approval*. Retrieved from <http://www.galvinpower.org/sealofapproval>

<sup>3</sup> U.S. Environmental Protection Agency. (2010). *Greenhouse Gas Emissions Reporting from the Petroleum and Natural Gas Industry*. Retrieved from EPA: [http://www.epa.gov/climatechange/emissions/downloads10/Subpart-W\\_TSD.pdf](http://www.epa.gov/climatechange/emissions/downloads10/Subpart-W_TSD.pdf)

<sup>4</sup> National Energy Technology Laboratory. (2010, October 7). *Life Cycle Analysis: Power Studies Compilation Report, DOE/NETL-2010/1419*. Retrieved from NETL: [http://www.netl.doe.gov/energy-analyses/pubs/PowerLCA\\_Comp\\_Rep.pdf](http://www.netl.doe.gov/energy-analyses/pubs/PowerLCA_Comp_Rep.pdf)



## **8 Optional Requirements**

In order to meet its long term goals and objectives, CITY ABC is seeking additional but optional services from those requested in Section 5, but may choose to act on proposals for these services at a later time.

### ***8.1 Renewable and Clean Energy***

CITY ABC is seeking proposals that include cleaner energy, renewable requisitions, and/or renewable energy. These include power from wind, small hydroelectric, geothermal, biogas including landfill gas, digester gas, gas conversion, gasification technologies, direct combustion biomass, biodiesel, photovoltaic, solar thermal, fuel cells using renewable fuels or natural gas, municipal solid waste conversion, tidal current, ocean wave, ocean thermal, and natural gas or bio fuel fired combined heat and power technologies.

Respondents are strongly encouraged to present alternative pricing proposals that the respondent believes would assist CITY ABC in achieving its goals to supply renewable energy to its customers at competitive rates. Proposals that feature combined fixed and indexed prices, caps and collars, laddered hedges, pass-through of certain costs, indexing to the applicable utility rates, or other creative pricing proposals are strongly encouraged. The focus should be to minimize risk to the CCAP while allowing the provision of competitive rates for the CCAP's customers relative to the offered resource mix and bundled rates charged by the incumbent utility. Alternative proposals may also specify mitigation mechanisms for volumetric risk, including those associated with customer opt-outs and participation in yet-to-be-defined green pricing programs. To promote these interests, CITY ABC will consider offers for entering PPAs directly with renewable and clean energy providers as well as consider purchasing Environmental Attributes/Renewable Energy Certificates.

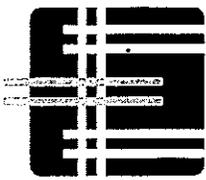
CITY ABC will give preference for clean energy and renewable sources generated within CITY ABC's jurisdiction.

### ***8.2 Ancillary Services/Demand Response/Unit Contingent Call***

If supplier can provide options for the CCA customers to earn revenue from supplying ancillary services (e.g., demand response, day-ahead pricing, etc...) through a shared savings program, the supplier should propose a shared saving program for consideration, including sufficient detail to facilitate evaluation of such a program.

### ***8.3 Energy Efficiency***

CITY ABC encourages prospective bidders to list any community-wide and individual-based energy efficiency (EE) programs to be implemented within its jurisdiction. Such proposals may include recommendations for existing EE programs, specific EE enhancements, financing proposals that will utilize/leverage CITY ABC tax-exempt status, and/or professional services related to the administration of EE programs. Examples include:



***Existing Homes***

- **Renewable Energy** – Site assessments and installation incentives, education, and outreach
- **Home Energy Assessments** – Energy evaluations of existing homes with incentives for completing recommendations and direct installation of low-flow water fixtures and CFLs
- **Targeted Home Performance** – Energy efficiency upgrades for limited income customers
- **Residential Prescriptive** – Incentives for installation of certain technologies in high efficiency natural gas space and water heating technologies

***New Construction:***

- **ENERGY STAR for New Homes** – Incentives offered to owners and builders for meeting certain standards and performance requirements
- **Residential Prescriptive** – Incentives for installation of certain technologies in high efficiency natural gas space and water heating technologies
- **Renewable Energy** – Site assessments and installation incentives, education and outreach

***Multifamily (both existing & new):***

- **Multifamily Direct Install** – Installation of low-flow water fixtures (i.e., showerheads and faucet aerators) and CFLs in rental units, condominiums, and mobile homes
- **ENERGY STAR for New Homes** – (Eligible for dwellings of up to 12 attached units) Incentives offered to owners and builders for meeting certain standards and performance requirements

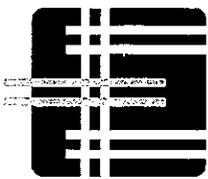
***Residential Retail Programs***

- **Retail Markdown Lighting** – Incentives paid to retailers in targeted CCA zip codes to mark-down the price of energy efficient lighting to utilities customers driving more sales of energy savings lighting products and education to the utilities' rate payers/customers.

## **9 Evaluation Criteria**

In addition to the minimum requirements set out above, respondents will also be judged on the following criteria. In order to be considered, respondents must address all requirements in this section including completion of all of the required forms. The criteria are weighted with a total possible score of 100.

- **Electricity costs.** – XX points. The respondents proposed pricing structure will be judged against the projected prices offered by ComEd over the contract term.



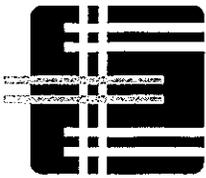
- Clean Power Ranking – XX points. See attachment 1 for the current ComEd default rate supply portfolio.
- Respondent experience. The experience of the respondent will also be taken into account, including a history with comparable projects. In addition, respondents must also be able to provide three references with the following criteria: organization, contact name, contact number, title of contact, and a description of the services provided – XX points.
- Preference points may be awarded based on the following considerations:
  - Respondents who demonstrate an understanding and sensitivity to the aims of the CITY ABC CCA through innovative suggestions/proposals.
  - The incorporation of local renewable or cleaner energy sources.
  - Provisions to reduce the demand for power through energy efficiency, conservation, and other measures will also be favored.

CITY ABC also retains the right to weight other factors in a respondent's proposal other than those specifically outlined above. In addition, CITY ABC reserves the right to contact any respondent for additional information regarding their proposal. CITY ABC makes no commitment to respondents participating in this RFP process, and CITY ABC reserves the right to end the process at any time for any reason without selecting a preferred supplier(s).

## **10 Proposal Instructions, Format, and Forms**

### ***10.1 Instructions for Submittal***

- Proposals may be submitted by either an electronic or hard copy. A hard copy, however, must be submitted to: \_\_\_\_\_
- Hard copies of the proposal and all supporting documents must be enclosed in a sealed, opaque envelope. The envelope will be sent to the above address and shall be identified with the project name.
- Electronic copies of the proposal must be emailed to \_\_\_\_ with the subject line of the email reading \_\_\_\_\_. A confirmation email will be sent upon receipt of the electronic proposal.
- Proposals must be received before the deadline of \_\_\_\_\_. Proposals received after this date will be considered late and will not be considered.
- Respondents will be responsible for the timely delivery of proposals at the location stated above.
- Oral, telephonic, facsimile, or telegraphic proposals will be considered invalid and will not be considered.



### **10.1.1 Project Contact**

TBD

### **10.1.2 Vendor Contact**

We will consider the person who signed your proposal to be your contact person for all matters pertaining to the proposal unless you designate some other person in writing.

### **10.1.3 Instructions for Modifications or Withdrawal of Proposal**

Written requests to modify or withdraw a proposal prior to the scheduled opening time will be accepted and will be acted upon at opening. No oral requests will be allowed. Requests must be addressed and labeled in the same manner as the proposal and marked as either MODIFICATION or WITHDRAWAL.

### **10.1.4 Requests for Presentations**

TBD

## ***10.2 Proposal Format***

Proposals should be submitted in the following format:

- Introduction and executive summary – Describe the organization, key members, its operations, and explicate any third parties that would be involved in the contract.
- Description of proposed services – Describe the services that will be offered and the generation sources.
- Alternative Proposals (if applicable) – Describe any alternative proposals to the pricing guidelines outlined above.
- Financial, technical, and operational qualifications – Describe the experience and achievements that make the organization the ideal fit for the project. Include supporting documents and relevant information.
- Bid forms – Complete the attached forms as appropriate. Provide appropriate details for alternative proposals, if applicable.
- Provide copy of standard contract

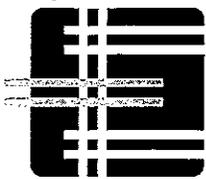
## ***10.3 Proposal Forms***

This section includes all of the required forms that must be completed to be considered compliant with this RFP

### **10.3.1 Sample RFP Submittal Template**

(1) Supplier name: \_\_\_\_\_

(2) Contact Information:

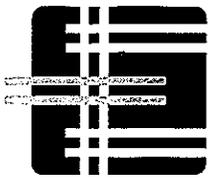


Person: \_\_\_\_\_  
Tel: \_\_\_\_\_  
Fax: \_\_\_\_\_  
E Mail: \_\_\_\_\_

-----  
(authorized signature)                      (printed name)                      (date)

Each supplier shall provide a response to the following:

- A. Provide a comprehensive plan to supply energy to the CITY ABC CCA in compliance with the stipulations of Full Requirements Energy, including shaped energy, ancillary service, distribution losses, and ISO scheduling and coordination. Plans should be laid out in twelve (12) month, twenty-four month (24) and thirty-six (36) fixed price energy supply, full requirements quote for each of CITY ABC's accounts. Provide a separate price for each account listed as Peak and Off Peak rates as well as the equivalent NTOU price based on historic volumes. Please specify definition of the Peak (UTILITY X hours) listed in your supply service agreement. Also specify if the supply rate includes Illinois RPS costs.
- B. Satisfy the requirements for the pricing variations, including alternative pricing, if applicable.
- C. Provide a description of the sources of power including geographic and fuel source details (see standard forms).
- D. Provide a detailed plan for the marketing and consumer education of the CCA, as well as the steps that will be taken to aid CITY ABC with the administration of the CCA.
- E. Provide the necessary documentation to prove that the respondent is certified to sell power from both the State of Illinois and the corresponding utility.
- F. Provide a sample copy of your monthly invoice showing bill format for all energy and energy adder charges. Note: CITY ABC requests single bill option for this contract.
- G. Provide a description of the resources either already in place or to be acquired that will allow for the operation of the CCA, such as an Electronic Data Interchange computer network and a call center capable of handling calls from Members of the Aggregation Group.
- H. Provide a copy of your standard contract terms and conditions applicable to your pricing offer. CITY ABC requests all energy adders (including UTILITY X-related credits) be passed through as opposed to being locked for the contract term.
- I. Briefly describe your company and its history as an organization including number of customers served in UTILITY X and volumes (aggregate peak demand and annual delivery volume).



- J. Provide a description of any community-wide energy efficiency (EE) efforts to be implemented within City ABC.

**10.3.2 Clean Power Rating**

Bidders shall use either Table 2 in Section 5.9 or the tables below to determine the efficiency and environmental attributes of the supplied electricity.

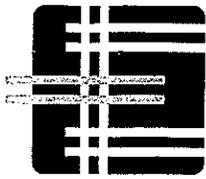
**Table 3 Efficiency/Fossil Fuel Intensity Metrics**

Generation Source	Annual MWh Supplied (A)	Annual Fossil Fuel Consumed, mmBTU (B)	Recovered Thermal Energy, mmBTU (C)	FFSEI
	(A)	(B)	(C)	NA
Coal				NA
Nuclear		= A * 11.5		NA
Wind				NA
CCGT				NA
Other				NA
Renewable REC		= - A * 11.5	NA	NA
Totals				D = (B-C)/A
Totals Delivered				= D * 1.07

**Table 4 Air Emissions Metrics**

Generation Source	Annual MWh Supplied (A)	CO <sub>2</sub> Emissions (lbs.) (B)	CO <sub>2</sub> Intensity (lbs./MWh)	NO <sub>x</sub> Emissions (lbs.) (D)	NO <sub>x</sub> Intensity (lbs./MWh)	SO <sub>2</sub> Emissions (lbs.) (E)	SO <sub>2</sub> Intensity (lbs./MWh)
Coal		=1.1*__	C=B/A		NA		NA
Nuclear			NA		NA		NA
Wind			NA		NA		NA
CCGT		=1.2*__	NA		NA		NA
Simple Cycle NG		=1.2*__	NA		NA		NA
Other			NA		NA		NA
REC's*		=- A*C	NA		NA		NA
Totals			F=B/A		G=D/A		H=E/A
Totals Delivered			= F* 1.07		= G* 1.07		= H* 1.07

\*Assuming no carbon, NOx, or SOx emissions from renewables, otherwise include emissions



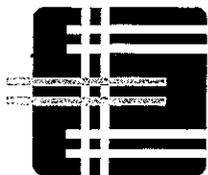
**Table 5 Water Consumption Metrics**

Generation Source	Annual MWh Supplied to Microgrid (A)	Annual Water Consumption (gal) (B)	Water Consumption Intensity (gal/MWh)
Coal			$C=B/A$
Nuclear			NA
Wind			NA
CCGT			NA
Other			NA
REC's*		$= -A * C$	NA
<b>Totals</b>			$D=B/A$
<b>Totals Delivered</b>	NA	NA	$= D * 1.07$

\*Assuming no water consumption from renewables, otherwise include emissions

**Table 6 Solid Waste Impacts Metrics**

Generation Source	Annual MWh Supplied to Microgrid	% Waste Recycled	Waste Recycling Factor, MWh
	<b>A</b>	<b>B</b>	<b>A*B</b>
Coal			
Nuclear			
Wind			
CCGT			
Other			
<b>Totals</b>	<b>SUM A</b>	<b>NA</b>	<b>C = SUM</b>
<b>% Recycled</b>	<b>NA</b>	<b>NA</b>	<b>=C/SUM A</b>



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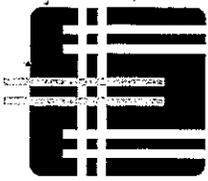
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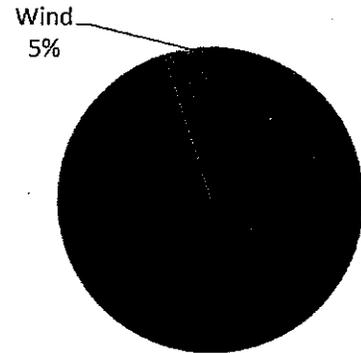
2002*Water & Sustainability (Volume 3): U.S. Water Consumption for Power Production—The  
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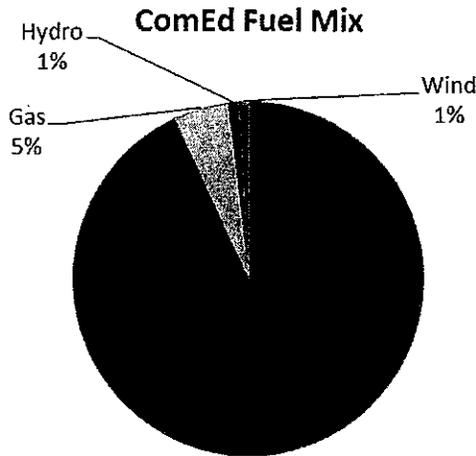
**Attachment 1 – ComEd Default Rate Generation Portfolio**

Illinois residents who don't select an alternative supplier are provided with a default supplier, ComEd (Figure 1).<sup>5</sup> By passively accepting this arrangement, residents also accept a rather outdated model for receiving their electricity. Coal generation increased from 32% in 2008 to 35% in 2010. This 3% increase in coal use added 1.3 million tons of annual carbon emissions (roughly equivalent to 180,000 cars), bringing the total carbon emissions from coal to about 15 million tons (2.1 million cars). Compared with the ComEd default supplier, the Illinois Institute of Technology (IIT) reduced total carbon emissions to zero or 18,000 tons (2,500 cars) (Figure 2) at a cost 30% below the current IPA residential rate. CITY ABC's goal is to eliminate coal from their energy supply entirely by replacing it with wind, hydro, biomass, high efficiency gas, and other competitive cleaner generation sources (Figure 3).

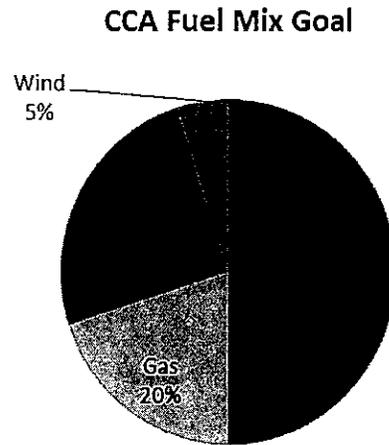
**IIT Fuel Mix**



**Figure 2, IIT Fuel Mix**



**Figure 1, ComEd Fuel Mix**



**Figure 3, Community Choice Aggregation Fuel Mix Goal**

<sup>5</sup> ComEd. (2010). Environmental Disclosure Information: Twelve Months ending June 30, 2010. Retrieved from [https://www.comed.com/Documents/Customerservice\\_Brochuresandforms/EnvironmentalDisclosureOct10.pdf](https://www.comed.com/Documents/Customerservice_Brochuresandforms/EnvironmentalDisclosureOct10.pdf)



## Attachment 2 – Typical Water Consumption by Type of Generation

**Benchmark** — The Table below provides the average water consumption for the seven generation types, which will be used to benchmark and rank other facilities.

**Typical Generation Water Consumption (gal/MWh)<sup>6</sup>**

Generation Type	Water Consumption	Water Withdrawal
Simple-cycle coal-fired/biomass/natural gas, once-through cooling	~300*	~35,000
Simple-cycle coal-fired/biomass/natural gas, pond cooling	~400*	~450
Simple-cycle coal-fired/biomass/natural gas, wet cooling towers	~480*	~550
Combined-cycle natural gas, wet cooling tower	~180	~230
Combined-cycle natural gas, dry cooling tower	~0	~0
Combined-cycle coal, wet cooling tower	~200	~380
Distributed-generation, dry cooling tower	~0	~0
Nuclear, once-through cooling	~400	~45,000
Nuclear, pond cooling	~550	~800
Nuclear, wet cooling tower	~720	~950
Recycled energy, dry cooling tower	~0	~0
Hydro dam	~18,000	~18,000
Geothermal	~400	~400
Renewable, wet cooling tower	~800	~800
Renewable, dry cooling tower	~0	~0

<sup>6</sup> Goldstein, R., & Smith, W. (2002). *Water & Sustainability (Volume 3): U.S. Water Consumption for Power Production—The Next Half Century*, 1006786. Palo Alto, California: EPRI.