



CITY OF BEVERLY HILLS
PUBLIC WORKS DEPARTMENT
MEMORANDUM

TO: PUBLIC WORKS COMMISSION

FROM: Trish Rhay, Assistant Director of Public Works 
Caitlin Sims, Senior Management Analyst 

DATE: August 11, 2016

SUBJECT: COMMUNITY CHOICE AGGREGATION

ATTACHMENTS: 1. Final Report Back on the Preliminary Technical Analysis on a Feasibility of a Countywide Community Choice Aggregation Program for Electrical Power Procurement – Report to Los Angeles County Board of Supervisors and County of Los Angeles Community Choice Energy (LACCE) Business Plan Executive Summary

Community Choice Aggregation (CCA) programs allow local governments and special districts to pool their electricity needs and purchase and/or develop environmentally sustainable energy on behalf of residents, businesses, and municipal agencies. The existing investor-owned utility continues to maintain the power grid, deliver electricity and provide customer service and billing, while the CCA purchases wholesale electric power and designs electricity rates for end-use customers. Several CCAs have been operating in northern California – including Sonoma Clean Power and Marin Clean Energy – for several years, and they have been able to provide more renewable energy at cheaper rates than the investor-owned utility in that area.

Los Angeles County Business Plan and Feasibility Study

At its April 21, 2015, meeting, the City Council adopted 15-R-13035, authorizing the City to participate in a feasibility study related to Community Choice Aggregation. The County of Los Angeles Board of Supervisors authorized funding to retain a consultant to complete a study assessing the feasibility of establishing an electrical power purchase CCA. The feasibility study was completed and released in late July 2016 and included an assessment of the following:

- A preliminary technical analysis of the feasibility of establishing a CCA in the County's unincorporated areas, including the costs (start-up, short-term and long-term), benefits and risks to the County;
- An assessment of the financial viability of a local CCA, including an assessment of energy supplies required for all customer classes (residential, commercial, and industrial users) for all cities in the County and the availability of sufficient green energy supplies;
- A comparison of end-user monthly rates for the proposed CCA vs. Southern California Edison (SCE); and
- An overview of issues, key decision points, and next steps.

The memorandum provided to the County of Los Angeles Board of Supervisors and the Executive Summary for the County of Los Angeles Community Choice Energy (LACCE)

Business Plan are included as Attachment 1. The entire LACCE Business Plan can be found at http://file.lacounty.gov/bc/q3_2016/cms1_247283.pdf.

The LACCE Business Plan included a preliminary assessment of comparing projected end-user monthly rates for CCA customers versus SCE customers. A snapshot of some of these rates (in cents per kilowatt-hour) is found below:

Rate Class	SCE – 33% Renewable	CCA – 33% Renewable	CCA – 50% Renewable	CCA – 100% Renewable
Residential	17.1	16.2	16.4	18.2
Commercial (GS-1)	16.6	15.7	15.9	17.7
Commercial (GS-2)	15.8	15.0	15.2	16.9
Commercial (GS-3)	14.5	13.8	13.9	15.5

Overall, the LACCE Business Plan concludes that the formation of a CCA in Los Angeles County would be financially prudent. Rates would be approximately 4% lower than the rates charged by SCE and would deploy approximately twice the amount of renewable resources.

Over the last nine months, City staff has been participating in the County of Los Angeles CCA Task Force as the County has developed the feasibility study. In addition, the City has been an active participant in the South Bay Clean Power (SBCP) Working Group. The SBCP mobilized cities throughout the region, including Beverly Hills, Santa Monica, West Hollywood, Torrance, Manhattan Beach, Carson, Lomita, Hermosa Beach, Culver City, and Redondo Beach, to push the County towards developing a CCA that is in line with its renewable goals and objectives. These objectives include being 100% renewable power in ten years, promoting distributed generation with a County-wide buildout of a new renewable energy infrastructure, and creating local investment, local power generation, local jobs, and local career opportunities.

Alternatives

The LACCE Business Plan concludes it would be financially prudent to form a CCA in Los Angeles County and lays out an implementation plan to do so. The proposed implementation plan utilizes a phasing approach that allows the CCA to manage any start-up and operational issues before undertaking full-scale operations. The implementation plan also assumes that all Los Angeles County municipal facilities and all customers in unincorporated Los Angeles County would be incorporated into the CCA and also provides that additional cities in Los Angeles County could also join the CCA. The proposed implementation schedule is found below:

Phase	Start	Eligibility
Phase 1	January 2017	LA County Facilities within Unincorporated Area
Phase 2	July 2017	All customers in Unincorporated LA County
Phase 3	To be determined	Individual cities

The County Board of Supervisors will next consider the report and will determine whether to move forward with the development of a CCA. Should LA County elect to move forward, the City of Beverly Hills will have several alternatives to consider.

Alternative 1: Join the County of Los Angeles CCA

If the City were interested in joining a Los Angeles County CCA, the City would work with County of Los Angeles and any other interested cities would negotiate a joint-powers agreement in order to create a joint-powers authority that would manage the CCA.

The benefits of joining a County of Los Angeles CCA is that it would provide economies of scale that would increase the efficiency (and presumably the cost) of procuring power and providing core administrative functions. If the City were to join early in the process, it would also be able to shape the formation of the JPA. Finally, joining the CCA would allow the City to provide its residents with the option for electricity that comes from more renewable sources and at a lower rate than is currently being provided. While all customers would automatically become CCA customers when the City joined the CCA, all customers would also have the option to opt-out of the CCA and remain customers of SCE.

The concerns of joining a CCA would be that, especially by joining early in the process, there may be some start-up challenges that the City would have to handle. Some of these may be managed if the City did not begin service until Phase 3; however, there may still be challenges. In addition, with a potentially large group of cities joining the County of Los Angeles CCA, there would be less local control for the City of Beverly Hills.

Alternative 2: Create a CCA with a smaller group of cities

If the City were interested in joining a CCA with a smaller group of cities, the City would need to work with these cities to develop a feasibility study and business plan that would assess the financial prudence of creating a CCA. If it were feasible, the group would negotiate a joint-powers agreement in order to create a joint-powers authority that would manage the CCA. The group would also submit the business plan to the California Public Utilities Commission (CPUC) for approval and, if approved, would be responsible for procurement for CCA administrative functions and a procurement for power.

The benefits of creating a CCA with a smaller group of cities are that it would provide more local control for the City. The City has also been working actively with the South Bay Clean Power (SBCP) group, so there is an active group of interested cities. In addition, presuming that the feasibility study found that the rates would be cheaper, the City would also be able to provide its residents with the option for electricity that comes from more renewable sources and at a lower rate than is currently being provided.

The concerns of creating a CCA are that the City would have to identify partner cities and, as a part of that group, would have to fund and develop its own feasibility and business plan. This process would take several months or longer. There would also presumably be a larger up-front investment from the City – including staff time and money – that would be required to develop the business and feasibility plan to submit to the CPUC and, if approved, procure services for administrative functions for the CCA.

Alternative 3: Create a CCA as a Single City

If the City were to create CCA as a single City, it would need to develop a feasibility study and business plan to assess the financial prudence of creating a CCA. If the CCA were feasible, the City would be responsible for submitting the Business Plan to the CPUC and, if approved, be responsible for a procurement for CCA administrative functions and a procurement for power.

The benefit of creating a CCA as a single city is that the City would have the most local control for the City. The City of Lancaster has successfully created a single-city CCA that has been operating for approximately one year, which could serve as a model.

The concerns of creating a single city CCA are the City would have to start from the beginning to develop a feasibility study and business plan to determine if it is financially prudent to form a single-city CCA. The City would be responsible for a large up-front investment – both staff time and cost – to undertake the feasibility study and business plan and to submit it to the CPUC. The City would also have to determine how the CCA should function—contract out or in-house – and would have to take an active role in power procurement.

As a final alternative, the City could elect to not move forward with any of these options.

Next Steps

At this time, the County of Los Angeles is seeking feedback from any city that is interested in participating in the County-wide CCA. The County would then work with any interested cities to create a joint-powers agreement and a joint-powers authority (JPA) that would govern the CCA. The governing board JPA would be responsible for the formation of the CCA and, as the program continued, would oversee the agency.

Staff is seeking direction from the Public Works Commission on which alternative it would recommend the City Council pursue. Staff will provide a presentation on this item at the August 11, 2016, meeting.



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Chief Deputy Director

County of Los Angeles
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"To enrich lives through effective and caring service"

July 28, 2016

To: Supervisor Hilda L. Solis, Chair
Supervisor Mark Ridley-Thomas
Supervisor Sheila Kuehl
Supervisor Don Knabe
Supervisor Michael D. Antonovich

From: Dave Chittenden
Chief Deputy Director

BOARD MOTION OF SEPTEMBER 15, 2016, ITEM NO. 6 - FINAL REPORT BACK ON THE PRELIMINARY TECHNICAL ANALYSIS ON THE FEASIBILITY OF A COUNTYWIDE COMMUNITY CHOICE AGGREGATION PROGRAM FOR ELECTRICAL POWER PROCUREMENT

Final Report Back

This memorandum along with the attached business plan constitute the Final Report Back in response to your Board's instructions on September 15, 2015, for the Director of the Internal Service Department (ISD) and the Chief Executive Officer (CEO) to provide a preliminary technical analysis on the feasibility of establishing a Community Choice Aggregation (CCA) program for electrical power procurement for County unincorporated areas, with potential expansion to other public agencies and private customers.

Background

Initially, on March 17, 2015, your Board instructed ISD's County Office of Sustainability to investigate the feasibility of establishing an electrical power purchase CCA program in the County. On June 24, 2015, ISD submitted the report-back to that motion.

On September 15, 2015, your Board instructed ISD and CEO to retain a CCA consultant to provide a feasibility study addressing the following areas:

- a. County Unincorporated. A preliminary technical analysis of the feasibility of establishing a CCA in the County's unincorporated areas, including the costs (start-up, short-term and long-term), benefits and risks to the County;
- b. Countywide. An analysis of the financial viability of a local CCA, including an assessment of energy supplies required for all customer classes (residential, commercial, industrial users) and the availability of sufficient green energy supplies;

- c. CCA versus SCE. A preliminary analysis that compares end-user monthly rates across rate classes and levels of green energy desired between a CCA and Southern California Edison, our local investor-owned utility; and
- d. Issues, Key Decision Points & Next Steps. Key decision points, next steps and issues that the Board must consider before making a decision to move forward with the formation of a Los Angeles County CCA, including options for financing start-up and initial operational costs, a proposed governance structure, potential green energy and rate tiers and planning, implementation and rollout timelines.

Pending submission of this Final Report Back, your Board additionally instructed ISD and CEO to create, lead, and convene regular meetings of a CCA Implementation Workgroup, with representatives from the County, other jurisdictions that have shown interest in joining a County CCA program, organized labor, and other stakeholders, to:

- a. Assess the feasibility of other jurisdictions joining a County CCA program;
- b. Provide information and guidance to other jurisdictions on the potential timeline and necessary steps to join a County CCA; and
- c. Determine if a County CCA can advance workforce training and hiring objectives that align with County goals.

Per your Board's direction, as these actions progressed, ISD submitted interim status reports to your Board on November 14, 2015, February 8, 2016, and April 6, 2016.

The Business Plan

Per your Board's direction, ISD engaged CCA consultants to conduct the CCA preliminary technical analysis and feasibility study.¹ Their resulting work product is the *County of Los Angeles Community Choice Energy Business Plan* (Business Plan), which is Attachment A hereto and an integral part of this Final Report Back.

This memorandum does not attempt to reiterate the detailed analysis from the Business Plan, but instead summarizes the results and incorporates the underlying analysis by cross-reference to the Business Plan.² The terms Community Choice Aggregation or CCA and Community Choice Energy or CCE are used synonymously throughout this report and the Business Plan.³

¹ The Business Plan was prepared by EES Consulting, Inc., in conjunction with Bevilacqua-Knight, Inc., and includes a funding option appendix prepared by Public Financial Management, Inc.

² For example, [BP 2, 4] would be a cross-reference to pages 2 and 4 of the Business Plan.

³ The use of the terms Community Choice Aggregation and CCA reference these types of programs as defined by California legislation authorizing the formation of CCAs and as used by the California Public Utilities Commission in their role as regulators of CCAs. The terms Community Choice Energy and CCE are being adopted throughout California as a more "user-friendly" term for these programs.

The Business Plan contains the requested technical analysis and financial viability assessment. It also estimates CCA power supply costs, administrative costs, electric loads, and future retail rates and compares them to the incumbent rates offered by Southern California Edison (SCE). These forecasted rates and other analyses are examined to determine if the proposed County CCA can offer competitive rates, better products and superior customer service while also improving the environment and creating local jobs.

The Business Plan includes an Executive Summary which concludes that the formation of a CCA in Los Angeles County is financially viable and would yield considerable benefits for the County's residents and businesses [BP 2-7]. These benefits would include at least a four percent lower rate for electricity than is charged by SCE [BP 4] with roughly twice the amount of renewable resources utilized [BP 4-5]. Upon achievement of various implementation phases of a County CCA, the program would significantly reduce GHG emissions in the region [BP 6-7], add hundreds of jobs, generate millions of dollars in additional Gross Domestic Product [BP 5-6], and give the County and its residents local control over their power supply and energy efficiency programs.

Finally, the Business Plan opines that there is no reasonable set of risk-related circumstances that would result in the County CCA rates being higher than SCE's comparable rates [BP 7, 60].

Three-Phase Implementation

A cornerstone to the analysis in the Business Plan is that implementation of a County CCA should be done through three progressive phases [BP 7, 14-15]. In particular:

- Phase 1 would commence as early as January 2017, and would provide service only to County municipal facilities located in County unincorporated areas. Other cities' municipal facilities could be eligible for Phase 1 services if they were to timely join LACCE.⁴
- Phase 2 would commence as early as July of 2017, and expand service to include all County unincorporated area electric ratepayers. Other cities' electric ratepayers could be eligible for Phase 2 service if they were to timely join LACCE.
- Phase 3 would commence at a date yet-to-be-determined, and would expand service to include all cities' electric ratepayers, depending on if and when the cities choose to join LACCE.

A proposed LACCE Implementation Schedule is included in the Business Plan [BP 56], and is also provided with this memorandum as a separate attachment (Attachment B - *LACCE Implementation Schedule*).

Beginning operations with the scope limited to County municipal facilities only in Phase 1 would have several benefits. For example, experiences from other CCAs already operating in California suggest that glitches with data transfer and customer billing-system interfaces with SCE will likely occur and take some time to correct. Using County municipal accounts only

⁴ Los Angeles Community Choice Energy or LACCE is the CCA program name used in the Business Plan.

during the initial phase would mitigate customer service concerns, as we—the County—would be our only customer [BP 64]. These County accounts are managed by ISD's County Office of Sustainability, and any data and billing problems could be more easily reconciled and resolved through this single-point of contact.

Phase 2 would expand services to all ratepayers in unincorporated County areas. The County has no control over cities joining LACCE as cities would become members of the program through individual Council resolutions. Cities may be more likely to join a CCA that is already operating and has operating experience.

Los Angeles Community Choice Energy (LACCE) Benefits Summary

Lower Rates

California mandates that SCE and other utilities achieve 33% renewable resources content in their power supply portfolios by 2020. SCE is currently at approximately 28% renewables (base rate) in their power supply and an LACCE rate with an equivalent 28% renewables content would be 5% lower than SCE's base rate. The Business Plan also forecasts that an LACCE rate with 50% renewables content would be 4% lower than SCE's base rate and an LACCE rate with 100% renewables content would be only 6% higher than SCE's base rate. [BP 3-4, 43-46]

Renewable Resources and Greenhouse Gas Reductions

The higher levels of renewable resources in the LACCE rates (50% and 100%) would have significant impacts on GHG reductions in the region. Serving only County unincorporated area customers under the 50% renewables rate would reduce GHG emissions by an estimated 500,000 tons of carbon annually. For comparison purposes, GHG responsibility for the County's municipal operations (e.g., buildings' energy use, vehicle fuels) is about 1 million tons of carbon annually. The LACCE base renewables rate in unincorporated County would offset half of the County's municipal operations GHG responsibility.

At full implementation (i.e., County and all eligible cities enrolled in LACCE, and under the 50% renewables rate) LACCE would reduce overall GHG emissions in the County by approximately 7%. This GHG reduction would be roughly double at the 100% renewables rate [BP 6-7, 47-48].

Economic Development and Jobs

For unincorporated County areas under the LACCE 50% renewables rate, ratepayers would save an estimated, total \$20 million annually in utility bill payments. The Business Plan uses a standard economic development model (IMPLAN) which predicts that that \$20 million savings would result in over 200 jobs created through direct, indirect and imputed impacts (impacts as a result of the new spending in the economy). At full LACCE implementation, these results could increase by up to seven times. [BP 5-6, 48-51]

Additionally, the LACCE could seek to support private sector distributed generation projects at the local and regional level, instead of procuring all power needs from large utility-scale distributed generation projects outside the County, Southern California, or the State [BP 46-48]. For example, with the typical 50MW (megawatts) solar project (which could be built in the

County; or alternatively, 50 1-MW projects), the economic modeling predicts around 700 construction and other service jobs would be created.

Local Control and Energy Management

LACCE would provide the County and cities choices in retail rate offerings to their ratepayers. The Business Plan provides three options on renewable power content strictly for comparison to SCE's current, base rate [BP 46]. LACCE, working with the County and cities, may determine other rate options be made available. Accordingly, it is conceivable that different rate offerings could be made for individual cities or groups of cities.

LACCE would be eligible to acquire funding for design of its own end-user programs incorporating measures such as energy efficiency, retail distributed generation, energy storage, water efficiency and electric vehicle charging into comprehensive, user-friendly, one-stop program offerings. LACCE would also benefit from having the Southern California Regional Energy Network (SoCalREN) already operating in the County (and serving all eligible cities) with energy efficiency programs. SoCalREN could easily and cost-effectively become the end-user program delivery model for LACCE. [BP 46-47]

Risks Assessment and Mitigation

The Business Plan identifies risks associated with operation of the LACCE program and discusses their mitigation and likely impacts. It also includes impacts on benefits due to sensitivity analyses around forecasted rates under highly negative scenarios for each risk. The major risk is that LACCE's rates could move higher than SCE's and the LACCE would lose revenue as customers migrate back to SCE. Other risks involve major power market price changes, customers moving back to SCE for other reasons, and regulatory/legislative risks associated with operation of CCAs in State. [BP 3, 12-13, 52-55]

The Business Plan concludes that these risks are manageable, particularly since LACCE's proposed rates are based on conservative estimates of the factors identified which impact LACCE and SCE rates [BP 3-4, 60]. Basically, LACCE's rates may approach SCE's rates if the wholesale, natural gas-based power market goes even lower from its current, historically low prices seen today and for several years in the past. Also, LACCE's rates may approach SCE's if SCE's rates are reduced dramatically. Currently, SCE does not forecast any reductions in their rates. [BP 52-55]

Retention of customers should not be a significant risk if LACCE's rates are lower than SCE's and/or provide rate choices not offered by SCE. It is assumed that some customers will proactively opt out of LACCE, preferring to stay with SCE. The Business Plan's customer retention rates used for rate modeling are based on actual retention rates seen in other CCAs [BP 14-15]. Also, LACCE's calculated electric rates use even more conservative numbers than seen elsewhere in the State.

Given the proliferation of CCAs in the State, any regulations or legislation that would harm CCA viability would seem unlikely, especially given the heightened awareness of potential regulatory and legislative issues around CCA by all CCA stakeholders [BP 55, 61].

Proposed LACCE Implementation Schedule and Key Activities

Board Acceptance of Business Plan

The details in the Business Plan allow your Board to determine whether to initiate the LACCE program and allows other cities' to determine whether to join LACCE or develop their own CCA(s). The Business Plan will be provided to the eligible cities within the County, most likely through their Council of Governments or other groups. The Business Plan also will be used to begin more comprehensive outreach to LACCE stakeholders including organized labor, environmental advocacy groups, technical service providers, financing providers, State energy regulators, community groups, and others.

A power point presentation with an overview of the Business Plan has been prepared and will be used for briefing your Board Offices, COGs, and cities, as well as other stakeholder groups. These briefings are a continuation of ongoing outreach, and will be conducted after the Business Plan has been submitted.

LACCE Technical Service Providers

A Request for Statement of Qualifications has been issued by the LACCE technical consultants seeking information for two, critical service providers for LACCE:

- A full services power provider who will procure wholesale power, schedule power delivery into the State transmission system (grid), provide all ancillary power supply services that support the State's grid operations, and provide all necessary power procurement reporting.
- An LACCE data manager who will collect, reconcile and provide all data to the wholesale power services provider and to SCE to ensure customer bills are accurate, customer bill payments are collected, and wholesale power providers are paid.

The LACCE technical team will evaluate these offerings and will work with proposers to identify a pool of service providers. Upon direction from your Board, ISD or, if operational, the LACCE JPA, would negotiate and execute agreements with these and other needed service providers for Phase 1 operations.

LACCE Financing

The LACCE program would require about \$10 million in start-up capital which will cover establishing the LACCE operations, procuring the first months of wholesale power under Phase 1, and paying for LACCE expenses during the 2 to 3 month lag between provision of power to LACCE customers and receipt of revenues from SCE for these customers. The Business Plan serves as a key document for informing the investment community about LACCE's operations and revenue viability. The Financing Section of the Business Plan indicates that a start-up loan can be acquired from a third party lender but it will likely be at relatively high market rates (5.5% over two years was used in the LACCE financial model) due to the nascent nature of LACCE. The LACCE financial model includes paying off this loan after two years of operation. COS has engaged an energy programs financial advisor who will reach out to the financial community to

determine lenders' appetites for financing LACCE's Phase 1 and Phase 2 operations with or without support from the County as described below. [BP 62-66]

\$1.5 million would be needed for expenses through calendar year 2016 to complete LACCE start-up activities. Thereafter, under LACCE Phase 1 initial operations, about \$8.5 million would be needed for labor, consultants, and initial power procurement. A more detailed description of these initial needs is included as an attachment (Attachment C – LACCE Start-up Budget).

Alternatively, other CCAs throughout the State have commenced operations using local government funding in the form of a loan with CCA operating revenues dedicated to paying off that loan. As indicated in the Business Plan, this type of internal loan from the County could similarly be repaid by LACCE revenues. [BP 64-65]

Other options for the County in providing LACCE financial and credit support include: establishment of an escrow account to "backstop" a lender's risk exposure, and/or provision of an agreement to not opt its Phase 1 accounts out of LACCE for the period of a loan [BP 65].

There are benefits to the County providing a loan or other credit support to LACCE but the initiation of LACCE is not seen to be dependent on this internal support.

LACCE Governance

A proposed organizational chart for CCA operations is included and discussed in the Plan. Phase 1 CCA operations, for County municipal buildings in unincorporated areas only, would be governed solely by the County, and run through ISD's County Office of Sustainability. [BP 2, 11, 36-39]

For other public agencies to join the CCA in subsequent phases, a joint powers authority (JPA) would be created. [*Public Utilities Code* §§ 331.1(b), 366.2(c)(12); *Government Code* § 6500, *et seq.*].

As a newly created and independent public agency, the JPA would be governed by its own Board of Directors. Unless your Board of Supervisors were to instruct otherwise, ISD recommends that the County would maintain a majority and controlling vote on the JPA Board. Depending on the number of other JPA members, other Director positions would be filled by some or all of the other member agencies, in direct and/or representative capacities.

The likely scope of non-County participation in any subsequent program phases is unknown at this time. But at your direction, ISD would continue to explore third-party public agency participation concurrently with Phase 1 start-up operations.

CCA Technical Team Next Steps

At your Board's direction, the LACCE technical team would continue using remaining technical study funds authorized by your Board to develop the CCA program with the following activities:

- Providing support to the Board Offices, COGs and cities in presenting and explaining development and outcomes of the Business Plan;

- Submitting necessary documents to SCE to support their preparation for working with LACCE on Phase 1;
- Submitting necessary documents to the CPUC, including the CPUC's required Implementation Plan (which is substantially completed), to support their review and approval of LACCE which is required for operations;
- Supporting the financial advisor's activities in identifying possible external and internal Phase 1 and Phase 2 financing sources;
- Providing limited outreach and education to other LACCE stakeholders and interested parties, particularly those who the County would seek to publicly advocate for LACCE (e.g., non-profit environmental groups, organized labor, academia, ratepayer interest groups, consumer protection agencies, and business representatives, etc.);
- Negotiating and executing (as directed by the Board) agreements with technical services providers.

Additional Next Steps

At your Board's direction, the CEO, County Counsel, and ISD, as more particularly tasked below, would initiate the following next steps to prepare for a potential CCA implementation:

- CEO and ISD to validate the technical feasibility report in the Business Plan, including start-up costs, sources of funding, and financial viability;
- County Counsel to work with CEO and ISD to explore appropriate governance models and provide options to your Board as non-County public agencies express interest in joining a County CCA; and
- ISD to continue to provide outreach to non-County public agencies.

Conclusion

The benefits to be derived from operation of the LACCE program are documented in the Business Plan and described in this memorandum and attachments. As also described, the risks associated with LACCE operations are projected to be manageable and unlikely to materialize. Under Phase 1, LACCE would gain operating experience working through business relationships with SCE, technical service providers, and cities and other stakeholders. To the extent that LACCE grows with other cities, the benefits for the region of lower utility costs, reduced GHG production, and initiation of beneficial local/regional clean energy programs would increase.

Successful CCAs are already operating in Marin and Sonoma Counties, in San Francisco City and County, and in the City of Lancaster. In Southern California, CCAs are being investigated by Ventura and Santa Barbara Counties (jointly) and in Riverside and San Bernardino Counties (jointly). CCAs are also being developed in Counties along California's central coast and in large Counties such as Santa Clara and Alameda; Humboldt County is

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exploring a CCA for the north coast region. The City of San Diego is leading CCA efforts in that region.

CCAs are now proving to be a critical component in the State's policies to reduce greenhouse gas emissions and to transform the energy industry into one that enhances the use of clean energy, helps accelerate the development of the electric grid of the future, and provides diversity and competition into the provision of traditional monopoly energy services.

Given the County's leadership in regional energy matters, individually as well as working with other energy stakeholders, it would be appropriate for the County to now develop its own CCA, the Los Angeles Community Choice Energy Program, to serve unincorporated areas and any eligible and interested city within the County.

If you have any questions regarding this matter, please contact me at (323) 267-2103, via email at dchittenden@isd.lacounty.gov or you may contact Howard Choy at (323) 267-2006, via email at hchoy@isd.lacounty.gov.

DC:HC:JG:sg

Attachments

c: ISD Board Deputies
Chief Executive Officer
Chief Operating Officer
Executive Office, Board of Supervisor
County of Sustainability Council

County of Los Angeles

County of Los Angeles Community Choice Energy

Business Plan

June 30, 2016

Prepared by:



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June 30, 2016

Mr. Howard Choy
County of Los Angeles
Energy Management Division
1100 N. Eastern Avenue
Los Angeles, CA 90063

SUBJECT: County of Los Angeles Community Choice Energy (LACCE) Business Plan

Dear Mr. Choy:

Please find attached EES Consulting, Inc.'s (EES) Community Choice Energy Business Plan (Plan) for the County of Los Angeles (County). This Plan represents the work product of EES and Bki in evaluating the prudence of implementing a Community Choice Energy organization for the County.

We want to thank you and your staff for your assistance in preparing this Plan. It has been a pleasure working with you on this project.

Please contact me directly if there are questions or if we may be of any further assistance.

Very truly yours,

A handwritten signature in black ink that reads "Gary S. Saleba".

Gary Saleba
President

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Executive Summary

Background

The California legislature passed AB 117 in 2002 (amended in 2011 by SB 790) allowing all Cities, Counties, or groups of Cities and Counties to provide an electric power supply source to customers within their jurisdictions that are currently served by Southern California Edison, Pacific Gas & Electric or San Diego Gas & Electric. Community Choice Aggregation (CCA) or Community Choice Energy (CCE) is a customer opt-out program where the CCA provides power supply and behind the meter services, and the incumbent IOUs provide transmission and distribution (wires) service.

This Business Plan (Plan) evaluates the prudence of forming a CCA within the County of Los Angeles (County), the Los Angeles Community Choice Energy (LACCE). The proposed LACCE will provide power supply and behind the meter services, and Southern California Edison (SCE) will provide transmission and distribution services. Customers are part of the LACCE program until they proactively opt-out. This Plan estimates LACCE's power supply costs, administrative costs, electric loads, and future retail rates and compares LACCE's rates to the incumbent SCE. These forecast rates are compared to determine if the proposed LACCE can offer competitive rates, better products and superior customer service while also improving the environment and creating local jobs.

Description of LACCE

The proposed LACCE may include the unincorporated areas of the County and a number of Cities within the County. The unincorporated County average annual energy is 440 aMW (average Megawatts) and 900 MW peak while the total County potential service area average annual energy is estimated at 3,000 aMW and 7,000 MW peak. Energy consumption for the entire County area served by SCE is equal to more than 30 percent of SCE's total retail load.

For this Plan, it is assumed that service will be offered to customers in three phases. Phase 1 will include the County's own municipal facilities residing within the unincorporated County areas. In Phase 2, all customers located in the unincorporated County will be included in LACCE. Finally, service to customers from the Cities within the County will begin under Phase 3. Exhibit ES-1 summarizes this phased approach to forming LACCE, and the number of customers and amount of load attendant with each phase.

**Exhibit ES-1
Participation Schedule**

Phase	Start	Eligibility	Customer Accounts	Peak Load (MW)	Average Load aMW	LACCE Annual Revenues
Phase 1	January 2017	LA County Facilities within Unincorporated Area	1,728	40	20	\$25M
Phase 2	July 2017	All Customers in Unincorporated LA County	306,930	900	440	\$180M
Phase 3	To Be Determined	All Individual Cities	1,497,747	7,000	3,000	\$1,200M

Depending on the interest from Cities located in the County, Phase 1 and Phase 2 may also include customers from individual Cities. However, because of the number of Cities and the size of their associated loads, a phasing of implementation was assumed for this Plan. This phasing strategy enables LACCE to manage any start-up and operational issues before full scale operations are undertaken. In addition, this phasing strategy will allow LACCE’s third party electricity suppliers, scheduling agents and data management entities to ramp up power supply procurement and bill processing over several months. Because it is not yet clear which Cities are interested in joining LACCE, this Plan explores the prudence of the first two phases being undertaken over a 20-year forecast period. It is anticipated that the results of this Plan are scalable as additional Cities join LACCE. Adding more customers than assumed in the Plan will increase revenues and further reduce LACCE rates.

By the end of Phase 2, LACCE is projected to serve a potential of over 300,000 retail customers and have annual electricity sales potential of over 3,800 GWh (Gigawatt-hours). Annual revenues to LACCE during Phase 2 operations are projected to be approximately \$180 million.

Governance

The feasibility, analysis and development of LACCE is currently being conducted by the Office of Sustainability within the County’s Internal Services Department. While LACCE could, in theory, be an organization operated within the County’s existing governance, it is anticipated that a JPA will be formed to provide the legal structure of LACCE. A JPA provides a more flexible framework for LACCE and historically has been the preferred structure for an organization like LACCE. Additionally, a JPA provides financial risk mitigation for its local government members.

Given the above, a key next step in the formation of LACCE is the creation of the JPA (created when two jurisdictions agree to join the JPA). Initiating LACCE operations will then require a governing authority to execute service contracts for LACCE formation and operations.

Alternatively, while a JPA is being finalized and implemented, the Office of Sustainability could manage Phase I operations of LACCE, if directed by the Board of Supervisors.

Risks

All businesses face risks and uncertainty. For LACCE, the major risks will be operational and regulatory. These risks are dealt with extensively later in the Plan. In summary, the Plan concludes that these risks are manageable and that no reasonable set of circumstances will result in LACCE's rates being higher than SCE's for comparable products.

Plan Results

This Plan evaluates the cost and resulting rates of operating LACCE, and compares these rates to a rate forecast for SCE. The analysis begins with a 20-year forecast of electrical loads and customers, incorporates several power supply resource portfolio options, and allows for the sensitivity testing of input assumptions. LACCE customers will see no obvious changes in electric service other than a lower price and increased renewable resources in their power supply resource mix. Customers will pay the power supply charges set by LACCE and no longer pay the costs of SCE power supply.

In addition to paying LACCE's power supply rate, LACCE customers will pay the SCE delivery (wires) rate and all other non-power supply related charges on the SCE bill to include Franchise Fees and Utility User Taxes.

LACCE will establish rates sufficient to recover all costs related to operation of the CCE. It is anticipated that LACCE's rate designs initially will mirror the structure of SCE's rates so that rates similar to SCE's can be provided to LACCE's customers. In setting rates, the Plan's financial analysis assumes the customer phase-in schedule noted above and assumes that the implementation costs are largely financed via a start-up loan.

The first consequence for forming LACCE is the retail rate impact as illustrated on ES-2. ES-2 shows SCE's current total bundled rates of 28 percent renewable power compared to three LACCE rate options. Bundled rates are the "all in" price for electricity delivered to the customer's meter. The Plan's Resource Portfolio Standard (RPS) rate assumes renewable energy is 28 percent of LACCE's initial power supply portfolio and increased per the State's RPS mandate.

For reference, the column headers noted on ES-2 are summarized below.

- RPS Bundled – LACCE rates with the same share (28 percent) of renewables as SCE's current power supply.
- 50% Green Bundled Rate – LACCE rates with 50 percent renewable power.
- 100% Green Bundled Rates – LACCE rates with 100 percent renewable power.

A rate schedule comparison of LACCE's rates and SCE's rates follows.

**Exhibit ES-2
Indicative Rate Comparison in ¢/kWh**

Rate Class	Customer Type	SCE Bundled Rate*	LACCE RPS Bundled Rate	LACCE 50% Green Bundled Rate	LACCE 100% Green Bundled Rate
Residential	Domestic	17.1	16.2	16.4	18.2
GS-1	Commercial	16.6	15.7	15.9	17.7
GS-2	Commercial	15.8	15.0	15.2	16.9
GS-3	Industrial	14.5	13.8	13.9	15.5
PA-2	Public Authority	12.6	12.0	12.1	13.4
PA-3	Public Authority	10.4	9.9	10.0	11.1
TOU-8 Secondary	Domestic	13.1	12.4	12.6	14.0
TOU-8 Primary	Commercial	11.7	11.1	11.2	12.5
TOU-8 Substation	Industrial	7.5	7.1	7.2	8.0
Total LACCE Rate Savings			5.4%	4.1%	(6.3%)

*SCE bundled average rate based on Table 3 in Advice 3319-E-A.

As can be seen above, the LACCE RPS residential rate is 0.9¢/kWh or 5.4 percent lower than what SCE currently offers with an equal amount of renewable power (28 percent). The LACCE residential rate with 50 percent renewable power (compared to SCE’s 28 percent) is 0.7¢/kWh or 4.1 percent lower for roughly twice the amount of green renewable power. The LACCE residential rate with 100 percent green power (compared to SCE’s 28 percent) is 1.1¢/kWh or 6.3 percent higher, but this additional amount comes with almost four times more renewable power than the comparable SCE rate.

As an alternative to its standard rates with 28 percent renewable power, SCE also offers rates which feature 50 percent and 100 percent renewable power. For the residential customers, SCE estimates energy costs to be 3.5 cents per kWh higher for each kWh served on the green rate. The LACCE rates for 50 percent and 100 percent renewable power for residential customers are therefore estimated at 12-13% percent lower than SCE’s.

The rates calculated under this Plan are for comparison to SCE rates only. Under formal operations, the LACCE governance will determine the actual rates to be offered to customers. For example, LACCE may decide to offer the 50% renewables rate as the base tariff to customers if the environmental benefits far outweigh a minor difference in cost compared to the RPS base case.

Finally, it should be noted that these rate comparisons assume all savings will go towards rate reductions. It is likely that the LACCE governing body may opt to place some of these savings into a financial reserve account for use at other times when needed and/or to accelerate the payoff of start-up and initial operations financing.

Renewable Energy Impacts

A second consequence of forming LACCE will be an anticipated increase in the proportion of energy supplied by renewable resources used by LACCE customers. The Plan includes procurement of renewable energy sufficient to meet 50 percent or more of LACCE customer’s electricity needs at start up. The majority of this renewable energy will be met by renewable energy purchased on the wholesale market or newly constructed renewable resources. By 2020, SCE must procure a

minimum of 33 percent of its customers' annual electricity usage from renewable resources due to the State's RPS mandate and the Energy Action Plan requirements of the California Public Utilities Commission (CPUC). In contrast, LACCE customers will target 50 percent renewable power by 2017, which will come from new and some local renewable resources.

Energy Efficiency Programs

A third consequence of the Program will be an increase in energy efficiency program investments and activities. The existing energy efficiency programs administered by SCE will not change as a result of LACCE. LACCE customers will continue to pay the Public Goods Charges to SCE. This charge funds energy efficiency programs for all customers, regardless of power supply provider. The energy efficiency programs ultimately planned by LACCE will be in addition to the level of energy efficiency investment currently provided by SCE. Thus, LACCE has the potential to increase energy savings with an attendant reduction in emissions due to expanded energy efficiency programs.

LACCE will likely establish a program which offers a combination of retail tariffs, rebates, incentives and other bundled offerings intended to increase customer participation in demand-side management programs including: renewable distributed generation, energy storage, energy efficiency, demand response, electric vehicle charging, and other clean energy benefits defined as Distributed Energy Resources (DER). LACCE will work with State agencies and SCE to promote deployment of DERs in specific and targeted locations throughout SCE's distribution grid, and preferably within the County, in order to help support efficient grid operations and maintenance as part of the development of the future "smart grid."

The Southern California Regional Energy Network (SoCalREN), administered by the Office of Sustainability and authorized by the California Public Utilities Commission (CPUC) as an independently administered energy efficiency program in 2012, will serve as a platform for providing the services described above as it already receives funding under the CPUC's Energy Efficiency Program and is active in current CPUC proceedings designed to accelerate the implementation of local DERs.

Economic Development

The fourth consequence of LACCE will be significant economic development. So far, the analyses contained in this Plan focused on the direct effects of forming LACCE. However, in addition to these direct effects, the formation of LACCE will create indirect economic effects. These include increased local investments, increased disposable income due to bill savings, and improved environmental and health conditions.

Exhibit ES-3 shows the economic impact resulting from \$20 million in electric bill savings across the County. The \$20 million rate savings represents the estimated bill savings per year achievable by LACCE once Phase 3 operations begin. Based upon a macroeconomic input/output model employed for this Plan, it is estimated that these savings will create approximately 211 additional jobs in the County and over \$9.6 million in labor income. It is also estimated that the total value added will be approximately \$15.9 million and output close to \$24.2 million.

Exhibit ES-3 \$20 Million Rate Savings Effects on County Economy				
Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	98.3	\$3,674,939	\$5,376,863	\$7,099,612
Indirect Effect	10.4	\$608,838	\$1,057,593	\$1,677,591
Induced Effect	102.1	\$5,319,262	\$9,472,599	\$15,391,851
Total Effect	210.7	\$9,603,040	\$15,907,056	\$24,169,054

In addition to increased economic activity due to electric bill savings, potential local projects can also create job and economic growth within the County. As an example of the macroeconomic activity caused by local DER deployment, this Plan assumes the installation of 50 crystalline silicon, fixed mount solar systems with nameplate capacities of 1 MW each for a total capacity of 50 MW. Overall, the building of a 50 MW solar project is projected to create \$87 million in earnings and \$188 million in output (GDP) in the local economy along with 1,636 jobs during construction and 14 full-time jobs ongoing. It is anticipated that LACCE will ultimately install a number of larger local solar projects such as the one described. LACCE will need between 2,000 – 3,000 MW of solar at build-out. As such, the total economic benefit of LACCE’s renewable resource could be 40 – 60 times those estimated above. Local clean projects development under LACCE may serve as a platform for accelerating local hiring programs and job training programs for underserved labor sectors and communities.

Green House Gas Impacts

The fifth consequence of forming LACCE will be significant environment benefits. The share of renewable power in SCE’s power supply portfolio is currently 28 percent¹ and is scheduled to shift to 33 percent by 2020. LACCE is committed to reductions in greenhouse gas emissions. If LACCE achieves its 50 percent RPS target at start-up, GHG emissions reductions attributable to LACCE operations in 2019 will range from 289,080 to 505,890 tons CO₂ equivalent (CO₂e) per year relative to SCE’s projected resource mix over the same period. Exhibit ES-4 details these reductions.

Exhibit ES-4 Baseline Comparison of GHG Reduction by LACCE			
	2017	2018	2019
Forecast Renewables (50% Renewables)			
LACCE (MWH) – Phase 2	1,438,275	1,459,854	1,459,854
LACCE RPS (MWH) – Phase 2	730,029	737,154	737,154
Additional Green Power (MWH)	708,246	722,700	722,700
CO ₂ reduction – Low (Metric Tons of CO ₂ e)	283,298	289,080	289,080
CO ₂ reduction – High (Metric tons of CO ₂ e)	495,772	505,890	505,890

¹ http://www.cpuc.ca.gov/RPS_Homepage/

These reductions in GHG emissions associated with LACCE operations are significant. Assuming only Phase 2 loads (all unincorporated County loads) are being met by LACCE, CO₂e emissions associated with in-County electricity use will be reduced by 1-2 percent. At full Phase 3 build-out, CO₂ emissions associated with in-County electricity use will be reduced roughly 12-25 percent by LACCE operations.

Summary

This Plan concludes that the formation of a CCA in Los Angeles County is financially prudent and will yield considerable benefits for the County's residents and businesses. These benefits include at least a 4 percent lower rate for electricity than is charged by SCE and roughly twice the amount of renewable resource deployment. With the achievement of Phase 2 operations, LACCE will reduce GHG emissions by as much as 500,000 tons of CO₂e per year, add hundreds of jobs, generate over \$24 million in additional GDP, and give the County and its residents local control over their power supply and distributed energy resource programs. At full build-out (Phase 3), LACCE will reduce in-County generation-related greenhouse gases by as much as 25 percent and total GHGs in the County by 6%. Finally, there is no reasonable set of risk-related circumstances that will result in LACCE's rates being higher than SCE's rates for comparable products.