LEAN ENERGY U.S.
Local Energy Aggregation Network

Harnessing the Power of Communities

March 8, 2013 Via Electronic Mail

Mary Nichols, Chair
James N. Goldstene, Executive Officer
California Air Resources Board

Dear Chair Nichols and Mr. Goldstene,

On behalf of the LEAN Energy Board of Directors, community energy supporters and allied organizations, we respectfully submit the attached proposal for the establishment of a $30M Statewide Community Choice Aggregation revolving loan fund, supported by an investment of Cap & Trade Auction revenues. The CCA Formation Fund (hereafter CCA Fund) would provide short-term revolving lines of credit and/or credit guarantees to incent and support local government adoption of clean and energy efficient Community Choice Aggregation (CCA) programs in the State of California.

Background:
Through CCA, local governments throughout California are or will achieve a range of objectives:

- Cleaner, more efficient energy supply through CCA power contracts;
- Development of distributed generation and local renewable energy assets;
- Development of community energy programs including EV charging stations and energy efficiency upgrades for existing building stock;
- Local jobs creation and economic opportunity in low-income communities; and,
- Consumer choice and competitive energy rates.

To date, three CCA programs are operational/approved in California (Marin, Sonoma and San Francisco Counties) and fifteen other cities and counties are in active exploration phases. Please see attachment B of the Fund proposal for a list of communities currently investigating CCA. Community Choice Aggregation is a priority initiative in many local government Climate Action Plans due to its emphasis on greenhouse gas reduction and its compliance with California's AB 32, "Global Warming Solutions Act." It should be noted that with respect to AB 32 and the State's renewable portfolio standard, California's first operational CCA - the Marin Energy Authority - has *exceeded* both targets within its first two years of operation. Moreover, CCA is identified as a top local government strategy toward achieving Governor Brown's policy mandate for 12,000 MW new distributed generation by 2020.
http://www.law.berkeley.edu/12901.htm

CCAs are motivated and nimble buyers of renewable energy and can sign power purchase agreements (PPAs) in a matter of weeks, rather than the two years it can take a large investor-owned utility. Through its supply contracts, Marin Energy Authority has already spurred the development of nearly 20 new renewable power assets throughout the state. Most of these are new solar projects that can now be completed with Marin's contract in hand. As exemplified by Marin's experience, accelerating the formation of CCAs will result in the acceleration of new renewable infrastructure, while at the same

time balancing that demand with the creation of local energy efficiency programs and financing mechanisms for local energy upgrades and distributed generation.

The CCA Formation Fund supports local governments who want to do the right thing by transitioning to cleaner energy supply, complying with state environmental policy mandates, and giving their residents and businesses an energy choice that is currently not available. The CCA Fund concept is supported by a myriad of environmental groups such as Sierra Club California, CA energy suppliers, and transitional lending institutions who have indicated a desire to refinance a CCA's start-up loans and support a CCA's credit needs over the long term.

In closing, allow me to express our gratitude for your consideration of Community Choice Aggregation as a local clean energy model deserving of Cap &Trade investment. Multiple jurisdictions in California are ready and willing to engage in the CCA opportunity, and the creation of a CCA Fund will provide just the incentive and support they need to participate in the State's transition to a clean energy future.

Sincerely Yours,

Shawn E. Marshall
Founder and Executive Director

Cc: Office of Governor Edmund Gerald Brown; LEAN Energy Board of Directors; California Infrastructure Bank; CCA Alliance, Green Cities California, Sierra Club California, Bay Area Air Quality Management District (BAAQMD).

Attachment: CCA Formation Fund proposal

CONCEPT PAPER & PROPOSAL FOR
THE CALIFORNIA CCA FORMATION FUND

CCA Fund Overview

LEAN Energy US and its coalition of members and allied organizations, propose the establishment of a $30M Statewide CCA Formation Fund, supported by an investment of Cap & Trade Auction revenues. The CCA Formation Fund would provide short-term (i.e. 2-4 year) revolving lines of credit and/or credit guarantees to support the formation of clean energy Community Choice Aggregations (CCAs) in the State of California. Please see **Attachment A** for a brief description of Community Choice Aggregation and how it works.

The California CCA Formation Fund (hereafter 'CCA Fund') is proposed as a matching program, offered by application and subject to underwriting, to local governments that are explicitly committed to a minimum threshold of 33%-50% of new renewable energy within their CCA supply portfolio. Loans or guarantees would be offered at low or below-market rates for a term of 2-4 years and repaid or released when a CCA is operational and has a successful track record over 12-18 months of generating ratepayer revenues and cash flow. While similar to other revolving loan funds or credit facilities, the CCA Fund has key structural advantages over other models including a strong revenue basis for rapid debt repayment through conventional refinance once operational, a phased credit approach tied to specific CCA formation milestones, and a required capital commitment and vote (resolution) to proceed with CCA formation from the local governments seeking to create a CCA.

The CCA's combination of robust early cash flow, long-term revenue, and direct impact on the acceleration of energy efficiency and new renewable infrastructure development in California argues for a dedicated CCA Fund, potentially administered by the CA Infrastructure Bank, and capitalized through an investment of Cap & Trade Auction revenues.

Policy Framework and Potential Program Impact

CCA in California was enabled by the passage of AB 117 (Migden) in 2002 and amended in 2011 by the passage of SB 790 (Leno). Because of its emphasis on GHG emission reduction and clean energy production in California, CCA is featured as a priority initiative in many local government Climate Action Plans. Furthermore, CCA supports local government compliance with 2006's AB 32 "Global Warming Solutions Act" that requires a reduction in carbon emissions to 1990 levels by 2020. Per statute, CCAs are required meet resource adequacy regulations and the California state renewable portfolio standard (RPS) which calls for a 33% minimum renewable energy mix by 2020. It should be noted that with respect to AB 32 and the State's RPS compliance, California's only operational CCA - the Marin Energy Authority - has already *exceeded* both within its first two years of operation. Finally, CCA is identified as a top local government strategy toward achieving Governor Brown's policy mandate for 12,000 MW new distributed generation by 2020. http://www.law.berkeley.edu/12901.htm

Each new CCA represents annual energy generation revenue potential per community ranging from $100M associated with Marin Energy Authority's service, up to an estimated $1.3B if San Diego County and its jurisdictions should decide in favor of CCA formation. Regardless of size, the start-up phase of any CCA is estimated to cost ~ $2M in program costs (mainly staffing/legal, consulting fees, community

outreach, technical studies and plans) and $7.5-$9M in initial energy contracts.[1] The $30M Fund will be able to help launch 4-6 CCAs initially because of staged borrowing and because repayment begins very early in CCA operations. Thus, it is estimated that 8-10 new CCAs could be created with the help of the CCA Fund by 2017, with additional CCAs supported as the Fund is replenished through repayments and/or release of credit guarantees.

To illustrate potential program impacts, consider the case of Sonoma County. Sonoma Clean Power has formed its JPA and is ready to launch once funding is secured. With $10M in start-up investment over 18 months, the program is conservatively expected to generate $198M in annual revenues and $10M in annual net profits within four years. The CCA has lined up River City Bank to take out all start-up loans within 12 months of operations. These figures are proportional to Marin's and can be reasonably extrapolated to other CCAs based on population and load size -- meaning that four years of CCA Fund support would conservatively result in $600M to $1.2B in annual local revenues and $30M to $60M in annual net profits. These revenues represent an *existing* revenue stream, redirected from investor-owned utilities, which can help finance new renewable energy development and local energy efficiency efforts, including but not limited to:

- Brokered Supply Contracts with Third Party Energy Suppliers
- Power Purchase Agreements (PPAs) w/ buy-out options at the end of the investment tax credit
- Energy Asset Development (by the CCA(s) and/or in partnership with ESPs/power developers)
- Advanced Net Metering Tariffs
- Feed-In Tariffs
- Electric Vehicle Infrastructure and Community Shared Solar
- Energy Efficiency Procurement and local EE programs

The California CCA Market

One of the critical findings from a LEAN report published in January 2011, and confirmed in numerous meetings with local government officials and staff around the State, is the need for CCA start-up capital and credit capacity. *The CCA Fund is necessary for local governments to enter the CA energy market because of an inability to self-finance the majority of a CCA's short-term start-up costs*. Once an operating track record and a skilled management team has been established, the CCA's average monthly revenue is adequate to sustain operations, repay debt, build capital reserves, enter into supply PPAs, implement energy and efficiency programs, and release credit guarantees associated with initial launch credit conditions.

Since the launch of the Marin Energy Authority (MEA) in 2010 and the recent CCA approvals in San Francisco and Sonoma Counties, there has been a significant increase in the number of communities investigating CCA. Please see **Attachment B** for a partial list that includes estimated annual revenues and new renewable development based on 2011 CEC electricity usage data and current (2012) MEA rates. Even with just a handful of counties on the current list, the potential for redirected revenue and new renewable generation over the next five years is tremendous.

When near-term revenue potential of $100M to $1.3B annually is contemplated for a handful of emergent CCAs, the short-term $5M-$10M in start-up funding necessary per CCA is a highly leveraged, low risk investment. Additionally, the robust cash flow available to the CCA once operational makes the

[1] The reason every CCA will have about the same launch costs is that it is important to keep the first service phase small (e.g. a mix of 8,000 to 10,000 residential and commercial/institutional customers) to allow any problems with the utility billing systems to be resolved before enrolling more customers. As the CCA market develops, this issue should be of decreasing concern.

CCA repayment and/or refinance picture compelling.[2] A combination of local government contributions augmented by loans and credit guarantees from the proposed CCA Fund will take emergent CCAs from the period associated with early start-up and formation into its early operations and revenue-generating phase. The timeline associated with formation through early operations varies. But for purposes of this proposal, and LEAN Energy's objective to build market scale through accelerated CCA adoption, the CCA formation timeline is defined as two years prior to launch, and early operations/revenues as 12-18 months post launch.

Proposed Program Design

To address short-term start-up funding needs and credit challenges, the CCA Fund proposes a revolving loan and/or credit guarantee program that runs for a term of no more than 3 years per community/CCA.

- The CCA Fund anticipates an average revolving, matching loan or credit guarantee size of $5M-10M to launch 8-10 CCA programs statewide by the end of 2017, for a total estimated Fund capitalization of $30M; as Funds are repaid or guarantees are released, additional communities will have access to the Fund on a rolling basis.
- Conventional lenders such as River City Bank have expressed willingness to provide CCA's early working capital if a creditworthy entity, such as the California Infrastructure Bank or other qualified institution, provides unconditional credit guarantees through the early formation and operations phases. The CCA Fund, capitalized through Cap & Trade Auction proceeds, could serve as that credit instrument.
- The range of loan sizes or credit guarantees corresponds to the scale, phasing of the roll-out, projected load and complexity of the associated CCAs and their available credit capacity;
- These CCA seed loans/credit guarantees will be drawn down based on performance milestones, and expected to be repaid through revenues, a commercial bank refinance, or other repayment method in 3 years from the time of first draw down;
- Local governments will be required to demonstrate support and a high likelihood for success prior to participation in the CCA Fund by self-funding their feasibility study and early planning efforts and passing resolutions authorizing formation of a CCA through a JPA or special district;
- Participation in the CCA Fund is tied to a required minimum percentage of new in-state renewable energy development as a portion of the CCA's overall energy supply achieved through Power Purchase Agreements, contract buyouts or joint venture developments, and included in the resource planning section of the CCA's certified Implementation Plan.

Extrapolated Impact of Multiple CCAs through the CCA Fund

8-10 new CCA programs with the scale and similar goals of the Marin Energy Authority would service a total annual load of ~5,320,000 MWh and could develop ~1,649,000 MWh of new renewable energy supply in CA. Given that the MEA services a relatively modest population in terms of load and size, these numbers could be significantly higher if the CCA Fund were to support one of the larger metropolitan areas contemplating a CCA launch. The contribution to job growth statewide through CCA-supported energy programs and energy development varies by technology and scale. Job growth would also be significantly influenced by the degree to which energy efficiency implementation is incorporated into the CCA's procurement planning and local programming.

[2] The rapid refinance, County repayment, and release of first loan guarantee by the Marin Energy Authority's lender, River City Bank (RCB), just 9 months after commencing operations, is encouraging. This was accomplished on management and revenue performance from only 10% of Marin's total load. Subsequent installments of RCB working capital as MEA expands to serve the remainder of its load have been revenue-based, with no further third-party credit guarantees required.

CCA Formation Timeline and Risk Mitigation

The CCA Fund would limit program eligibility to CCAs that have completed a feasibility study and other minimum criteria that establishes preliminary viability and community support for the new CCA formation. The primary risks to which the Fund's loans would remain exposed include:

Political Risk: Cities and counties have a series of votes of their elected bodies that must pass in order for the CCA program to move forward. This proposal contemplates the first of these as the city/county vote (typically by resolution) to move forward with a CCA feasibility study. The second "go/no go" vote usually occurs after the initial feasibility study has been completed, and assuming passage, additional funds are committed for preparation of the implementation plan and JPA development.[3] A third vote occurs at the time of JPA formation (passage by ordinance of local government members is required) and possibly at the time of initial energy supply contract, though this last vote not required by statute. The Fund can monitor and limit exposure to this "political risk" by including milestones tied to the release of funds between votes, and can require that local government funds support initial activities through the first/second vote before matching loan funds or credit guarantees are deployed.

Operations Risk: Resource planning, procurement and overall operations risk are present through program implementation; however, the Fund's performance thresholds can be structured to incorporate specific performance milestones in program development as well as CCA management and operations. This "phased-in" credit model maximizes lending to those CCAs with successful planning, strong public support, a strong management and procurement team, and the greatest chance of long-term success.

Opt-out Risk: In California, CCA ratepayers are freely able to opt out for a 4 month period around the launch of the new CCA program, and at any time thereafter with a small exit fee. The risk is that opt-out rates exceed the maximum forecast in the CCA's business plan and render the program uneconomic and/or unable to service debt payments. In deregulated energy markets, opt-out rates for energy aggregation fall in the 3-5% range. In partially deregulated states like California, opt-out rates are generally higher due to IOU opposition and rate competition. In MEA's phase I when IOU opposition reached a fever pitch, opt-out rates were 22%, a percentage that was contemplated in MEA's business plan and modeled in its load forecasting. In MEA's phase II, as the business model has been established and the IOU ceased its public opposition, opt-out rates have dropped and are expected to drop even further over time. It is important to note that the opt-out provision of the CCA statute coupled with conservative opt-out estimates and cost competitive energy products largely mitigate opt-out risk. There are other statutory mitigations (such as bonding requirements) for CCA organizational failure that will be included in future CCA Fund discussions as needed.

CCA Formation Timeline

The following is a representation of the basic steps, costs and possible 2-year timeline in a California CCA development process.[4] Note that the requirements for and cost of 1st working capital will vary greatly depending on the size of the first phase of customer accounts and the associated energy demand. The vast majority of early working capital necessary to launch a CCA is that dedicated to the purchase of the initial energy supply. There is a time gap between the purchase of initial energy (via a signed ESP contract or PPA), and the receipt of customer revenues to pay for that energy, which can be covered by a commercial lender with a credit guarantee. This is in contrast to the seed capital/ formation funding

[3] This is where Sonoma County currently stands in their formation process.

4 Time and cost will vary depending on level of political consensus, committed resources and technical support, community support/opposition, IOU response, et al.

necessary to get a CCA up to the point of signing its first energy contract and receiving first customer revenues.

ACTION	TIMEFRAME	Estimated COSTS
Local education, political support and early organizing; initial city/county resolution to commission CCA technical feasibility study	Months 1-6	Costs borne by local governments and community fundraising efforts.
CCA tech study results; procurement and funding scenarios; public polling and feedback; second "go/no go vote" (resolution) to proceed with CCA formation and draft CCA Implementation Plan.	Months 6-12	Costs of $50,000 to $200,000 borne by community and local government(s).
CCA Implementation Plan development; PUC review and certification; JPA organizational development and municipal membership; energy procurement RFI; final go/no go JPA formation votes (by ordinance)	Months 12-18	$250,000-$500,000
JPA governance, operations/staffing, RFP prep, vendor and energy contract negotiations; IOU service agreement ratified	Months 15-21	$125,000-$500,000 (see note below)
Public outreach and notification, first energy contract confirmed; opt-out process begins	Months 21-24	$50,000-$100,000 in soft costs plus $5-8M for first energy contract;
Begin serving customers; ratepayer revenue begins; remaining month of free opt-out	Month 24-25	Cost shown in other line items
Note: technical, finance, legal, regulatory and marketing/ public education occurs throughout 2-year process.	Months 1-24	Costs shown above (varies by size/complexity of CCA program)

PROPOSED NEXT STEPS: Determine State's Capacity and Interest in Sponsoring a California CCA Formation Fund. With a commitment from the California Infrastructure Bank or other qualified sponsor(s) to back the CCA Fund and help support its development, LEAN Energy proposes the following next steps:

A.) Convene a CCA Fund working committee of I-Bank, LEAN Energy and other Fund sponsor representatives, CCA, legal, and finance experts to develop the Fund structure and administration, draft the milestone timeline and performance measures, establish loan/credit terms and conditions, and review energy infrastructure commitments with emerging CCA communities;

B.) Engage 3-4 communities as pilot Fund participants/counterparties and funding recipients (Sonoma Clean Power is a likely first choice);

C.) If needed, shop the CCA Fund proposal to all ESPs (Energy Service Providers) and renewable power developers who have bid on CCA contracts and/or participated in CCA activities to date -- for their review, feedback, and investment commitment;

D.) If needed, present the CCA Fund proposal to all likely Foundation supporters for review, feedback and investment commitment;

E.) Work with pilot communities to identify and develop their energy infrastructure and efficiency planning within the earliest stages of CCA formation for inclusion in their CCA Implementation Plans.

F.) Capitalize Fund and begin first draw-downs or credit guarantees in Q3-4 2013 or soonest available timeframe.

RESOURCES:

Operational/Authorized CCA Programs in CA

- Marin Energy Authority: www.marinenergyauthority.org
- City and County of San Francisco/Clean Power SF: www.cleanpowersf.org
- Sonoma Clean Power: www.scwa.ca.gov

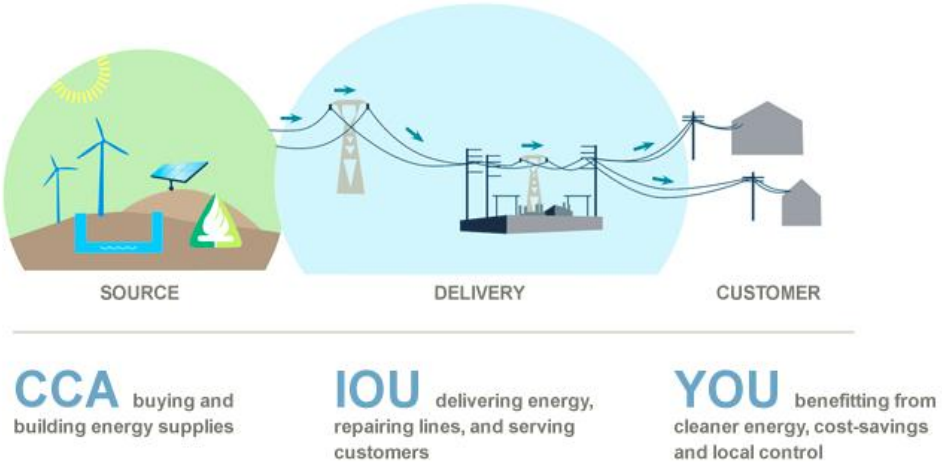
About LEAN Energy US:

LEAN Energy US (Local Energy Aggregation Network) is a non-profit membership organization committed to the accelerated expansion and competitive success of clean energy CCAs nationwide. As a hub organization, LEAN brings together existing aggregation programs and agencies, local governments interested in pursuing CCA, technical experts, consumers and allied organizations to protect the CCA marketplace and keep it strong. By pooling costs, expertise, and best practices, LEAN helps communities achieve their CCA objectives on an accelerated timeline, with greater certainty of economic and environmental benefits. LEAN's core functions include: education and outreach, legislative and regulatory affairs, CCA market initiatives, and CCA research and innovation. Visit us at www.LEANenergyus.org.

ATTACHMENT A: What is Community Choice Aggregation (CCA)?

CCA is a market-based energy solution that is revenue supported and not reliant on taxpayer subsidies. The model is currently permissible by law in six states, including California, and allows local governments and certain special districts to pool their electricity demand in order to purchase and develop new power resources on behalf of their residents, businesses, and municipal accounts. CCA is a flexible model that can be designed to suit a community's energy goals. Through CCA, local governments are achieving a range of objectives:

- Competitive rates, and in some markets, significant rate savings
- Cleaner, more efficient energy supply
- Local jobs creation and economic development
- Integration of locally tailored programs such as feed-in-tarrif, net energy metering, PACE (property assessed clean energy), community shared solar, demand response and energy efficiency programs.
- Development of local renewable energy assets



CCA allows local governments to negotiate the procurement and development of power and energy-related programs on behalf of their communities. Energy generation revenues flow through a local joint powers agency, while all transmission and distribution, line repairs, billing and customer service functions remain with the existing utility. Once the CCA is established by vote of an elected Board of Supervisors and/or City Council, customers are automatically enrolled, but are free to remain with their existing utility by "opting out" of the CCA at any time.

ATTACHMENT B: A Snapshot of the California CCA Market

(Partial list)

CCA STATUS IN CALIFORNIA *(as of 10/2012)*	**2011 USAGE DATA**	**EST. ANNUAL REVENUE**	**CA RPS (33%)**
CEC Electricity Usage Data Provided by County Only*	**Million kWh**	**$ Millions**	**Million KWh**
	Residential/Other	.069/kWh-MEA 2012 rate	(33% of 2011 data)
OPERATIONAL			
Marin County/Marin Energy Authority	1,422	$100+	469
Richmond, City *of/Joined MEA in June 2012*			
IMPLEMENTATION PLAN CERTIFIED, CONTRACT NEGOTIATED			
San Francisco, City & County of/SF-PUC: *Operational 2013*	5,838	$403	1,926
FEASIBILITY COMPLETE, JPA,IMPLEMENTATION PLAN			
Sonoma County: *JPA approval; operational 2013/4*	2,881	$199	951
CCA INVESTIGATION UNDERWAY (countywide data only)			
Alameda County: Cities of Oakland, Albany, Berkeley, Hayward (s also: EBMUD)	10,938	$755	3,610
Apple Valley, City of: *Engaged consultant*			
Arcata, City of/Humboldt County	914	$63	302
Benicia, City of/Solano County	3,095	$214	1,021
Calaveras County: *Engaged consultant*	326	$22	108
Davis, City of; Yolo County: *County steering committee formed; scoping plan complete; resolutions of support*	1,638	$113	541
East Bay Municipal Utility District: *Vote of the Board 12/11/12*		Est. $350	
Monterey County: *Formed local govt. task force*	2,555	$176	843
Palmdale, City of: *Engaged consultant*			
Rancho Mirage, City of			
San Benito County	313	$22	103
San Diego County; City of Solana Beach, Santee: *Reso. review*	18,761	$1,295	6,191
San Luis Obispo/City & County: *CCA in Climate Action Plan*	1,674	$116	552
Santa Cruz/City & County: *CCA in Climate Action Plan; steering committee formed*	1,253	$86	413
Santa Clara, County of *(CCA in Climate Action Plan)*	16,384	$1,130	5,407
Trinity County *(partially served by public utility)*	122	$8	40
Tuolomne County: *Engaged consultant*	445	$31	147
TOTAL	**68,559**	**$5,083**	**22,624**
**CEC County Usage Data -- http://ecdms.energy.ca.gov/*			