FREQUENTLY ASKED QUESTIONS ABOUT “COMMUNITY CHOICE AGGREGATION” IN MARIN COUNTY

This document answers general questions about Community Choice Aggregation. It is updated periodically to include new information. More documents related to Marin County and cities CCA investigation are available on the County of Marin website at the following link: www.co.marin.ca.us/depts/CD/main/comdev/advance/Sustainability/Energy/cca/CCA.cfm

I. THE BASICS ..................................................................................................................... 3

1.1 What is Community Choice Aggregation (CCA)? .......................................................... 3
1.2 Why could a CCA program be better for the community than the status quo? ............... 3
1.3 How much renewable energy can a Marin CCA obtain compared to PG&E? ................ 5
1.4 Doesn’t PG&E advertise that over 30% of their power comes from renewable resources? .................................................................................................................................. 5
1.5 Is renewable energy the only reason communities are investigating the CCA option?... 5
1.6 How will natural gas prices affect the overall cost of electricity from PG&E?.............. 6
1.7 Why shouldn’t Marin and other communities just ask the State of California to require the utilities to increase renewable sources in their supply portfolios? Why can’t the State use its tax-exempt borrowing power to finance new renewable development?................. 6
1.8 What other local governments are exploring community choice aggregation? .......... 7
1.9 What is PG&E’s position on the CCA program?......................................................... 7

II. HOW THE CREATION OF A CCA WILL AFFECT RATEPAYERS .................................... 9

2.1 Does the customer’s relationship with Pacific Gas & Electric (PG&E) change? .......... 9
2.2 Do I have to participate in the CCA if my jurisdiction creates one? ............................... 9
2.3 Can I join a County CCA if my city does not create one?........................................... 9
2.4 Why is only a customer “opt-out” option proposed?..................................................... 9
2.5 Is there a cost to opt out of the CCA if a customer chooses to at a later time?............. 9
2.6 How will remaining CCA ratepayers be affected by major users if they chose to opt out?....................................................................................................................................... 10
2.7 Will a CCA have to pay a similar exit fee to PG&E for financial commitments to power suppliers made on behalf of the CCA customers? ................................................................. 10
2.8 If there is no financial advantage initially between a CCA and PG&E, why wouldn’t ratepayers just stick with the status quo? .............................................................................. 10
2.9 Will a CCA customer still be able to obtain rebates from PG&E for energy efficiency and solar electric systems? ............................................................ 11
2.10 Will a CCA customer still be able to obtain net metering for qualified solar electric and other distributed generation systems? ................................................................. 11

III. HOW A CCA WILL BE IMPLEMENTED....................................................................... 12

3.1 How will Marin implement a CCA? ............................................................................. 12
3.2 How will the CCA procure power to meet Marin’s electricity demand? .................... 12
3.3 How much renewable energy could be supplied at rates at or below PG&E? .......... 12
3.4 Is there sufficient renewable power available for Marin since all utilities are required to meet the state mandated requirements for 20% renewable energy by 2010? ............... 13
3.5 Where and what kinds of power plants are expected to be developed in Marin? .... 14
3.6 Would a Marin County CCA have more difficulty participating in the development of renewable energy projects in other counties because of environmental justice issues? ..... 14
3.7 How will the CCA be financed? ........................................................................ 15
3.8 What financial or other obligation does a city or county incur by establishing a CCA? 15
3.9 How many customers make the CCA economically viable in Marin County? ....... 15
3.10 Will creating a CCA require setting up a new bureaucracy? Isn’t the private sector better at managing the complexity of today’s electricity markets than the public sector? .. 15
3.11 Why aren’t Marin communities working to create a CCA with jurisdictions outside of Marin County? ................................................................................................. 16

IV. OTHER RISK AND LIABILITY QUESTIONS ................................................................. 17

4.1 Can cities and counties be legally shielded from the actions of the CCA? ............ 17
4.2 Would a default on CCA bonds cast a long shadow for local governments in the bond market? .............................................................................................................. 17
4.3 A recent Supreme Court decision implies raising rates for local government services is subject to Prop 218. How does this ruling affect a CCA? ......................................................... 17
4.4 Is the CCA subject to the same energy price fluctuations that undermined PG&E’s financial stability in 2000? ................................................................. 17
4.5 Can PG&E raise transmission rates on a CCA above those of its own customers? .... 18

V. RENEWABLE 101...................................................................................................... 19

5.1 What is renewable energy? ...................................................................................... 19
5.2 What is the Renewable Portfolio Standard (RPS)? ................................................... 20

VI. ACRONYMS AND DEFINITIONS ............................................................................ 21
I. The Basics

1.1 What is Community Choice Aggregation (CCA)?

Community Choice Aggregation (CCA) was established by the legislature in 2002 (AB 117) to give cities and counties the authority to procure electricity in bulk for resale to customers within their jurisdictional boundaries. Under this CCA program, PG&E would deliver the electricity to end use customers and PG&E would continue to read the electric meters and issue monthly bills to customers enrolled in the CCA program. Unlike traditional utility service, the source of the electric supply (generation) and the price paid by customers for the generation services procured by the CCA program would be determined by the CCA. Customers would have the choice of being automatically enrolled in the program following a notification process or remaining with the incumbent utility.

Marin County with additional financial support from Marin Municipal Water District and North Marin Water District conducted feasibility studies during 2004-2005 to identify the benefits and risks of forming a CCA program. The feasibility studies performed by Navigant Consulting, Inc. (Navigant), which were subject to peer review by a team of independent, expert consultants, generally found that Marin could significantly increase its use of renewable energy while providing electric rate stability and potentially reduced electric rates over the long-term relative to PG&E. The CCA’s ability to finance generation projects at low cost was identified as a key factor in being able to achieve these objectives. The County took additional time in 2006 to further investigate financing, risk and legal issues associated with starting a CCA.

Following consideration of the feasibility study and other favorable findings, the County of Marin and the eleven cities within the county decided to jointly develop a comprehensive business plan that would address issues not included within the feasibility study scope and to confirm the study’s findings in certain key respects. The communities formed a Marin CCA Local Government Task Force with elected and staff representatives from each jurisdiction. A Stakeholders Advisory group with representatives from a wide range of ratepayer classes and interest groups, and a Technical Advisory Group of local experts have been convened to advise the Task Force. The business plan is expected to be completed by the end of 2007 and the Task Force is expected to make its recommendations in early 2008.

1.2 Why could a CCA program be better for the community than the status quo?

The CCA law offers many potential advantages to our community over the status quo:

**Affordable Renewable Energy** – Under a CCA, Marin County homes and businesses may be able to enjoy the benefits of non-polluting renewable energy resources at the most affordable price. We can determine how our electricity is generated – from clean and renewable resources rather than polluting and finite fossil fuels. Marin may be able to meet over half of
its electricity demand with renewable energy resources (such as wind, geothermal and solar) within 5 years and achieve a modest savings over current PG&E rates.

Greater Price stability – California’s growing demand for electricity is expected to be met by an increasing dependence upon natural gas-fired power plants. California already imports about 84% of its natural gas from other regions. California’s growing appetite for more electricity will require even more imported fossil fuels, including Liquefied Natural Gas (LNG) from other countries. Renewable energy has no fuel cost and is not subject to the shortages and price volatility we have seen in natural gas prices. Under the status quo, generators and PG&E are allowed to pass those price risks through to ratepayers. Investment in renewable energy generation will help achieve a higher level of price stability for homes and businesses, and help protect the local economy. The initial studies show that Marin ratepayers could save about $240 million over the next twenty years.

Promote Local Clean Distributed Generation - With a CCA program, Marin County can create its own rates and incentives to promote local clean distributed generation facilities including solar, biomass, cogeneration and small-scale wind. If and when new technologies capable of harnessing our tremendous tidal power resource become commercially viable, a CCA would be able to develop that resource as well. Incorporating local distributed electricity generation sources as well as remote renewable energy power plants helps to diversify risks and increase reliability of service for all of Marin County.

Local Accountability – Unlike PG&E, local governments are accountable to their citizens through locally elected officials whose tenure is predicated on serving the public good. The decisions of a local power authority would be more transparent and responsive to the desires of the community than the current electricity suppliers regulated by the California Public Utilities Commission. In an early example of this, the Marin cities and County CCA Local Government Task Force has convened a group of residential, commercial, industrial, agricultural and institutional ratepayers to advise on their issues and priorities for electricity supply, and assure that a CCA would serve local needs.

Public Financing of Generation – Local governments have a substantial financial advantage over investor-owned utilities when investing in new power supply. The CCA can access lower cost tax-exempt financing to build generation and doesn’t pay shareholder profits or income tax. Offering both lower cost financing and the retail customer base, the CCA can partner with experienced public and private power producers and energy service providers.

Additional advantages – There are many potential advantages that have not been quantified including greater rate stability to attract and retain employers, less reliance upon unsustainable power sources, increase in economic development and jobs, helping build markets for new cleaner and cheaper power technologies.
1.3 How much renewable energy can a Marin CCA obtain compared to PG&E?

<table>
<thead>
<tr>
<th>PG&amp;E’s Estimated Power Mix</th>
<th>2006</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Renewable</td>
<td>13%</td>
<td>12%</td>
</tr>
<tr>
<td>Biomass &amp; Waste</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Geothermal</td>
<td>2%</td>
<td>3%</td>
</tr>
<tr>
<td>Small Hydroelectric</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>Solar</td>
<td>0%</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Wind</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Coal</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Large Hydroelectric</td>
<td>19%</td>
<td>12%</td>
</tr>
<tr>
<td>Nuclear</td>
<td>23%</td>
<td>24%</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>42%</td>
<td>49%</td>
</tr>
</tbody>
</table>

The chart above sums up PG&E’s current supply portfolio. Eligible Renewable power includes biomass, geothermal, solar, wind and small hydroelectric power. (See Section 5 for more information on renewable energy.) Eligible renewable power made up only 13% of PG&E’s supply in 2006 and is expected to make up only 12% in 2007. State law (the Renewable Portfolio Standard or “RPS”) requires all utilities to increase their percentage of “eligible renewable” energy to 20% by 2010.

Based on recent quotes from power suppliers and current projections of PG&E generation rates¹, a Marin CCA could procure at least 20% of its power from renewable sources from start-up in 2009 and achieve 51% renewable energy supply in about five years while remaining competitive with PG&E rates. A CCA could achieve this goal by entering into a full requirements contract for energy supply and operational services with an experienced, financially stable energy supplier in the short term, and using lower-cost public financing to invest in renewable power supply with private and public power partners in the long-term.

1.4 Doesn’t PG&E advertise that over 30% of their power comes from renewable resources?

PG&E has a TV ad that claims “over 30% of their power comes from water & renewable resources.” This is true if large hydroelectric power is included under “water.” However, PG&E’s large hydroelectric facilities do not qualify as “eligible renewable” power under state law. Also note in the table above that while the statement was true for 2006 if including large hydroelectric generation, it is not true for the estimated power mix in 2007 because of below-average rainfall.

1.5 Is renewable energy the only reason communities are investigating the CCA option?

¹ PG&E rates have increased by average of 4.1% annually since 1980 (California Energy Commission). For planning purposes, a 2.2% rate of growth in generation rates is assumed going forward.
Many of the cities investigating CCA are looking to increase the use of renewable energy generation beyond what the State currently requires of the investor-owned utilities and what is expected from PG&E. However, this is not true for all local governments. A CCA recently formed by San Joaquin Valley cities and counties and operated by the Kings River Conservation District is planning to build a natural gas fired power plant. For these communities at the end of PG&E and SCE’s distribution grids, the reliability of power and price stability are the primary drivers, though cleaner energy is also a concern. (SJVPA recently announced plans for a new solar facility that could be as large as 80 MW.)

1.6 How will natural gas prices affect the overall cost of electricity from PG&E?

Natural gas-fired generation accounts for the largest share of PG&E’s supply portfolio. The availability of large hydroelectric power from year to year has a dramatic impact on PG&E’s demand for natural gas-fired generation and the resulting cost of electricity passed through to ratepayers. As you can see from the table in 1.3 above, 2007 is expected to be a low hydro year pushing up PG&E’s reliance on natural gas-fired generation from 42% in 2006 to 49% in 2007. Despite the anticipated contribution of energy efficiency and renewable resources to the state’s supply, the California Energy Commission is projecting much of the new demand for electricity will be met by building new natural gas-fired power plants. In-state resources supply only about 16% of California’s natural gas needs and the ability to increase supplies from other states is limited. Future supplies are expected to be imported in the form of liquid natural gas (LNG) from other countries. Under this scenario, natural gas supplies and prices will become increasingly subject to forces outside of our control.

1.7 Why shouldn’t Marin and other communities just ask the State of California to require the utilities to increase renewable sources in their supply portfolios? Why can’t the State use its tax-exempt borrowing power to finance new renewable development?

Recent history suggests that it is much harder to do the right thing at the state level than the local level. The politics and special interests, rivalries between state agencies, and general contentiousness between the investor-owned utilities and state and federal regulators create a climate of uncertainty for independent power producers and the financial community.

As reflected in recent news reports, renewable energy developers such as Florida Power & Light (that alone has invested $2 billion in renewable power projects nationwide) are avoiding California because of the overly complex rules and difficulty working with the investor-owned utilities. Power producers need certainty in contracts and timing. Many have had bad experiences with the investor-owned utilities and the states regulatory agencies. CCAs function more like municipal utilities and avoid many of these problems. Since a CCA can both provide the market (customer base) and financing, and bypasses CPUC regulation, independent power producers, financial institutions and other municipal utilities have shown great interest in working with CCAs.

During the energy crises in 2000-01, the State did create the now-defunct California Power Authority to provide financing for local power generation but it was never funded by the
legislature and its actions tended to ignore local government involvement. For example, they proposed dozens of local natural gas-fired power plants to meet an urgent need in “transmission-constrained” areas. A 90 megawatt power plant was proposed for the Ignacio Substation in Novato without any consultation of local officials. At the time, the Board of Supervisors commissioned a study that determined Marin did not have the alleged transmission constraint and the power plant wasn’t needed.

1.8 What other local governments are exploring community choice aggregation?

Many other cities in the Bay Area are considering a CCA program, including Berkeley, Emeryville, Oakland, Pleasanton, Richmond, San Francisco and Vallejo. In Southern California, Chula Vista, Beverly Hills, Los Angeles County and Santa Monica are also investigating their CCA options. In the San Joaquin Valley, 13 local governments have established a CCA.

The table below shows the status of the most active communities in California.

<table>
<thead>
<tr>
<th>Communities</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Joaquin Valley (13 jurisdictions)</td>
<td>Implementation plan completed and certified by the CPUC. Passed ordinances and formed the CCA. Will begin serving customers in January 2008.</td>
</tr>
<tr>
<td>San Francisco (City and County)</td>
<td>Implementation Plan approved by the County Board of Supervisors on June 12, 2007.</td>
</tr>
<tr>
<td>Chula Vista</td>
<td>Completed an investigation of municipal power business models including municipalization and CCA in 2004. Expected to update the CCA business model this year and take to council for a vote.</td>
</tr>
<tr>
<td>East Bay (Oakland, Berkeley, Emeryville)</td>
<td>In Phase II analysis and business planning</td>
</tr>
</tbody>
</table>

1.9 What is PG&E’s position on the CCA program?

PG&E supported the Community Choice Aggregation legislation (AB117) in 2002 and reaffirmed their support before the Marin County Supervisors in 2006. However, more recent activities suggest PG&E’s position is changing. PG&E sold its natural gas fired power plants and stopped building new power plants in its service territory after California restructured its electricity market in 1996. At present, PG&E only owns the Diablo Canyon Nuclear Generation Facility and a fleet of hydroelectric facilities that it built decades ago. PG&E procures virtually all other electricity on behalf of its customers from third party electricity generators, the costs for which are passed through to the ratepayers. PG&E earns a rate of return on investment in transmission and distribution systems. Since the CCA only provides generation, PG&E’s revenues would not be affected. However, PG&E has recently proposed to re-enter the power plant construction business in its own service territory with three new natural gas-fired power plants on the drawing boards. PG&E has recently criticized the
proposed activities of the San Joaquin Valley Power Authority, California’s first CCA certified by the California Public Utilities Commission. The SJVPA filed a complaint against PG&E with the CPUC in June of 2007. That matter is currently in mediation. According to recent press accounts, PG&E has also supported media campaigns questioning the efficacy of San Francisco’s proposed CCA.
II. How the creation of a CCA will affect ratepayers

2.1 Does the customer’s relationship with Pacific Gas & Electric (PG&E) change?

The relationship between the customer and PG&E is virtually unchanged. CCA customers remain retail distribution customers of PG&E. PG&E would still own and maintain the power lines, and provide customer service and billing. The charge for electricity generation, which currently accounts for about half of your electric bill (and which is a current line item on the PG&E bill), would still be there. If a community establishes a CCA program, customers in the community will automatically become a CCA customer for the generation component unless they opt to stay with PG&E. The only difference between a CCA and non-CCA customer will be the sources of and rates for their electricity.

2.2 Do I have to participate in the CCA if my jurisdiction creates one?

No. The law allows any customer to “opt out” of the CCA program if they choose not to participate. A CCA is established by ordinance approved by the elected bodies of each city, or the County for unincorporated areas. Cities and counties can further aggregate their customer loads by creating a joint powers authority. Currently, ratepayers in Marin have no choice for electricity service providers other than PG&E. If your jurisdiction establishes a CCA, you will be able to choose the CCA or PG&E. Prior to the establishment of the CCA program, every customer will be given a choice to join the CCA program or stay with PG&E’s power supply portfolio. You will also be able to switch back and forth between a CCA and PG&E but there will likely be restrictions on how often you can switch and may be a cost for doing so.

2.3 Can I join a County CCA if my city does not create one?

No. Customers can only participate in a CCA if their city council elects to do so. A CCA created by the County can only serve customers in the unincorporated areas of the county. This is also true for businesses that may have more than one location. Only those locations within a CCA jurisdiction can be served by the CCA.

2.4 Why is only a customer “opt-out” option proposed?

The law (AB117) defines the customer opt-out approach. In general, the opt-out approach is a better way to ensure a critical mass of customer load to make the CCA viable without mandating that any customer must be part of the CCA. The law also defines a clear process and time period for customer notification to ensure customers are aware of and have a simple method to opt out. Customers would be provided with four notices and opportunities to opt-out of the program without penalty of any kind, twice within 60 days prior to enrollment and twice within the first two months of service.

2.5 Is there a cost to opt out of the CCA if a customer chooses to at a later time?

MarinCCA-FAQ 9-19-07 9
Following the free opt-out period, customers would be allowed to discontinue service. However, the CCA has the right to set a termination fee. The fee might include a small administrative fee (e.g., $5 for residential customers) and, if necessary, a cost recovery charge to prevent shifting of costs for long-term power commitments to remaining program customers. For the majority of customers such fees would likely be small since most Marin County residents and businesses are relatively small consumers of electricity.

2.6 How will remaining CCA ratepayers be affected by major users if they chose to opt out?

In general, Marin has a smaller concentration of large commercial and industrial customers than most Bay Area counties making this less of an issue. Beyond the initial opt-out period, CCAs are permitted to establish exit fees to ensure that customers opting out don’t saddle remaining customers with an unfair financial burden for long-term power commitments made on behalf of the exiting customers.

2.7 Will a CCA have to pay a similar exit fee to PG&E for financial commitments to power suppliers made on behalf of the CCA customers?

The exit fee imposed by the CPUC on CCA customers – called the “Cost Responsibility Surcharge” (CRS) -- is designed to shield PG&E from any financial losses or cost increases that might result from customers switching to the CCA supply. The CRS is determined by a formula that includes both fixed and variable components including:

- Department of Water Resources (DWR) Bond Charge, a charge leftover from the energy crises of 2000-2001;
- A “regulatory asset” charge to help PG&E emerge from bankruptcy from this same time period;
- A charge covering the “above market” rates portion of PG&E’s current supply portfolio. This charge is based on the net of the total portfolio.

Since the DWR and regulatory asset charges are paid by existing PG&E customers, they don’t represent an added cost for a CCA customer. The net above-market rates portion of the CRS could be a significant variable affecting the economics of a CCA in the short term. However, based on current market prices, the current CRS is effectively zero.

2.8 If there is no financial advantage initially between a CCA and PG&E, why wouldn’t ratepayers just stick with the status quo?

Even if a CCA just matches PG&E rates in the short run, there are many reasons for ratepayers to go with the CCA over PG&E. For some consumers, support for renewable power and reducing greenhouse gases may be the reason to stay with a CCA. For others, the concept of local control, greater price stability and the potential for future savings may be driving forces. Like municipal power utilities, CCA’s would not be subject to the same regulatory uncertainty as the private utilities that helped lead to the extreme price hikes during the energy crises. CCA’s can shift more ratepayer risk to the energy service providers than
PG&E. For example, under the SJVPA CCA contract, Citigroup assumes the risk of price fluctuations in natural gas generation, a cost PG&E is allowed to pass through to ratepayers.

2.9 Will a CCA customer still be able to obtain rebates from PG&E for energy efficiency and solar electric systems?

Yes. The California Public Utilities Commission authorizes PG&E and the other investor-owned utilities to collect from all ratepayers fees known as “public good charges” to fund energy efficiency and renewable energy incentive programs. Under a CCA, PG&E will still collect these fees and CCA customers will remain eligible for these incentives and services.

2.10 Will a CCA customer still be able to obtain net metering for qualified solar electric and other distributed generation systems?

Net metering allows a customer to turn their meter backwards and receive a credit at times when their solar system generates more power than is used on site and is taken back at times when more power is used than the system produces. The credits and use are netted out after 12 months. The CPUC did not adopt rules for CCA net metering during the original proceeding. The CPUC issued a proposal for comments allowing CCA customers to net meter on August 30, 2007. The CPUC is expected to permit net metering by CCAs in the near future.
III. How a CCA will be Implemented

3.1 How will Marin implement a CCA?

Following consideration of the feasibility study and other favorable findings, the County of Marin and the eleven cities within the county decided to jointly develop a comprehensive business plan that will propose how a Marin CCA program would be organized, funded and operated. The core program elements will include plans for energy resources, governance, finance and rate setting. A draft business plan is expected to be developed by late September, 2007 for review by the Local Government CCA Task Force. The following questions and answers are based on information developed for the Task Force by Navigant prior to development of the business plan and reflect the general mission and objectives developed by the Task Force.

3.2 How will the CCA procure power to meet Marin’s electricity demand?

Navigant recommends that CCA program operations commence under a turnkey contract with an experienced, financially stable energy supplier for a five to seven year period. This approach minimizes risks by placing the operational responsibility and obligation to deliver energy at stable prices on a third party supplier. The power purchase agreement should specify power content requirements and include provisions for integrating renewable resources procured independently by the CCA. Once formed as an entity, the CCA will issue a request-for-proposals to potential suppliers. The power supply section of the business plan will define the parameters of the RFP.

The CCA will also identify experienced public and private power developers that are capable of facilitating longer-term renewable power development goals. The CCA will be able to take advantage of the lower cost of public financing by investing in renewable power generation with public and private development partners. Tax-exempt financing, lack of shareholder profits and taxes provide a CCA with a significant cost advantage relative to PG&E. Renewable resources beyond the initial target of 50 percent can be integrated into the CCA’s supply portfolio as technically and economically feasible.

The CCA can also develop and fund local initiatives to reduce energy use through increased energy efficiency, and promote the installation of distributed generation including solar, biomass, small wind and cogeneration.

3.3 How much renewable energy could be supplied at rates at or below PG&E?

Navigant’s analysis suggests that a CCA beginning operation in 2009 could procure 25% renewable content with no increase in rates over PG&E. Through investment in renewable generation, the CCA could achieve over 50% renewable content in about 5 years also with no increase in price over PG&E.
3.4 Is there sufficient renewable power available for Marin since all utilities are required to meet the state mandated requirements for 20% renewable energy by 2010?

There are recent studies examining the potential for renewable energy generation within and outside the state that demonstrate significant potential for renewables. A study conducted by the Center for Resource Solutions released in November 2005 documents substantial and abundant renewable resources in California and throughout the West. The CPUC sponsored study determined that there are sufficient developable renewable energy resources of commercial quality within California to serve a 33% Renewable Portfolio Standard by 2020 proposed by Gov. Schwarzenegger. If out-of-state resources are included in the equation, the picture looks even brighter. The report documents 11,810 MW of wind power not located in California available by 2010. Even more solar power supply (14,800 MW both in-state and out-of-state) is available by the same date. Current law only requires utilities power supply portfolios to contain 20% renewable energy by 2010.

The amount of renewable energy required to meet the proposed initial target of 51% renewable energy is approximately 100 MW. NCI’s analysis is based on current market prices for both purchased power and investment in new generation. The assumption of achieving 51% renewable generation within five years is based on an investment in 100% wind electric generation, the most available and cost-competitive source of renewable generation.

There are many factors that can cause the availability and cost of renewable generation (or any generation) to increase or decrease. A CCA would not go into business without the contractual obligations in place to ensure the source and price of the energy supply.
3.5 Where and what kinds of power plants are expected to be developed in Marin?

The current supply plan proposed by Navigant assumes no power plants will be built in Marin County for either conventional or renewable power. Marin County lacks wind resources of sufficient scope to support commercial wind farms, though there may be limited applications for small wind turbines. Marin also has no known geothermal resources. Central solar thermal-electric plants require significant land area and are only viable in areas with a very low incidence of cloudy days. This generally limits this technology to desert areas. While solar thermal technology produces electricity at roughly half of the cost of a solar PV system, it is still more expensive than wind or geothermal power.

The County has identified substantial potential for solar photovoltaics (PV) on businesses and homes in Marin and increasing use is expected. However, PV is currently too expensive to be sold at wholesale power prices. It is cost-effective only for end-users today because the systems offset the retail price of electricity including the cost of transmission, distribution and other service charges. California regulations restrict rebates for solar and small wind electric systems to systems sized to meet the customer’s on-site electricity needs. Under current law, a customer wanting to oversize a system for sale of power back to a CCA would not be eligible for state rebates.

There may be other opportunities for local power generation from landfill gas, biomass and small or micro hydro. Co-generation may be possible at some industrial and commercial sites as well. However, it is impractical to plan on exploiting these opportunities until they have been adequately identified and assessed. A CCA could provide the financial means to undertake a thorough assessment of local resources once it is in operation.

3.6 Would a Marin County CCA have more difficulty participating in the development of renewable energy projects in other counties because of environmental justice issues?

Generally, renewable energy development has been embraced by counties because it provides jobs and economic development without the adverse impacts associated with many other kinds of development. Renewable energy can also solve other environmental problems such as use of agricultural waste products that are otherwise burned, and be compatible with existing land uses such as wind power on ranchland.

Renewable resources are, by definition, far more environmentally friendly than fossil fuel-based generation. The environmental justice issues generally concern air quality and health impacts from fossil-fuel power plants, and the impacts from extraction, processing and transport of fossil fuels. Environmental issues related to renewable energy are more limited and localized, such as the potential for bird kills from wind turbines, location of geothermal plants in sensitive wildlife habitat, and air quality issues with certain types of older biomass power generation.
3.7 How will the CCA be financed?

The CCA will be financed from the revenues received for electricity delivered to participating customers. The initial start-up costs and reserves for the CCA program can be funded by loans secured by future revenues. In the long term, tax-exempt revenue bonds can be issued to build and own generation. California law provides the CCA with both ratemaking authority and the ability to impose exit fees, both of which are necessary to ensure repayment of bonds. The business plan will provide a finance section detailing the costs and financial options.

3.8 What financial or other obligation does a city or county incur by establishing a CCA?

A city assumes various powers and responsibilities by establishing a CCA such as assuming ratemaking authority for retail customers and the responsibility to procure power for customers in its jurisdiction. If the city aggregates its customer load with other jurisdictions, the law provides that this be done through a joint powers agreement. The authority and responsibilities of the Joint Powers Authority (JPA) versus the individual cities will be determined by the participating cities. A city can remain disconnected from any financial obligations of the CCA.

3.9 How many customers make the CCA economically viable in Marin County?

There is no absolute rule as to the scale of customers or the amount of electricity demand size necessary to implement a CCA. Electricity use varies greatly among different customer types. Consumption patterns and levels of demand differ in each jurisdiction.

The unincorporated areas of Marin County, San Rafael and Novato account for about 70% of the electric use in the County. To achieve economies of scale at least two out of these three jurisdictions would be necessary to establish a CCA.

3.10 Will creating a CCA require setting up a new bureaucracy? Isn’t the private sector better at managing the complexity of today’s electricity markets than the public sector?

While setting up a CCA program will require a new Joint Powers Authority, it does not require hiring a large staff to manage the tasks of running the CCA. All of the required tasks and functions of the CCA program can be handled through contracts with existing private and public sector organizations with significant expertise and experience.

It is not really a matter of public versus private sector because the private sector will indeed be employed to carry out many of the functions associated with a CCA program. The CCA is more a matter of public control over critical resources required to sustain our communities and a way to take advantage of unique and cost-effective financial opportunities available only to the public sector. The proposed CCA would be a public-private partnership that takes advantage of the opportunities offered by both the private and public sectors offer.
If the private sector could provide critical resources better and less expensively than municipalities, you would see a greater move to privatize public enterprises for electricity, water and sewage in the cities that provide them. In fact, public utilities have a long track record of providing these services at less cost than their private-sector counterparts.

3.11 Why aren’t Marin communities working to create a CCA with jurisdictions outside of Marin County?

There is no reason why Marin communities can’t join with other jurisdictions in the future. Logistically, however, it would be difficult to involve more than Marin’s twelve jurisdictions in the investigation and business planning. The initial and ongoing analysis has been conducted for Marin’s jurisdictions using customer data specifically for Marin’s communities. Other communities in the state investigating CCAs also are at different phases of their work. Marin has collaborated with other local governments at the CPUC and through Navigant on initial phases of the analysis. The joint powers agreement can permit other jurisdictions to join the Marin CCA and collaboration with other CCAs on power supply and operations.
IV. Other Risk and Liability Questions

4.1 Can cities and counties be legally shielded from the actions of the CCA?

Yes. The County consulted with Eric Tashman of Sidley Austin Brown & Wood, an attorney specializing in public bond financing, on the legal implications for local governments. There would be no recourse to the local governments if revenue bonds were used by the JPA. Cities and the County can adequately firewall their general funds. The only exception would be if the County and other local governments chose to be a purchaser of last resort, which is not a requirement and not anticipated. Bond investors require a clear source of repayment. The key elements for repayment are ratesetting authority and the ability to recover costs from customers leaving the system, both of which the CCA has authority to do.

4.2 Would a default on CCA bonds cast a long shadow for local governments in the bond market?

It is possible for such events tend to have a negative psychological impact on financial markets, even if unwarranted. However, the conditions necessary for, and likelihood of such a default, need to be understood. As explained in the answer above, a CCA has the two critical elements required by investors to ensure repayment of bonds – rate-setting authority and the ability to impose exit fees on departing customers, if necessary. Unlike the bankruptcy in Orange County, the bonds supporting a CCA will also have tangible steel-in-the-ground generation assets backing them up.

4.3 A recent Supreme Court decision implies raising rates for local government services is subject to Prop 218. How does this ruling affect a CCA?

Marin County has no legal opinion on this issue yet, but one will be developed as part of the investigation. The federal Supreme Court ruled that utility water rate increases were impacted by Prop 218, which was passed by voters in 1996 and requires voter approval of local tax increases.

It appears the primary issue with Prop. 218 in this specific ruling is the use of funds for purposes other than intended. One example would be collecting revenue through the electricity rates to contribute to a city’s general fund. The CCA analysis does not assume that the CCA can be used to raise revenue for unrelated municipal activities.

4.4 Is the CCA subject to the same energy price fluctuations that undermined PG&E’s financial stability in 2000?

Due to the restructuring law passed in 1996, the CPUC prevented utilities from entering into long-term purchase contracts because it was assumed that market competition would lower prices. At the time of California’s energy crises, PG&E was caught in a unique situation of having to purchase power from the spot market, whose prices went through the roof due to
market manipulations, escalating natural gas prices, and other factors. Since the energy crisis of 2000-2001, the CPUC has changed power purchase rules that eliminate many of the risks exposed by California’s experimentation with market restructuring.

The Navigant study assumes that the CCA would purchase no more than 15% of the total demand on the spot market, an accepted industry standard for meeting variable peak demand needs, thereby limiting exposure to the volatility of day-to-day price swings.

4.5 Can PG&E raise transmission rates on a CCA above those of its own customers?

Transmission and distribution systems and costs fall under a complicated set of rules controlled by the CPUC, California Independent System Operator (which manages the state’s transmission grid), and the Federal Energy Regulatory Commission. A CCA would have no direct control over these costs, nor does PG&E. However, a CCA would have the ability to plan and fund participation in the regulatory proceedings and be at the table -- like PG&E -- to look out for ratepayer interests.
V. Renewable 101

5.1 What is renewable energy?

Renewable Energy is defined as energy derived from resources that for all practical purposes cannot be depleted. Types of renewable energy resources include moving water (hydro, tidal and wave power), thermal gradients in ocean water, biomass, geothermal energy, solar energy, and wind energy. Neither fossil fuels (oil, coal, natural gas) nor nuclear power are considered to be renewable. State law defines Eligible Renewables more narrowly. For example, only small hydroelectric facilities under 30 megawatts in size as an Eligible Renewable.

Types of Renewable Energy

**Biomass and waste-to-energy** - Biomass fuels are residues produced from logging, mill operations and the manufacture of wood, pulp, paper, and fiberboard, agricultural field and orchard crops, livestock and poultry growing operations, food processing, and demolition (urban wood waste). Waste fuels include combustible residues from industrial processes, municipal solid waste ("garbage," including tires but not garden trimmings because these are considered "biomass" fuels), and municipal liquid wastes. In general, solid biomass fuels are converted to electricity by burning the fuel in a boiler, which generates the steam used to turn a turbine generator. These fuels may also be gasified and burned to produce electricity. Liquid biomass fuels are converted to electricity by capturing and burning the gases they give off.

**Geothermal** - Geothermal electricity is produced using heat from deep within the earth (often evidenced by the presence of hot springs or geysers). This heat is captured and used to turn an electric turbine.

**Solar** - Solar electricity can be generated in two ways. One way involves focusing the heat of the sun on a central point that heats up. This heat is then used to produce steam, which turns an electric turbine. Another way to harness solar power for electricity is using photovoltaic cells such as those seen on rooftops. Photovoltaic (PV) cells convert energy from the sun to electricity. PV systems are currently too expensive to use as a wholesale source of power by a CCA. PV systems can be cost-effective when installed on the customer’s side of the meter offsetting the full retail cost of electricity.

**Small hydroelectric (30 megawatts capacity or smaller)** - Hydroelectric power plants convert the energy in falling water into electrical energy. Small hydroelectric facilities may either use a small dam or river flows to harness the energy of the moving water. Federal law defines small hydroelectric as having a capacity of 30 megawatts or less, and California uses this definition for purposes of the power content label as well as other programs.

**Tidal Power** - Tidal power is a variation of hydroelectric power and comes in two main forms. The first uses kinetic energy in flowing water, rivers, tides and open currents and the second uses potential energy, similarly to hydroelectric power, but using the differing heights of low and high tides.
Wind - Wind energy is derived from the movement of air caused by the uneven heating of the earth's surface by the sun. Power from the wind is captured using wind turbines – blades that turn as the wind blows – to generate electricity.

5.2 What is the Renewable Portfolio Standard (RPS)?

Senate Bill 1078, signed into law in 2002, created a Renewable Portfolio Standard (RPS) for the state of California, calling for the state to double its renewable supply capacity from 10 to 20 percent between 2003 and 2017. California utilities were required to increase their renewable energy supply by 1 percent annually over a 14 year period. The CPUC moved the date for compliance from 2017 to 2010. This was reaffirmed by new state legislation that also allowed the utilities to miss the deadline for extenuating circumstances.

An RPS ensures that a minimum amount of renewable energy is included in the supply portfolio of electricity resources serving a country, state or other jurisdiction. An overall renewable energy target is set by government policy makers, but the market then determines which fuels and specific projects are built to meet the target.

The RPS is a flexible, market-based public policy that has been the most effective in developing lowest cost new renewable resources both here and abroad. Some states include set-asides for specific technologies (e.g., Colorado), most often solar photovoltaics, a technology geared to retail not wholesale transactions. Because it is a market standard, the RPS relies almost entirely on private capital to develop new state-of-the-art renewable energy projects.

Fuels and technologies eligible for the California RPS include: solar photovoltaics; solar thermal electric; wind, geothermal electric; biomass; landfill gas; digester gas; municipal solid waste; hydroelectric; tidal energy; wave energy; ocean thermal energy; and fuel cells powered by any of these renewable fuels.
VI. Acronyms and Definitions

AB117: California legislation passed in 2002 that established community choice aggregation, authored by then-Assemblywoman Carole Migden

CCA: Community Choice Aggregation

CEC: California Energy Commission

CPUC: California Public Utilities Commission

CRS: Cost Responsibility Surcharge, also referred to as an “exit fee”

CTC: Competition Transition Charge: a usage-based charge imposed by the utility on customers to provide for full recovery of stranded costs resulting from deregulation

DA or Direct Access: A customer is allowed to choose an alternative supplier than that of its host distribution utility. In essence, the end-use customer has “direct access” to a power plant not controlled or owned by the company providing his distribution and billing services.

DG or Distributed Generation: Small, modular power sources sited at the point of power consumption. These systems can operate as a stand-alone system or can be connected to the electricity grid. Residential homeowners might install a solar photovoltaic system on their rooftop. For commercial customers, distributed generation may come in the form of on-site gas-fired cogeneration, a fuel cell or an array of diesel generators.

DSM or Demand-Side Management: Methods used to manage and shift demand for energy, most often to times of the day when the cost of energy is less. DSM activities include energy efficiency programs, electricity load shifting activities and devices, and fuel substitutions.

ESP or Energy Service Provider: a person or entity other than the retail distribution utility, which provides electric energy to an electric utility customer

IOU or Investor-Owned Utility: A private company providing electricity or water to a monopoly service area and governed by the California Public Utilities Commission (e.g. Pacific Gas Electric.)

KRCDD: Kings River Conservation District: a special district in the San Joaquin Valley that will operate the San Joaquin Valley Power Authority, a new CCA

kW: kilowatt: a common unit measurement for electricity capacity or demand. (1 kW=1000 watts)

kWh: kilowatt hour: a common unit measurement for electricity use (1kWh=1 kW demand for one hour)

MW or megawatts: 1 megawatt=1000 kilowatts

Power Charge Indifference Adjustment (PCIA): This adjustment (either a charge or credit) is intended to ensure that customers who purchase electricity from non-utility suppliers pay their share of cost for generation acquired prior to 2003.

PV: Photovoltaic: Solar electric generation by conversion of light into electrons. The most commonly used form of solar electric power such as roof panels on homes.

RFI: Request for Information

RFP: Request for Proposals

SJVPA: San Joaquin Valley Power Authority: The CCA established by thirteen local governments (including the city of Fresno and Kings County) The communities contracted with the Kings River Irrigation District to operate the SJVPA. More information can be found at: www.communitychoice.info