

PACKET MATERIALS

DATE October 16, 2009

Item No. 5

LOCAL AGENCY FORMATION COMMISSION AGENDA PACKET CONTENTS LIST *

- Memo from Jason Fried, Senior Program Officer
- Risk Assessment Report by Navigant Consulting
- Draft Commercial Terms of Energy Services Agreement
- Peer Review by Local Power
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Exceeds 20 pages; see file to review
Available for review at City Hall, Room 244

Completed by: Alisa Somera

Date: October 13, 2009

* This list reflects the explanatory documents provided.

San Francisco Local Agency Formation Commission

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TO: San Francisco Local Agency Formation Commission

FROM: Jason Fried, Senior Program Officer

DATE: October 16, 2009

SUBJECT: Item #5: Final Navigant Risk Assessment Report and Peer Review by Local Power. (Discussion Item)

On July 31, 2009 Navigant Consulting presented the Draft Risk Assessment Report to LAFCo.

On Monday August 10th, a public presentation was made at the Clean Energy Stewards Meeting of the San Francisco Public Utilities Commission (Stewards Meeting). The Stewards Meeting addressed a variety of issues, including those related to CCAs. Some of the attendees are involved with the creation of CleanPowerSF, while others know of the CCA process but have not been deeply involved.

On September 18th Local Power Inc., submitted its Peer Review of Navigant's report and found that "in general, [they found] the quality of the work by Navigant to be quite good." While agreeing with the report, Local Power does raise concern about some issues that were not mentioned in the report, such as use of raising the amount of cogeneration in the city using currently available systems to produce extra renewable energy.

Comments received from the public and Local Power were incorporated into the Final Report, which is attached along with the Peer Review by Local Power.

The Commission is requested to receive and file both reports. Information from both the Risk Assessment Report and Peer Review were used to draft the SFPUC RFP for an energy service provider for CleanPowerSF.

Attachments:

1. Risk Assessment Report by Navigant Consulting
2. Draft Commercial Terms of Energy Services Agreement
3. Peer Review by Local Power



RISK ASSESSMENT REPORT

San Francisco
Community Choice Aggregation Program
Clean Power SF

Prepared for:
San Francisco Local Agency Formation
Commission



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August 1, 2009

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Executive Summary

Navigant Consulting was retained by the City and County of San Francisco's ("CCSF") Local Agency Formation Commission ("LAFCO") to prepare this Risk Assessment Report ("Report") to support the implementation of CCSF's Community Choice Aggregation Program, Clean Power SF. Specifically, this Report:

- Identifies and describes key program risks;
- Explains the relative importance of each; and
- Suggests how identified risks may be mitigated and managed.

Clean Power SF is itself a means to mitigate risks associated with the provision of electric service and electricity consumption in San Francisco. The program structurally addresses fundamental risks related to increasing electricity costs, dependence on fossil fuels, carbon, and reliance on remote energy sources. The defined approach minimizes risks to CCSF and its constituents by assigning operational risks to a third party supplier with structured rates that preclude the pass-through of unanticipated costs to customers. The 360 MW renewable infrastructure developed through the program will significantly reduce exposure to volatile fossil fuel prices as well as future carbon costs. The Implementation Plan establishes ratepayer protections that are not provided under the status quo, where PG&E is allowed to pass cost increases through to ratepayers.

In developing this report, Navigant Consulting carefully reviewed the City and County of San Francisco Community Choice Aggregation Program Description and Revenue Bond Action Plan and Draft Implementation Plan ("Draft Implementation Plan") to identify risks contained within the proposed implementation and operation of Clean Power SF. The Draft Implementation Plan defines a specific approach to achieving CCSF's program objectives whereby an Energy Services Provider ("ESP" or "supplier") is selected to operate the program, including the deployment of specific categories of resources, under contract pursuant to rates that meet or beat PG&E's. This report examines the risks under the proposed approach and identifies options for mitigating the identified risks.

Navigant Consulting presented a draft of this report to SFLAFCO and at a public workshop in San Francisco and solicited feedback prior to finalizing the report. No comments were received.

In general, the risks implicit in Clean Power SF fall into two broad categories: 1) strategic risks; and 2) commercial/operational risks. Strategic risks may threaten the startup or viability of Clean Power SF based on political or structural dynamics/considerations. Commercial/Operational risks may threaten the success of the program due to problems with execution at any of the program phases.

The most important strategic risks are summarized below, and others are discussed in the main body of this report.

Supplier Selection and Performance

The critical role designated for the ESP places the supplier selection process and the ensuing performance of the supplier in meeting its contractual responsibilities at the forefront of key factors for program success. There are specific strategic risks within the overarching task of securing an acceptable ESP agreement. These include the need to attract responsive bids from qualified suppliers, ensure sufficient protections are in place to monitor and protect against supplier default, and ensure the supplier performs in accordance with its contractual obligations to the satisfaction of Clean Power SF.

Attracting Qualified Bids

Attracting qualified bids and selecting the program's supplier through the RFP process is the most important action CCSF will take during program implementation. The single greatest risk that would jeopardize program startup would be the inability of CCSF to attract interest from and contract with an ESP meeting CCSF's requirements. CCSF has already taken an important step in mitigating the risk of failing to obtain a qualified supplier by gauging market interest through a recently conducted Request for Qualifications ("RFQ") which yielded responses from two potential suppliers.

If CCSF wishes to increase the number of potential bidders to its RFP, NCI recommends conducting interviews with both responsive and non-responsive recipients of the RFQ to determine the aspects of the potential project that appealed to or concerned them. The results of this exercise should provide valuable feedback in crafting the planned Term Sheet and ultimate RFP. Other options described in this report for increasing the pool of bidders range from providing additional information in advance to bidders to more significant structural changes that would re-allocate risk between the ESP and Clean Power SF. Of course, any such a re-examination and potential rebalancing of risks must be careful not to negate the basic rationale or objectives for the Program.

Supplier Credit and Performance

A high degree of due diligence is required before entering into a contract with a supplier. There is a risk that the selected supplier fails to perform its obligations satisfactorily or becomes financially unsound during the course of the agreement, thereby potentially defaulting on its obligations. Mitigation strategies discussed in this report include close monitoring of the supplier's operations and financial conditions, mandatory supplier reporting, increased CCSF ownership of generation resources, posting of performance bonds, and creation of contingency plans for finding a replacement provider or developing equivalent internal capabilities.

CCSF must devote sufficient staff and focused accountability to manage the Clean Power SF partnership. While most functions are outsourced to the ESP, Clean Power SF is ultimately CCSF's program. Structurally, the ongoing viability and acceptable performance of the ESP is a key issue. The creation of a "supplier relationship manager" whose main responsibility is to be an expert in all matters relating to the ESP is a possible component to managing supplier performance risk. Early recognition of and intervention in potential ESP problems may prevent them from growing.

CCSF might also consider developing more in-house expertise to build a capability of stepping into ESP functions if the ESP fails to adequately perform. This could be an integral part of the supplier relationship manager's function.

Further, early thought should be given to the worst-case scenario of supplier failure. There would be a benefit in having contingency plans related to the transition of the supplier's functions to another capable entity (including possibly Clean Power SF itself, if its personnel were sufficiently trained). Failing that, other plans should be in place regarding the disposition of customers, physical facilities, supply contracts and commitments, and Clean Power SF in general.

PG&E and Political Opposition

A second prominent strategic risk is political opposition, primarily from PG&E, the utility which stands to lose the citizens of San Francisco as electric generation customers. PG&E's original stance on CCA programs was neutrality, but has since shifted to active opposition. Recently, the San Joaquin Valley Power Authority announced it was suspending its program because of several issues that hindered its ability to negotiate an acceptable contract with an ESP. SJVPA cited strong opposition from PG&E and marketing by PG&E in order to retain customers as roadblocks to program implementation.

PG&E recently sponsored a ballot initiative for a state constitutional amendment. This amendment, under the rubric of the "New Two Thirds Vote Requirement for Local Public Electricity Providers Act," would require a vote of approval from two-thirds of the potential ratepayers within a CCA service territory to allow the commitment of public funds to start a CCA program. PG&E should be expected to seek other legislative or regulatory changes to eliminate or contain the CCA option. It also should be expected to conduct a publicity campaign designed to foment customer opt-out.

Messaging and branding are keys to retaining customers in the face of PG&E opposition. The Program has many attributes that distinguish it positively from PG&E and should appeal to many of the citizens of CCSF, including a much better environmental profile, long-term rate stability, and local generation, among others. Pre-emptive publicity and active public education concentrating on the benefits, pre-empting the objections, and emphasizing that the customer is choosing a new path to public power and sustainability may enhance customer retention.

Excellent customer service will help keep enrollments high once Clean Power SF becomes operational. CCSF may consider a particular outreach to its larger customers to ensure they support and value participation in Clean Power SF. This may include staff liaison in the form of account managers to assist the supplier in handling customer issues that inevitably will arise from time to time. The use of individual contracts for large customers may also be explored to retain them in the Program. Particular scrutiny should be applied during the RFP process to the ESP's capabilities regarding billing and other customer services with a direct impact on customers. The ability of the ESP to expend resources in marketing Clean Power SF should be a factor in supplier selection.

A mitigation to counter the New Two Thirds Vote Requirement for Local Public Electricity Providers Act and other such legislation may be a coordinated response with other CCAs, potential CCAs, and allies

such as municipal power agencies. This would include lobbying and brainstorming potential legal challenges and/or counter legislation. Funding such challenges will be an issue.

Program Financing

The potential issuance of revenue bonds, referred to as H Bonds in the Draft Implementation Plan, to finance construction of the 360 MW clean energy portfolio, is an important plan element that could pose a risk if there are problems with the bond structuring or issuance. Successful issuance will require demonstration to the satisfaction of investors and credit rating agencies of a secure revenue stream sufficient to cover debt service. The Clean Power SF enterprise creates a revenue stream that makes it well-suited to use of H Bonds. Program terms and conditions governing customer payments and the potential for customer departure from the program must be well-defined to ensure a strong credit profile for the program.

To mitigate this risk, CCSF should consider retaining an investment banker or financial advisor in the near future to begin structuring the H bond issuance. As part of this effort, additional details regarding the program's terms and conditions influencing the program's credit profile would be developed. These include policies regarding collection of customer payments, customer deposit policies and administration, and policies in place to prevent or mitigate loss of customers.

Commercial / operational risks are those which may impede program success or the achievement of its objectives due to failure to manage the implementation, transition, or ongoing business processes, or through the rise of unfavorable financial circumstances.

These risks can generally be mitigated through clear expectations, conscientious preparation, and assiduous management. Some of these risks are extensions of strategic risks (for example, changes in laws or regulations after the program has been launched) while others are operational and may present themselves in the transition, implementation, or operational phases.

Rate Management

Additional clarity should be provided regarding pricing structures that would be acceptable to CCSF, particularly in regards to how the meet or beat requirement will be measured initially and over time as PG&E's future rates are highly unpredictable. Changes in the cost responsibility surcharge that PG&E will assess on the monthly bills of Clean Power SF's customers will also impact the comparison between Clean Power SF's rates and PG&E's. If an objective is for Clean Power SF rates to be more stable and predictable than PG&E's, it is possible that program rates may not always be at or below PG&E's, even if they start out the same. Appropriate program messaging will be important to maintaining customer loyalty. CCSF should also clarify whether the ESP is required to match all rate structures offered by PG&E or if the meet or beat requirement is measured on a different basis, such as a weighted average for all customers, potentially with adjustments for energy efficiency and conservation impacts.

Program Elements Requiring Further Development

Several identified risks stem from current unknowns in the Clean Power SF Program that can be mitigated with additional information. Areas that would benefit from further detailed development

include program policies and procedures relating to customer credit, rules for customer migration after the initial opt-out period, additional information regarding the preferred locations and other details of the anticipated 360 MW portfolio, the amount of CCSF administrative costs that are required to be incorporated in supplier bids, and information on likely H bond financing details such as timing of potential issuance and anticipated terms.

Clean Power SF Objectives

In large part, CCA is a risk management response to the catastrophic failure of the energy markets in 2000-2001. This event, known as the California Energy Crisis, resulted in wholesale power and gas costs in the spot market that were many multiples of the corresponding retail rates. A fundamental cause of the Energy Crisis was a utility procurement strategy that relied almost exclusively on very short term purchases. CCA programs allow municipalities and other local agencies to increase the amount of control they have over their exposure to the energy markets, and to insulate themselves to some degree from the decisions of large utilities and other third parties.

Clean Power SF's proposed supply portfolio, which emphasizes owning generation facilities that do not rely on natural gas or other fuels that are subject to price volatility, mitigates exposure to spot market prices, which was at the core of the financial breakdown of the investor-owned utilities. Another risk management element of the Program design is the requirement of the supplier to bear the financial risks of containing wholesale costs within rates.¹ Ownership of non-fuel generation resources and to a lesser extent long-term contracts reduces Clean Power SF's exposure to increasing energy costs. The focus on local, renewable resources also mitigates exposure to increasing fossil fuel prices, carbon costs, and transmission congestion charges that would be applicable to delivery from remote generation sources.

Current State of Energy Service in San Francisco and Envisioned End-State

Currently, the residents of San Francisco are bundled electric customers of PG&E. Some portion of the load for CCSF-owned facilities is served by hydroelectric power generated from CCSF's Hetch Hetchy water supply facility in the Sierra Nevada Mountains. Hetch Hetchy power is, by law, limited to municipal use and not currently available to be sold directly to residents. About 25 percent of CCSF's large commercial and industrial customers, representing about 12 percent of CCSF's load, are direct access customers and obtain their electricity from third parties.

Individual PG&E customers have no influence on the proportion of renewable energy in their energy mix unless they personally undertake renewable projects—for example, by installing solar electric systems on their residences or businesses. PG&E, like the other major investor-owned utilities in California, is behind meeting its Renewable Portfolio Standards (RPS) goal of 20% by 2010. In fact, PG&E customers, including most San Francisco businesses and residents, received only 14% of their power supply from qualifying renewable generating facilities in 2008.² CCSF aspires to a much higher level of renewable energy.

¹ This structural mitigation does amplify the credit risk associated with the supplier, and thus emphasizes the need for credit management and contingency plans for possible supplier failure.

² PG&E Power Content Label bill insert (April 2009), actual 2008 Annual Power Mix.

CCSF also believes that PG&E's rates may increase substantially due to PG&E's history of rate increases in general, and to its specific exposure to costs related to carbon emissions from its fleet of gas-fired generators and to expenses associated with the Diablo Canyon nuclear power plant.

Clean Power SF envisions the City of San Francisco as having the highest proportion of self-supplied RPS energy of any municipality in the United States. Its goal is to satisfy 51 percent of its residential and commercial electric load with renewable energy (much of it installed within CCSF), energy efficiency, and conservation by 2017. Clean Power SF intends to achieve this goal at electric rates that are less than or equal to those of the incumbent utility, PG&E.

Clean Power SF, as the provider of electric generation service for the residents and commercial enterprises of CCSF, has several objectives, including:

- An electric supply resource mix including 360 megawatts of newly built capacity (nominal)³ that is significantly lower in greenhouse gas emissions per kilowatt hour than PG&E's, while maintaining or improving electric supply reliability and meeting or exceeding any State of California requirements for RPS and Resource Adequacy Requirements (RAR). At a minimum, the CCA's resource mix will achieve a 51% RPS, using solar photovoltaics, distributed renewable generation, and energy efficiency measures, by 2017.
- The establishment of rates for electric power that, on a weighted-average basis, meet or beat an equivalent weighted average of PG&E rates, and that are more stable than PG&E's.
- The award of a contract to a single supplier to provide all energy and related services, which supplier will bear all financial risks associated with such provision.
- Ownership of certain electric generation facilities initially procured or built by the supplier with financing from municipal revenue bonds (H Bonds).

Expected Benefits

Identified potential benefits of Clean Power SF include:

- CCA customers will enjoy a lower risk of rate hikes compared to PG&E customers, based on PG&E history of rate increases and its particular exposure to carbon and nuclear-related costs. CCA rates will be more stable and predictable.
- Increased reliability and energy security from a shift to local renewable resources from remote fossil and nuclear resources.

³ The intermittent nature of some of the resources that comprise the 360 megawatts of nominal capacity means that the California Independent System Operator will credit a somewhat lower number for resource adequacy requirements.

- Protection from rate increases through two bonds or other financial guarantees, obtained at supplier expense: one to cover the costs of customers returning to PG&E service, and the other to insure the completion of the construction of any facilities.
- Dramatically accelerated renewable energy development for CCSF, including the achievement of 51% RPS by 2017.
- Other beneficial services for customers, such as photovoltaic purchase and installation, distributed generation, and energy efficiency and conservation systems.

Cost and Rates

The cost of constructing and installing all facilities and systems and the cost of staffing all administrative, operational, maintenance, and energy procurement, and some customer care functions, will be the responsibility of the supplier.

Facility construction may be financed through H Bonds. If such bonds are issued, the principal and interest payment will come from ratepayer revenues in accordance with the rate structure that the ESP bids.

The supplier’s compensation will be integrated into rates. The supplier retains whatever ratepayer revenues remain after it has paid required program costs. The supplier will bid structured rates that provide transparency in rate changes during the course of the agreement.

Resource Mix

Clean Power SF intends to install 360 MW of electric generation capacity or its equivalent in energy conservation and energy efficiency in the following proportions:

Resource	Capacity
Load Reduction (Management and Efficiency Measures)	107 MW
In-City Solar Energy	31 MW
Small Scale Distributed Generation	72 MW
New Wind Energy	150 MW

Customer / Ratepayer / Geographic Coverage

The service territory of Clean Power SF is bounded by the jurisdictional boundaries of CCSF. As CCAs are by law “opt-out” programs, all customers within the jurisdiction of the City and County of San Francisco would be default participants in the program. Under current regulations, existing direct access

customers, which have bilateral energy supply contracts with third-party (non-PG&E) providers, would be automatically enrolled unless they affirmatively opt-out. CCA customers will have four opportunities to opt out during the transition and remain full-service PG&E customers.

CCSF continues to be interested in acquiring PG&E's electric distribution system. At present, such acquisition is not an active part of the Draft Implementation Plan.

Organization / Staffing / Administration / Budget

The San Francisco Board of Supervisors assigned the responsibility to monitor and prepare necessary documents for implementation of Clean Power SF to the LAFCO, while the SFPUC has the authority to actually implement the project, per Ordinance 86-04. It is anticipated that LAFCO as well as SFPUC will consider and approve the budget for the implementation of the CCA Program for recommendation to the Board of Supervisors Budget and Finance Committee. This process provides CCSF's top elected officials with direct oversight of the CCA team.

In implementing the Program, LAFCO is authorized to exercise a broad array of functions and powers to accomplish the objective, including, but not limited to: negotiating contracts, managing finances, and consulting with the SFPUC to issue H Bonds. Once the Board of Supervisors has determined that Clean Power SF has been implemented, LAFCO's authority will terminate, and full responsibility for the Program will transfer to SFPUC.

The Program was authorized an initial budget of \$5.0 million, \$3.2 million of which was placed in reserve pending information on the progress of Program startup. A key premise of the Draft Implementation Plan is that CCSF will incur no large-scale CCA expenditures until a contract with a supplier is imminent.

The CCSF Attorney's office, assisted by LAFCO and SFPUC, represents Clean Power SF at the CPUC, CEC, and other state and federal agencies.

Overview of Assumptions and Clean Power SF Implementation Approach

To provide the appropriate context for the risk assessment, it is important to review Clean Power SF's key assumptions and implementation approach.

- The San Francisco LAFCO will monitor San Francisco's community choice aggregation program, Clean Power SF, in conjunction with the SFPUC's implementation efforts and report to the Budget and Finance Committee of the Board of Supervisors.
- H Bonds may be used to finance renewable power generation facilities that are to be designed, built, operated, maintained, and integrated into the CCA power portfolio by CCSF's chosen supplier.
- Suppliers will compete for sole award of the Clean Power SF contract in a Request for Proposal process. Potential suppliers will bid the retail electric rate schedule that they will charge to serve the ratepayers of the program. These rates will be all-in, and include all costs for:
 - Procuring and scheduling electric power.
 - Procuring ancillary services, including resource adequacy.
 - Managing all aspects of the interface with the California Independent System Operator and Pacific Gas and Electric Company for system operation.
 - Servicing and repaying the H Bonds issued to support facility design and construction, including photovoltaic, wind, and other distributed generation facilities within CCSF; a wind farm outside CCSF limits; any interconnects required for such facilities; demand response systems; and customer energy efficiency installations.
 - Managing the construction and commissioning of the above facilities.
 - Acquiring and maintaining permits, certificates, and other authorizations for constructing and operating the above facilities.
 - Operating and maintaining all renewable generation, energy conservation, and related facilities, systems, and programs once built or implemented.
 - Ongoing administration of portions of the program, including billing and interface with Clean Power SF offices and PG&E. The San Francisco Public Utility Commission will be responsible for customer service and administration of a customer call center, customer opt-out processing, and management of energy efficiency programs.
- Bidders will also bid the term (duration) of the CCA Program contract, which will be another factor considered in making the award.

- The initial contract with the supplier is expected to have a term of 15 to 20 years, to coincide with the likely funding mechanisms.
- A contract that would result in customer rates higher than PG&E's will not be approved. The Board of Supervisors will not change the rate structure approved in the ordinance awarding the contract to the chosen supplier, except as an emergency measure.
- CCSF will own some or all facilities built under the CCA contract.
- Satisfying CCSF's RPS requirements will involve a combination of building and buying. The supplier is expected to purchase wind capacity and energy from merchant generators and possibly Renewable Energy Credits (RECs) from third parties in order to achieve the goal of 51% RPS.
- The "build not buy" approach for renewable generation resources provides the potential benefit of reducing rates over time, utilizing financing strategies that would result in the lowest possible rates for customers, and the absence of fuel costs combined with low operations and maintenance costs which are attributes of renewable generation technologies. Many facilities are expected to continue to generate electricity for thirty to fifty years, while bonds financing the projects are expected to have been paid off within 20 years, yielding many years of extremely low-cost electric generation.
- Clean Power SF expects to be self-funding through rates, with the exception of reasonable administrative start-up costs approved by the SFPUC and/or Board of Supervisors.
- The implementation of Clean Power SF will proceed in five phases:
 - Start up
 - Program Development
 - Procurement / Supplier selection
 - Implementation / Construction / Bond issuance
 - Operations and Maintenance

The implementation approach and assumptions described above clearly identify specific programmatic elements and requirements that are important to CCSF's CCA initiative. These elements/requirements define overarching objectives for Clean Power SF, structural responsibilities, performance obligations of the chosen supplier and financial considerations, as well as other details. CCSF was thoughtful and thorough in developing these elements, which significantly limit procedural ambiguity and public uncertainty regarding the proposed CCA Program.

The defined approach minimizes risks to CCSF and its constituents by assigning operational risks to the third party supplier with structured rates that preclude the pass-through of unanticipated costs to

customers. The 360 MW renewable infrastructure developed through the program will significantly reduce exposure to volatile fossil fuel prices as well as future carbon costs. The Implementation Plan establishes ratepayer protections that are not provided under the status quo, which allows PG&E to pass cost increases through to ratepayers.

However, the care that was taken in developing specific programmatic details may present certain challenges for prospective energy service providers. The risks and mitigation strategies identified in the following sections will provide additional discussion regarding the manner in which CCSF can effectively pursue Program implementation, consistent with the key goals and objectives that have been established.

Strategic Risks and Mitigation

Clean Power SF is a visionary and ambitious undertaking with many components and interdependencies. At a high level, successful program startup requires execution of the following major tasks:

- The negotiation of an acceptable contract with a qualified ESP;
- Development of the various interfaces between the program, the ESP and PG&E;
- Issuance of H-bonds to the extent such proceeds are to be used to finance the 360 MW portfolio or other elements of the program; and
- Program marketing, customer outreach and retention of customers through the initial opt-out process.

Strategic risks are those factors that may impede successful completion of these tasks, affecting the ability of the program to come into being due to political or structural reasons.

Supplier Selection and Performance

As specified in Ordinance 86-04 and the Draft Implementation Plan, the ESP is central to the program as it is responsible for procuring electric supplies, developing, operating and maintaining the 360 MW portfolio, and integrating proceeds from H Bond issuances by CCSF into the Program's investment and cash flow requirements. The critical role designated for the ESP places the supplier selection process and the ensuing performance of the supplier in meeting its contractual responsibilities at the forefront of key factors for program success.

There are specific strategic risks within the overarching task of securing an acceptable ESP agreement. The following pages discuss these strategic risks in detail.

Attracting Qualified Bids

The single-supplier approach specified in the Implementation Plan offers many benefits. It integrates the various aspects of the resource plan, insulates CCSF from many major risk elements, relieves CCSF of the need to manage certain issues at a detailed level, and provides a single, accountable point of contact. In essence, the Draft Implementation Plan describes a situation in which CCSF will outsource virtually the entire electric utility function of the CCA to a single provider. The Plan constrains the price of this service by requiring that the supplier extract all compensation and costs from rates which cannot exceed PG&E rates. The single supplier will bear the financial risk of providing this comprehensive service within that rate.

Accordingly, attracting qualified bids and selecting the program's supplier through the RFP process is the most important action CCSF will take during program implementation. The single greatest risk that

would jeopardize program startup would be the inability of CCSF to attract interest from and contract with an ESP meeting CCSF's requirements.⁴

Possible Mitigation

CCSF has already taken an important step in mitigating the risk of failing to obtain a qualified single supplier by gauging supplier interest through a recently conducted Request for Qualifications ("RFQ") which yielded responses from two potential suppliers. While the responses of potential suppliers are expressions of interest and not binding, they do provide valuable confirmation of market interest, and provide input as to what provisions or adjustments to the Implementation Plan might be included in the Request for Proposal that is due to be issued in October 2009.

If CCSF wishes to increase the number of potential bidders to its RFP, the RFQ could be followed up by interviews with both responsive and non-responsive providers to determine the aspects of the potential project that appealed to or concerned them. In fact, ongoing, bilateral communication between LAFCO, the SFPUC and prospective energy suppliers will likely facilitate implementation activities and will provide CCSF with current information regarding market impacts on program pricing and other considerations. Ongoing communication with prospective suppliers will also provide opportunities for CCSF to convey pertinent information related to project siting developments, political and public opinion related to the program and other concerns. The results of this exercise should also provide valuable feedback in crafting the planned Term Sheet and ultimate RFP. Other options for increasing the pool of bidders are described under *Options for Increasing the Number of Potential RFP Respondents*.

Supplier Credit

The long-term viability of the supplier is crucial to program success. While the selected supplier will be entering the relationship voluntarily through a competitive solicitation, which presumes interest in and commitment to the program, supplier failure once the Program is active would create difficulties for the Program in identifying a qualified successor that will be willing to step in. The anticipated long-term nature and large notional value of the ESP contract elevate credit as a major risk element that will need to be addressed in the ESP contract. Both CCSF and the supplier will have credit requirements that could become impediments to successful negotiation of an ESP contract.

In accordance with CPUC regulations, a bond or other form of financial assurance is required to cover PG&E's market exposure if CCA customers are returned to PG&E service involuntarily. The amount of the bond or other assurance must cover six months of related costs. This may be difficult and/or expensive to obtain.

To minimize supplier credit and performance risks, due diligence efforts by LAFCO and the SFPUC as to the creditworthiness, professionalism, and competence of the supplier is paramount.

⁴ This risk stems from the scope, complexity, heterogeneity, and strictly specified portfolio of the Clean Power SF Program as envisioned in the Draft Implementation Plan, as well as the allocation of risks and rewards for the ESP.

Possible Mitigation

Typical credit arrangements in wholesale power contracts provide for defined credit thresholds that, once exceeded by the mark-to-market value of the contract, trigger a requirement to post a letter of credit or other form of acceptable credit support. Typically, such credit provisions are reciprocal, meaning that both parties to the transaction are required to provide credit support under defined conditions. Such a “margining” obligation would likely not be acceptable to CCSF, and the ESP would likely need to look solely at revenues generated by the CCA program as its sole source of payment assurance. Other CCA programs have provided credit assurance to the supplier by granting a security interest in customer account receipts sufficient to cover the CCA’s obligations under the contract. For example, the San Joaquin Valley Power Authority’s (SJVPA) CCA program granted a security interest to its chosen supplier, Citigroup Energy, Inc. (CEI), for its customer accounts receivables. It also committed to using bonds to prepay its energy purchases, if such a prepayment was determined to be feasible and provide economic benefits to the program.

Finding an appropriate at-scale method for the supplier to provide credit assurance to CCSF is more problematic. It may be difficult to find an ESP willing to enter into a contract that requires it to post hundreds of millions of dollars of credit support. As a practical matter, due to the sheer dollar value of the contract, respondent ESPs may seek to negotiate for a relatively high credit threshold for the ESP or waiver of such a threshold altogether as long as the ESP maintains an acceptable credit rating. In that case, CCSF would be relying upon the general creditworthiness of the ESP, or its credit support provider. As an example, the agreement negotiated between CEI and SJVPA required CEI to provide a parental guarantee from Citigroup or a replacement guarantee from an entity with a credit rating of A3/A- or better.

A high degree of due diligence is required before entering into a contract with a supplier. A high credit rating for the chosen supplier is mandatory; even so, further investigation and continual credit monitoring is warranted. CCSF should monitor the appropriate press sources for any information related to the supplier. It may be beneficial to create a position of “supplier relationship manager,” who would be responsible for maintaining an in depth, near-real time knowledge of the financial “health” and general business activities undertaken by the supplier. Suggested responsibilities should include thorough reviews of current Securities and Exchange Commission filings, the supplier’s investor presentations, its publicity, and web content, as well as popular and industry press reports on all related topics, including other projects. Program management should receive regular briefings based on these reviews; a clear process should be established for communicating any concerning findings to Program management in a timely manner. The effectiveness of this mitigation would be a direct function of the status and focus assigned to the position.

Ownership of generation facilities as set forth in the Implementation Plan mitigates credit risk significantly, but exposure remains for residual power purchases. A potential mitigation would be to increase the plans for CCSF-owned generation facilities beyond the 360 MW established in the draft Implementation Plan. The completion bonds specified in the Draft Implementation Plan further mitigate this risk by ensuring that the renewable generation facilities will be built. However, delays in construction are possible, and replacing the power in the interim will be the responsibility of the ESP,

with attendant credit implications. Nonetheless, increasing generation asset ownership will diminish the volume of power that must be purchased as well as associated credit exposure.

Requiring an ESP to post a bond for the costs of returning customers back to PG&E in the event of supplier failure also mitigates risk, but this is strictly a financial mitigation. According to the Joint Motion of City of Victorville, Pacific Gas And Electric Company (U 39-E), San Diego Gas & Electric Company (U 902-E), San Joaquin Valley Power Authority, Southern California Edison Company (U 338-E), and the Utility Reform Network for Adoption of Settlement Agreements, (CCA Bond Settlement), such bond or financial guarantee must be updated semiannually, and reflect the then-current market. The CCA Bond Settlement mitigates the risk of obtaining sufficient coverage by allowing the CCA to grant PG&E a securitized interest in its accounts receivable. Alternatively, CCSF could obtain a letter of credit to cover the involuntary return risk, using the municipality's good credit rating, or potentially provide self insurance against the risk.⁵

Requiring such a bond does not address the sustainability of Clean Power SF. In fact, this risk mitigation measure, if implemented, would effectively terminate the program. CCSF should explore the possibility of structuring the ESP bond so that the proceeds can be used by CCSF in finding a replacement ESP or other sources of requisite energy supply. It may be possible to obtain a second bond or an option that would cover the incremental cost of energy required to serve CCA customers, but would not require the customers to be returned to PG&E. Under this potential approach, Clean Power SF would be kept intact. The cost of the first bond would remain specific to the return of the customers (and the cost responsibility of the supplier), but CCSF may consider funding its own bond, if that supports a broader plan to keep the Program intact.

Further, early thought should be given to the worst-case scenario of supplier failure. There would be a benefit in having contingency plans related to the transition of the supplier's functions to another capable entity (including possibly Clean Power SF itself, if its personnel were sufficiently trained). Failing that, other plans should be in place regarding the disposition of customers, physical facilities, supply contracts and commitments, and Clean Power SF in general. The ideal mitigation would be to find a creditworthy and capable replacement supplier immediately. This is not likely to be easy, especially in an environment in which high or volatile prices were the underlying driver of the problem. However, CCSF may require the supplier to report in detail on its purchased power and gas portfolio, which may help in two ways. One, it will provide assurance that the portfolio is properly diversified. Two, it will reveal the counterparties. It is conceivable that CCSF could negotiate directly with existing supplier counterparties that were to continue delivery. This would require CCSF to have the administrative capability to carry out this function, and would specifically require power purchase contracts to be in place or to be negotiated very quickly. Use of standardized industry contracts, such as the Edison Electric Institute (EEI) or Western States Power Pool (WSPP) agreements would facilitate quick negotiations of replacement agreements. A related mitigation strategy in support of the above

⁵ An open issue at the CPUC is responsibility for customer reentry costs if the posted bond proves insufficient to fully cover these costs. While there are strong arguments in favor of spreading any such costs across all ratepayers, there is some risk that the CPUC will rule that the CCA program or the returning CCA customers themselves should be solely responsible for these costs.

would be to divide the CCA contract award among more than one supplier such that one could step up in the case of default of the other. However, this approach would contradict the planned program structure under which a single supplier provides all requisite energy services and may not be feasible.

Supplier Performance

Other supplier performance issues could include unsatisfactory customer service, untimely development of the 360 MW portfolio obligation, or failure to meet regulatory requirements. In such a case, it may not be desirable to use the ability to return customers to PG&E by invoking the bond secured for such a contingency.

The scale and schedule of the build-out of RPS facilities is ambitious as Clean Power SF seeks to transform in significant ways the manner in which electricity is produced, transmitted and consumed in San Francisco. It is possible that the supplier may not be able to achieve the RPS facility construction schedule goals. The siting, permitting and construction of energy-related facilities could experience significant delays that may force the supplier onto the open market to make spot purchases of power.⁶ The Implementation Plan calls for the supplier to substitute market RPS power to the extent that it is unable to timely construct RPS facilities. The Plan also provides for the issuance of additional H Bonds and contract extensions for the supplier (which must be approved by ordinance).⁷ The Implementation Plan requires the supplier to obtain a performance bond or other financial guarantee to cover any of its performance failures (including its subcontractor's failures) in the roll-out of the CCA's 360 Megawatt renewable and energy efficiency portfolio. To the extent this is a construction bond, the risk of obtaining the desired level of coverage at a manageable premium is low. To the extent the bond covers non-traditional installation issues (e.g., market losses related to unplanned electric energy purchases driven by a failure to timely complete renewable generation construction), the risk of finding a creditworthy underwriter willing to underwrite the risk at a premium that fits within the rate cap increases.

⁶ To the extent that the desired projects and related actions will result in environmental impacts, CCSF, its legal counsel and other technical advisors should consider potential requirements imposed by the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA), which may obligate CCSF to perform environmental analyses and related documentation once specific projects are proposed. Because of San Francisco's predominantly urban landscape, numerous concerns related to land use, traffic and circulation, noise and utilities and public service impacts will likely surface during public planning discussions and activities. CCSF's Major Environmental Analysis (MEA) Division of the Planning Department is responsible for administering Chapter 31 of the San Francisco Administrative Code, which describes local guidelines for CEQA implementation. MEA should be consulted during the project planning phase to determine the requirements of Chapter 31 that may be applicable when developing local projects. Satisfying the prescribed requirements of CEQA and local implementation guidelines described in Chapter 31 may be costly and time consuming, depending on expected environmental impacts, and should be reflected in the timeline for project deployment that is communicated to prospective energy suppliers.

⁷ Plan, p. 15.

Possible Mitigation

The contract should contain sufficient incentives and penalties to direct appropriate supplier performance, including incentives for completing the 360 MW rollout in accordance with defined milestones. CCSF may wish to begin the process of devising such a contract, based on one of the industry standard contracts identified above.

Due diligence regarding the supplier's performance in any related endeavor is warranted. While past performance may not be an indicator of future performance in financial instruments, it is an excellent indicator for individuals and companies.

As noted above, the creation of a single responsible function (a "supplier relationship manager") to monitor all aspects of the supplier's performance and its general operation and financial health may provide early warning and intervention opportunity to prevent small problems from growing.

CCSF might also consider developing more in-house expertise, both to help manage the supplier to minimize potential problems, and to build a capability of stepping into supplier functions if the supplier fails to satisfactorily meet expectations. This could be an integral part of the supplier relationship manager's function.

Local Power Inc., in its *Community Choice Aggregation Program Report* of February 28, 2008, analyzes the siting risks associated with local renewable resources extensively and identifies potential mitigations that CCSF can take to expedite the construction of revenue-producing facilities, including: altering the permit process to allow for expedited installation of wind and solar; consolidating/streamlining the existing multiple-agency process; tasking relevant departments to draft new design guidelines and processes; integrating the San Francisco Urban Wind Task Force into the CCA planning process and expanding its duties to find locations where larger scale, higher towers for wind generators would be acceptable; modifying codes to allow pole-mounted systems; creating an overlay zoning ordinance; and implementation of Demonstration Projects.⁸

In addition, CCSF may consider taking on some of the risk of any delay caused in part by problems with CCSF processes, such as local permitting.

Political Opposition

PG&E has opposed the creation of any CCA in its service territory and will no doubt attempt to undermine Clean Power SF. PG&E has already expended considerable resources in opposing other CCA programs, notably the program planned by the San Joaquin Valley Power Authority, which cited PG&E's opposition as a significant factor in its recent decision to suspend implementation of its Community Choice program.

⁸ Community Choice Aggregation Program Report, February 28, 2009, by Local Power Inc., p. 36.

Lessons from SJVPA

With SJVPA, PG&E undertook an aggressive public relations and lobbying campaign. PG&E's tactics included the following:

- Presentations at city council meetings highlighting risks to ratepayers and cities that PG&E claimed were associated with the CCA program.
- Creation of customer mailers criticizing the opt-out nature of the program.
- Letters to elected leaders disputing the validity of the program's economic analyses and rate projections.
- Statements to public officials creating an apparent linkage between public goods funded energy efficiency programs and continued bundled service from PG&E.
- Lobbying of city council-members to discourage their jurisdiction from joining the program and encouraging their withdrawal and promoting similar organized efforts by others.
- Statements and presentations criticizing the key program agreements, including the electric supply agreement.
- Creation of a web-page to allow customers to opt out of the program prior to the noticing and opt-out process being conducted by SJPVA.
- An Op/Ed piece written by the Chief Executive Officer of PG&E Corporation criticizing the SJVPA's decisions and governance practices and casting doubt on the analyses developed in support of the program.

PG&E ultimately entered into a settlement agreement with SJVPA where the utility agreed to a number of disclosure requirements and the functional separation of marketing employees from utility employees for purposes of communicating with customers regarding the SJVPA program. PG&E has not applied the provisions of the settlement to other CCA efforts outside of the SJVPA area.

PG&E would be expected to undertake the same kind of actions in opposing Clean Power SF. CCSF should also anticipate PG&E conducting a mass media campaign to convince customers to remain with PG&E electric generation service.

The risk of high rates of opt-out by Clean Power SF's potential constituents largely stems from the ability of PG&E or other opponents to mount a public relations campaign in which they will attempt to instill doubt about the viability of the program in the public mind. If a contract is signed with an ESP, opponents may design an opt-out campaign to undermine the reputation or credibility of the ESP. For example, some ESPs may have involvement in aspects of the energy industry that CCSF may object to, such as nuclear power, liquefied natural gas, or oil exploration and production. Opponents may seek to exploit the perceived deficiencies in the ESP to divide the support base for the Program. Any risks that

are allocated to program customers, however appropriate, will be highlighted and any remaining uncertainties associated with the program will be exploited to encourage opt-out.

Possible Mitigation

Messaging and branding are keys to retaining loyal customers in the face of PG&E opposition. The Program has many attributes that set it apart in a positive light from PG&E, including a much better RPS profile, long-term rate stability, and local generation, among others. Pre-emptive publicity and active public education, concentrating on the benefits and pre-empting the objections will help to retain customers.

A neighborhood-by-neighborhood implementation of the program has been suggested, to take advantage of perceived stronger support in certain neighborhoods to build a critical mass that may persuade areas with perceived potentially higher opt-out rates to remain in the CCA Program. Other phase-in schemes could be designed to offer the program first to customers who are eager to join, with later roll-out to all customers once tangible evidence of success is proven. It may even be possible to start the program on a pilot opt-in basis before full implementation of the opt-out program.

Any type of phased implementation would require a change in the Draft Implementation Plan, which states that “The City and County will not attempt to implement a phase-in of customers on a neighborhood-by-neighborhood basis nor on a customer class-basis, but shall offer its service to any and all PG&E electric generation customers who do not elect to continue to be served by Pacific Gas and Electric procurement pursuant to 366.2(a)(2) of the Public Utilities Code.”⁹

CCSF could seek to have legislation introduced to revise Public Utilities Codes section 366.2 to clarify that the requirement for a utility to fully cooperate with the CCA program precludes the utility from marketing against or undermining the CCA program. As currently written, the law could be interpreted to limit the scope of utility cooperation to the provision of data:

“All electrical corporations shall cooperate fully with any community choice aggregators that investigate, pursue, or implement community choice aggregation programs. Cooperation shall include providing the entities with appropriate billing and electrical load data, including, but not limited to, data detailing electricity needs and patterns of usage, as determined by the commission, and in accordance with procedures established by the commission.”

The CPUC’s implementing regulations were developed in the context of PG&E statements that it was neutral to CCA and would not compete with CCA for electric generation customers. This was consistent with PG&E’s support for AB 117. However, PG&E is now on record as opposing CCA generally and has demonstrated its intention to compete against the CCA program to retain customers, albeit using shareholder rather than ratepayer funds. Since Clean Power SF will be dependent upon PG&E for many

⁹ Draft Implementation Plan, Appendix A, SF CCA Draft Implementation Plan CPUC Compliance Submission Document, pg. 15.

services critical to the program's operation, including both the processing of customer opt-outs and the billing and collections of Clean Power SF customers, the ability for PG&E to compete against the program poses numerous risks. Had it been understood during development of the CCA implementing regulations that the utility would be competing for customers, it is likely that provisions would have been adopted to address the inherent conflict of interest. As a mitigation measure, CCSF may wish to appeal or modify the CPUC's decision allowing for utility marketing against CCA programs or otherwise impose restrictions to proscribe use of the utility's monopoly position to unfairly compete against Clean Power SF.

Since there are no other jurisdictions required to join Clean Power SF, PG&E's lobbying of officials to discourage jurisdictions from joining is moot. However, PG&E should be expected to step up lobbying of local elected officials and agencies as the program progresses.

Politically Motivated Changes in Law

PG&E recently announced its support for a ballot initiative that would amend the California constitution to require a vote of approval from two-thirds of the potential ratepayers within a CCA service territory to allow the commitment of public funds to start a CCA program. The so-called "Taxpayer Right to Vote Act" was filed with the Attorney General's office on May 28, 2009. PG&E's position opposing CCA is clear, and it should be expected to seek other legislative or regulatory changes to eliminate or contain the CCA option.

Such legislative assaults become increasingly likely as time goes on with no operational CCA programs.

Possible Mitigation

Initiating the program, whether in whole or in part, will create a higher hurdle for legal changes. However, CCSF is cautioned not to rush the Program to implementation in a way that would compromise other Program components or create or amplify other risks.

CCSF can and should make its interests understood to legislators, whether individually or in concert with others. A mitigation specifically to counter the Taxpayer Right to Vote Act may be a coordinated response with other CCAs, potential CCAs, and allies such as municipal power agencies. CCSF could form and/or support a coalition of like-minded cities. It could also align with non-utility power suppliers and direct access providers, who have a natural interest in creating more competitive energy markets. This effort would include lobbying and brainstorming potential legal challenges and/or counter legislation. Funding such challenges will be an issue.

Customer Retention

To promote maximum viability and achievement of the envisioned benefits, Clean Power SF needs to retain as many customers as possible to keep its volumes high and stable. Higher, more stable volumes are less costly to manage for a potential supplier than lower, unpredictable volumes. Thus, more suppliers may be attracted and may be more likely to bid a rate bid that is favorable if Clean Power SF can deliver higher, more stable volumes. Program financing also depends upon a stable and secure customer base.

The initial opt-out process is one driver of volume risk as discussed above. Once the Program is operational, the risk of customer defection is largely a function of customer satisfaction. Many issues can provoke customer dissatisfaction. The Plan by default covers off one major source: the initial price cannot be higher than PG&E's. However, there are administrative risks in the customer relationship, notably account set-up and billing that, if performed poorly, can quickly create unsatisfied customers and negative press.

Conversely, as the Program matures, which will include the phase-in of various efficiency measures, the size and character of the customer load may change. The supplier will be largely responsible to coordinate supply with demand. However, CCSF also bears some responsibility in this regard. To the extent it can retain potential customers, and particularly potential direct access customers who tend to have flatter, more manageable load requirements, CCSF strengthens the likelihood of Program success.

Load growth must also be considered, particularly the addition of any large loads or expansion of the program to other geographical areas.

Finally, volume can fluctuate due to weather. This is a normal risk for a supplier to manage, but there is a cost that the supplier will embed in its rate schedule.

Possible Mitigation

First, CCSF should make sure the program is as viable and carefully structured as possible. This risk analysis is part of that effort.

Second, CCSF should ensure that the selected ESP is highly qualified, credible, and financially sound. Particular scrutiny should be applied to the ESP's capabilities regarding billing and other customer services with a direct impact on customers. The ability of the ESP to expend resources in marketing Clean Power SF should be a factor in supplier selection.

Third, CCSF might itself conduct a promotional and educational campaign that emphasizes the positive attributes of the program. A key fact supporting Clean Power SF is that the U.S. and California are full of successful municipal utilities whose rates are lower than for-profit utilities. The economic advantages are structural: publicly owned utilities don't have to make 10-12% profit to attract capital. Also, they are tax-advantaged—their borrowing costs are lower due to the capacity to issue tax-free bonds. A CCA is very similar to a municipal utility in this respect. In addition, San Francisco already has a successful, experienced municipal utility. Clean Power SF is an extension of in-place expertise and capabilities.

To combat potential opponent arguments and assertions, CCSF may task individuals now to identify them in a brainstorming process and develop pre-rebuttals.

Fourth, excellent customer service will keep enrollments high. CCSF may consider a particular outreach to its larger customers to ensure they support and value participation in Clean Power SF. This may include staff liaison in the form of account managers to assist the supplier in handling customer issues that inevitably will arise from time to time. The use of individual contracts for large customers may also be explored to retain them in the Program.

CCSF should also consider negotiating with PG&E for audit rights related to customer data, particularly during the opt-out process. CCSF might also consider trying to obtain a change in CCA rules that would allow CCSF to process opt-outs. This would entail an expanded administrative function, with the attendant costs and management issues, but would eliminate a situation where the competitor has a direct role in determining the Program's customer base.

Fifth, CCSF could limit customer departures from the Program after the initial opt-out period by imposing a charge to leave or mandating minimum stay requirements, or a combination of both. Municipal utilities have the advantage of a stable customer base because once a municipal electric service area has been officially instituted, customers have no alternative supply option. The dilemma faced by Clean Power SF is that any rules or fees designed to restrict customer migration may act as a disincentive for participation. Additional definition surrounding program rules for customer migration will be necessary.

Program Financing

Another strategic risk relates to the need to obtain adequate financing to support the program and potentially the 360 MW infrastructure projects that will be developed by the ESP. Obtaining adequate startup capital depends largely on how the financing decision-makers perceive the viability of the enterprise. In private industry, the key financing decision-maker is typically a bank, which will lend money or raise equity on behalf of the startup. For a public enterprise such as the CCA Program, a key financing vehicle is municipal bonds, which may be issued to support development of the electric generation facilities. In this case, the specific bonds to be offered to the market are known as H Bonds, which were authorized by the citizens of San Francisco in 2001 (Charter Section 9.107.8, Ammiano). As revenue bonds, interest payments and repayment of principal to investors will come from rates paid by customers of the CCA program for electricity and related services produced by the facilities that the bonds finance.

The interest rate and market appetite for H Bonds will be influenced by the opinions and the credit ratings of agencies such as Standard & Poor's, Moody's Investor Service, and Fitch Ratings. These credit agencies will analyze the business plan of the proposed enterprise, the ESP contract, and program terms and conditions, with an eye toward any risk that may jeopardize repayment.

A strategic risk for Clean Power SF is failing to satisfy the credit agencies that component risks have been sufficiently identified and planned for, leading to unfavorable pricing or suboptimal market acceptance of the H Bonds. This may inhibit the Program's ability to obtain adequate financing, assuming such financing is included in Clean Power SF's plans. This risk is noted in Appendix J, Program Risk Analysis, of the Draft Implementation Plan, which states "[I]n a complex program environment, the application of early proactive efforts to [identify and resolve issues] should reduce the quantity of problems ultimately faced by the program." This *Risk Assessment Report* is presented in the spirit of anticipating the questions and potential issues that the rating agencies and other key stakeholders may have, which will assist LAFCO in developing appropriate plans and mitigations for such risks, and to a successful presentation of the H Bonds to the investor market.

To the extent H Bond proceeds are made available to the ESP, the revenue needed to service the H Bonds will be funded through the supplier's energy pricing schedule implicit in its bid. Since any bond issuance would occur after the ESP is under contract, the ESP must estimate the revenue that will be available from the bonds if it is proposing use of such funding. The accuracy and supportability of the rates that the supplier bids may be affected by the need for the supplier to estimate these costs with very limited data.

Risk Mitigation

CCSF could retain an investment banker or financial advisory firm in the near future to begin efforts to structure the bond financing so that more can be made known to potential suppliers prior to issuance of the RFP. This effort will also help identify program terms and conditions important to enhancing the credit profile of the program. For example, since program revenues are the sole funding source for debt service, market acceptance of the bonds will be influenced by the security of the revenue stream. Investors will look to program rules regarding collection of customer payments, customer deposit policies and administration, and policies in place to prevent or mitigate loss of customers. These policies should be well-defined and able to withstand scrutiny from the rating agencies/bond investors.

Concurrently, to the extent CCSF anticipates making public goods funds available to the ESP, it should more clearly define the amount of such funding and the process and timing for making the funds available.

CCSF should provide as much direction and support data as possible to assist the bidders in formulating accurate rate estimates. The more accurate the data, the more supportable the bids, which will reduce the chance of problems with the supplier not being able to support its bid in the implementation phase, or create issues with bond repayment and/or facility construction/program implementation.

Market Timing

Current electric and gas commodity prices are off significantly from their 2008 highs, making the environment for obtaining bids that compare favorably to PG&E's rates much more attractive than they would have been just a year earlier. However, the credit markets are much more constrained than before last year's banking crisis, and the era of easy and abundant credit appears to have ended for the foreseeable future. This market environment applies to all market participants. Most significantly for Clean Power SF, PG&E has filed a preliminary notice that it expects to reduce its electric generation rates on January 1, 2010.

The volatile nature of the energy markets as well as the unpredictability of PG&E's electric generation rates pose challenges to timing the launch of Clean Power SF, particularly under a strict meet-or-beat rate requirement.

Possible Mitigation

The best mitigation for market timing is to keep abreast of the market and maintain flexibility in terms of the timing for soliciting final price bids. CCSF can take the necessary administrative actions to be in a position to execute the ESP contract and commence program implementation when market conditions

best allow for the City to meet its objectives. Development of a term sheet and a pro forma ESP agreement, preferably with input from potential suppliers, would allow the City to act quickly to take advantage of market opportunities. This strategic flexibility must be balanced against the natural urgency to initiate this important program for CCSF.

The CCA is required to submit an Implementation Plan to the CPUC for review. Under Clean Power SF's single-supplier model, the ESP will need to be identified in the Implementation Plan before it is certified and before Clean Power SF can be registered to begin offering service to customers. The possibility for delay in the CPUC's review can create risk to the ESP if it causes a delay in the agreed upon start date, as its supply acquisition commitments would become out of synch with its supply delivery obligations, requiring the supplier to dispose of supply at the prevailing market price. Obtaining timely regulatory approvals, including CPUC approval of the Implementation Plan, would likely be included as a condition precedent in the ESP agreement.

The CPUC completed its review of the SJVPA Implementation Plan within a 90-day review window, with a relatively modest administrative process, consistent with the CPUC's self-defined role of limiting its review to ensuring that statutory requirements are met and that the plan conforms to the CCA tariffs. Based on its record to date, the risk of the CPUC delaying its review of the Clean Power SF Implementation Plan appears low. However, delays should be anticipated in program planning. CCSF should ensure its implementation timeline allows for a minimum of 90 days for CPUC review, plus a contingency for potential delay. CCSF can also preview drafts of the plan with CPUC staff to clarify issues in the interest of expediting the review process. Providing sufficient lead time (six to nine months) between execution of the ESP contract and the commencement of service under the contract mitigates the risk of delays in obtaining regulatory approvals. A lead time longer than six to nine months introduces the risk of change occurring in the PG&E rates used to benchmark the ESP's prices, as PG&E changes its rates at least annually.

Commercial / Operational Risks and Mitigation

Commercial/ operational risks are those which may impede program success or the achievement of its objectives due to failure to manage the implementation, transition, or ongoing business processes, or through the rise of unfavorable financial circumstances.

Changes in Regulations, Laws, or Fundamental Market Conditions

The RPS standards that Clean Power SF has set for itself far exceed the current standards in any applicable regulation. During the course of a long-term ESP contract contemplated by Clean Power SF, RPS standards may become more stringent or other regulatory or legal changes may affect the Program's viability or the supplier's ability to manage it while continuing to support its rate commitments.

Additionally, fundamental market conditions may affect the finances of the supplier, CCSF, or its customers in a way that may potentially threaten the viability of the Program.

Regulatory and legal changes cannot be controlled by the ESP. Its acceptance of such risks would come at a premium. As the Draft Implementation Plan states, risks should be allocated to the party in the best position to manage the risk. While it is tempting to try to assign all risk to the ESP, doing so would result in risk adders in the supplier's bid that may undermine the ability of rates to meet or beat PG&E's. Generally, the ESP will likely not bid premiums for risks it can control or hedge, while it is likely to bid a potentially significantly higher price if it must accept risks it cannot control or hedge.

Reinstatement of direct access, whereby individual customers are able to choose an alternative energy supplier on an opt-in basis, would become a risk if it erodes the program's customer base or if the competitive threat causes additional marketing expenses to be incurred. Further, reinstatement of direct access could throw the ESP and CCSF into conflict if the ESP wishes to market to program customers via direct access. (The volumetric aspect of this risk is discussed with other volumetric risks in section *Customer Retention*.)

Possible Mitigation

Certain risks may be better borne by the Program than the ESP. Regulatory changes that affect all load serving entities, such as changes to the RPS, resource adequacy requirements, or costs of carbon regulation, are best borne by the Program because these changes are likely to impact PG&E's rates as well, so customers would be no worse off by bearing them under the Program than under the status quo. Customers may actually be in a better position *vis a vis* these risks, considering the forward-looking resource plan of Clean Power SF and the 51% RPS target established for the Program; the Program should have less exposure to an increase in the RPS to 33% and the potential costs of carbon regulation than does PG&E.

The potential for regulatory changes that adversely affect the ability of the ESP to deliver on its obligations will likely be addressed in a Material Changes clause of the ESP contract. A Material Changes clause would allow for a re-opening of the contract if some fundamental regulation, law, or

market condition has changed. Any such provision would need to be carefully crafted to ensure it accomplishes an appropriate balancing of risks and minimizes the potential for dispute.

CCSF should continue to monitor regulatory developments and actively participate in those that may affect CCA viability. CCSF has been active at the CPUC on CCA related matters and should plan for an expanded regulatory organization to support Clean Power SF as it comes to fruition. CCSF will be impacted through the Program directly or indirectly by virtually every major electric proceeding at the CPUC, including those directly impacting the program and its costs as well as those impacting PG&E's costs and rates. CCSF will also need to be active at the Federal Energy Regulatory Commission (FERC), particularly in regards to its regulation of the California Independent System Operator's markets and operations.

As for Direct Access risk, CCSF can mitigate, to some extent, by including a non-compete clause in its ESP agreement. Providing excellent customer service and effective public relations will be important to maintaining satisfied customers and minimizing the risk of loss to potential competitors.

Cost Responsibility Surcharge

Clean Power SF customers will be responsible to compensate PG&E for financial commitments it made for electric generation that must be adjusted due to changes in load caused by departures of its customers to the CCA Program. PG&E will assess a fee, known as the Cost Responsibility Surcharge (CRS), on the monthly bills of Clean Power SF customers. The reason that CCA regulations allow PG&E to impose a fee for departing customers is because it upsets the balance between their supply commitments and their delivery. If PG&E has made forward financial commitments based on a certain load, and that load changes, then PG&E is exposed to the market for that difference. The CPUC agreed that it is unreasonable for PG&E to bear the full impact of a risk it has no control over.

The CRS risk manifests in two ways. Initially, the ESP's rates must account for the CRS in the meet or beat comparison to PG&E. Secondly, the CRS is an annually determined rate that changes based on both the costs of PG&E's energy supply portfolio and to the market price benchmark used to derive the CRS. As such, it is essentially impossible to forecast accurately. The CRS will decline over time as supply commitments expire, but the risk of an uncertain CRS is difficult to hedge.

Possible Mitigation

CCSF has the option to utilize the Open Season process in PG&E Rule 23.2, whereby advance, binding notice is given to PG&E that CCA service will commence on a date certain. The Open Season rules define a standard, annual time window for providing a binding notice of intent (BNI) but also allow for alternative binding commitments to be made outside of the Open Season. The advantage of the Open Season or BNI is a potential reduction in Cost Responsibility Surcharge liabilities because, under the Open Season rules, any PG&E supply commitments made after the date of the BNI will be excluded from the CRS liabilities. The BNI is not without risk because the rules also provide for CCSF to be liable to PG&E for increased procurement costs if CCSF does not meet its obligations to commence service on the specified date.

The potential cost of participating in the Open Season process is fairly open ended, in that PG&E would charge CCSF for its actual costs to buy power for load it hadn't planned to serve in the event the Program did not meet the commencement date set forth in the BNI. Depending upon market conditions and the length of the delay in actual service, the exposure could be quite large. The benefits of participating in the Open Season process (reduced CRS) are difficult and possibly impossible to quantify without access to confidential procurement information retained by PG&E. Nonetheless, it may be appropriate to provide an advance BNI under certain circumstances, and the option need not be completely ruled out. For example, if Clean Power SF progresses to a point where it were just a few months from commencing service and CCSF became aware of a large, high cost supply commitment being considered by PG&E, a BNI could avoid this cost at relatively little risk.

Considering the CRS is difficult to predict and that it will decline and eventually disappear, consideration should be given to how to allocate the risk of changes in the CRS between the ESP and program customers. It is unlikely that an ESP would accept the risk of changes in the CRS without charging a risk premium that could undermine the ability to offer competitive rates. If customers implicitly accept the risk of changes to the CRS, they would also get the benefit of long-term reductions in this cost element.

Administrative and Overhead Costs

CCSF will have to organize a significant function to manage the ESP contract. The extensive outsourcing of functionality and risk does not relieve CCSF of ultimate responsibility for the Program. The contract can and should be devised with strong incentives for positive supplier performance and strong disincentives for negative supplier performance, but the wise risk management strategy is to head off potential supplier problems before they grow too large.

Among other functions, there will be a requirement to manage the various existing energy programs and integrate or coordinate them (such as individual solar installations).

The Draft Implementation Plan specifies that CCSF's administrative costs are to be rolled into the supplier's rate bid. Since the supplier does not know the extent of CCSF's desire to provide oversight, and may resist the notion at some level as an intrusion, the requirement that the supplier make such an estimate can be problematic. Additionally, the City's administrative costs estimates must be provided in advance for the suppliers to include in their bids.

Possible Mitigation

The SFPUC already has a considerable staff with expertise in energy and contract management areas. However, the scale and strategic importance of the Program and the key relationship with the supplier suggests that careful planning take place early on in the process to develop a pro-forma contract with an eye to identifying areas that may benefit from or require dedicated management. This, however, is in conflict with the requirement that the supplier pay for such oversight. CCSF might consider a fixed amount that the supplier must be responsible for to support the cost of CCSF administration of Clean Power SF in its bid. If so, City costs in excess of the agreed upon amount would not be the supplier's responsibility.

Customer Credit

Customer payments will provide 100 percent of the revenue the supplier needs to pay its expenses, earn its profit, and service any H Bonds used to finance operations. Minimizing customer nonpayment is crucial to program success. The Implementation Plan identifies the risk of customer nonpayment or late payment. It notes that San Francisco's delinquency rate is high compared to its load and number of accounts.¹⁰

The San Francisco CCA Program is committed to universal access. All customers will be accepted into the program, irrespective of credit history. All mitigations for potential customer nonpayment must by policy be oriented to remedial action.

One potential remedy for a nonpaying customer is to suspend service. Utilities take this action from time to time. Much regulation surrounds this contingency in order to prevent abuse while minimizing the potential for rate increases driven by failures to pay. In the case of CCAs, delinquency in the payment of charges for electric service is not a "disconnectable" situation. Therefore, there is some risk that CCA customer delinquency will not necessarily lead to a shut-off of service, and unpaid bills may accumulate. PG&E collects ratepayer money on behalf of the CCA. Its tariffs (Rule 23.R) obligate it to take "the appropriate actions to recover the unpaid amounts owed the CCA." Partial payments are allocated proportionally between PG&E charges and CCA charges. In evaluating a delinquent residential account for service termination, partial payments must be allocated first to delinquent disconnectable charges.

Possible Mitigation

CCSF will need to define the Program's policies and procedures for treatment of delinquent accounts. At a higher level, CCSF should consider trying to identify ways to reduce delinquency and establishing alternative payment arrangements when necessary. The Implementation Plan identifies returning chronically late- or non-paying customers back to PG&E, because PG&E alone has the legal right to disconnect such customers. The feasibility and desirability of this mitigation is subject to verification.

Rate Management

The supplier will be required to meet or beat PG&E's generation rates that are in effect at the time of the initial opt-out period, and to commit to a fixed or indexed structured schedule of rates thereafter according to a forecast of PG&E retail rates and wholesale power market prices.

The language regarding rates in the Draft Implementation Plan does not specify the index the ESP must use for changes to its rates over time. The Implementation Plan could be interpreted that the supplier can bid a rate structure that could, over the course of the term of the agreement, sometimes be above PG&E's, depending on timing.

¹⁰ "According to PG&E, delinquent balances on electric energy accounts in San Francisco represent 13% of total delinquencies in the utility's system. This figure is disproportionately high compared to San Francisco's contribution to PG&E's system total number of accounts (approximately 7%) and total electrical energy demand (approximately 5%). Plan, pg 156.

PG&E will change its rates from time to time, typically annually. This would tend to confuse whether the Program's rates were still comparable and met the goal of being at or below such rates.

PG&E may also completely revise its rate structure at some point during the Program's existence. For example, it could consolidate the residential tiered rate structure or introduce additional time-of-use rates. This would also tend to confuse whether the Program's rates were still comparable and met the goal of being at or below such rates.

There is an inherent risk in tightly tying Program rates to PG&E's rates due to the dynamic and unpredictable nature of PG&E's rates. If the ESP contract rates for an upcoming year are approved based on a forecast of PG&E rates, there is a chance that PG&E's actual rates in that year will come in above or below the forecast. If PG&E rates are lower than the forecast, the rates contracted with the ESP may no longer meet or beat PG&E's.

Possible Mitigation

More definition should be given to the nature of the rate bid and what constitutes "comparable" bids in light of likely timing differences between PG&E's rates and Program rates over the duration of the supplier contract, and in light of potential changes to PG&E's rate structure. A weighted-average rate for all customers with adjustment for energy efficiency and conservation impacts appears to be a viable method to analyze.

Also, to the extent that mismatches between PG&E's rates and Program rates arise (especially earlier in the Program, before an appreciable capacity of renewable generation is installed), with PG&E able to promulgate lower rates for some period, messaging is important. Customer loyalty might be reinforced by messaging that focuses on the long-term rate reductions and stability that will be achieved in the "build not buy" model.

Contract Term

Contract term must be bid by the supplier. The Implementation Plan assumes that the term is likely to be consistent with the H Bond payback period, under the assumption that the supplier would utilize H Bond proceeds for the development of elements of the 360 MW. However, it is conceivable that a supplier might bid less than the expected 15-20 year term of the proposed bonds.

Possible Mitigation

CCSF's bid acceptance criteria should favor bids that are consistent with the bond period for proposals that include H Bond financing. CCSF should provide itself with a high level of assurance that revenue-generating facilities with sufficient capacity will be built within the term of the supplier's contract so that the bonds can be repaid timely. Additional work on structuring the bonds will also help tighten the bidding requirements for acceptable contract terms.

Resource Adequacy Requirements

Clean Power SF must meet the CPUC's Resource Adequacy Requirements (RAR), which require Load Serving Entities (LSEs) to control operating and planning reserves that exceed peak load by a minimum of 15 percent for current demand as well as the year-ahead summer peak. CAISO currently identifies San Francisco as a resource-constrained area. As PG&E power is supplanted by new renewable generation and conservation/demand response facilities, it will have to demonstrate specific in-CCSF or at least Greater Bay Area electric resources to serve its customers.

Much of the renewable generation contemplated in the Draft Implementation Plan is intermittent (e.g., photovoltaic and wind). As such, they have dependable capacity factors substantially lower than their rated output capacity.

Potential Mitigation

Sufficient physical resource adequacy capacity already exists to serve San Francisco's current load. Therefore, what is required is a transfer of contractual rights to the Program/ESP. As load transfers from PG&E to Clean Power SF, PG&E will have a reduced need for resource adequacy capacity and would be expected to release the related contracts. Coordination with PG&E at the outset will be necessary, particularly if the timing for commencement of service does not coincide with the regulatory resource adequacy needs determination and demonstration cycle. CCSF should begin discussions with the California Energy Commission, which has responsibility for defining resource adequacy requirements annually for jurisdictional load-serving entities, including CCAs.

The 360 MW rollout will help meet the Program's resource adequacy requirements, although the qualifying capacity will be less than 360 MW due to the intermittency of some of the elements (e.g., wind and solar). CCSF should initiate discussions with the CAISO to better understand the resource adequacy value of the 360 MW portfolio component as these resources are more definitively specified in subsequent implementation efforts.

Options for Increasing the Number of Potential RFP Respondents

This section discusses options CCSF could consider if it wishes to increase the number of likely bids to the RFP. Options range from providing additional information in advance to bidders to more significant structural changes that would re-allocate risk between the ESP and Clean Power SF. Any such a re-examination and potential rebalancing of risks must be careful not to negate the basic rationale or objectives for the Program. Toward that end, CCSF may consider a preliminary exercise in which the main Program objectives are prioritized, so that any potential rebalancing retains the appropriate focus.

Risk Allocation Between Clean Power SF and ESP

As identified in Appendix J of the Draft Implementation Plan, a key risk management priority is to effectively and fairly allocate risk between the CCA Program and the supplier. The Implementation Plan states that while it is “tempting for an owner to allocate as much risk as possible to a contractor . . . there are two main disadvantages to this approach; the likelihood of excessive bid price contingency and a higher likelihood of conflict and claims as the project advances.”¹¹

One way to increase the number of potential bidders would be for Clean Power SF to accept a greater share of risk internally to the program and for the program administrators to accept a more prominent role in the Program’s operations. Clean Power SF staff could take greater responsibility for integrating multiple electric supply contracts and contractors during the deployment of the 360 MW portfolio, similar to the way in which a municipal electric utility typically operates. Alliances or joint action with established publicly owned utilities for purposes of energy procurement and resource development is also possible and could be explored. While there are clear advantages to having a single contractor manage the electric supply, infrastructure development, and operations of the program - particularly the limited risk imposed on CCSF - other models are feasible for an enterprise of this size.

Additional Research and Information for Potential Bidders

The more information and certainty that can be provided to potential suppliers regarding the sources of CCSF funding, including both H bond proceeds and Public Goods funding available for energy efficiency investments, the lower will be the perceived risk profile from the bidder’s perspective. Benefits of providing more information include encouraging a more diverse set of bidders and reducing the risk premiums that suppliers must charge to cover risk contingencies.

Scheduling one or more pre-bid conferences for potential bidders is a strong potential component of a communication program. It would also provide CCSF with valuable feedback related to any potential modifications to its requirements or to potential contract language in order to attract interest from highly qualified suppliers.

¹¹Ibid., Appendix J, Program Risk Analysis, p.68.

The Draft Implementation Plan clearly defines bidding requirements for categories of energy investments to be developed by the ESP (i.e., the 360 MW portfolio); however, the locations and detailed specifications of the individual infrastructure projects remain to be identified. There appears to be flexibility as well in the ultimate ownership and contractual arrangements between the ESP and customers for distributed generation and efficiency projects that will be located on customer property. It may be appropriate to leave the detailed design of the infrastructure up to the entities that will be responsible for its deployment, i.e., the ESP, but it should be understood that this requirement introduces a fairly high hurdle to preparing a responsive proposal to the RFP. Considering the breadth of services expected of the ESP and the complexity of the core bidding requirements that may already limit potential RFP responses, CCSF may wish to consider conducting further work to specify in detail the projects it intends for respondents to include in their bids. This would include identifying potential sites for the photovoltaic rollout, and identifying sites and preparing technical descriptions of the distributed generation, conservation, and energy efficiency projects. Furthermore, additional work to clarify how the benefits and costs of behind-the-meter generation and efficiency investments should be allocated between the ESP, the participating customer, and non-participating customers might further mitigate this risk.

An alternative approach, rather than CCSF preparing detailed specifications for the 360 MW portfolio in advance of the RFP or imposing the obligation on bidders to incorporate into their bids, would be to break the RFP into stages. In the first stage, a supplier would be selected for exclusive negotiations for a specified period of time based primarily on its qualifications. Under an MOU or other form of agreement, CCSF and the supplier would then jointly explore and identify sites, identifying what will be built and where. In parallel, CCSF would be structuring and preparing for the bond financing and defining the public goods funding and other sources of funding that will be available to the ESP. Once this information is assembled, the supplier would present a best and final offer for CCSF's consideration, which would only be accepted if it meets the requirements set forth in the Implementation Plan. If the offer is not accepted, CCSF could reopen the program to other bidders or perhaps pursue the identified projects independently.

Overcoming Potential Economic Constraints

Higher than expected ESP bids could arise from several sources: a general scarcity of available renewable energy supplies, the operating and cost characteristics of specific technologies defined for the portfolio, high energy prices generally, or temporarily low PG&E rates. By design, Clean Power SF requires rates to be at or below PG&E rates, which mitigates the risk of customer opt-outs and the consequent detrimental impact to program scale. CCSF risks are also mitigated in that the program cannot begin and significant CCSF commitments will not be made unless bidders are able to offer rates that meet or beat PG&E's.

The SFPUC is conducting a separate study to examine economic issues related to the Program, and this Risk Assessment makes no presumptions regarding the findings of that analysis. However, if it turns out that the feasibility of the meet-or-beat rate objective is in doubt for whatever reason, CCSF may at some point wish to reconsider this requirement of its program design.

Clean Power SF has an advantage it can leverage to counter the rate-limit issue: the energy services that will be offered by Clean Power SF are qualitatively different and superior to the services provided by PG&E. Some residents and businesses may be willing to pay more for the higher quality services. Market research may reveal customer preferences that could allow for a relaxation of the rate cap for certain customers.

In the event that bidders are not able to offer rates that meet or beat PG&E, CCSF could consider a pricing strategy that differentiates the higher quality service. For example, a premium (likely temporary) could be charged to customers who desire a higher renewable energy content, as is being proposed by the Marin Energy Authority for the Marin Clean Energy program. Another pricing strategy would be to offer a fundamentally different rate structure than offered by PG&E, which may be more appealing to customers and would tend to downplay direct cents per KWH rate comparisons. CCSF could package energy efficiency services or distributed solar installations in combination with a fixed monthly charge. The bills of participating customers could be reduced even if the volumetric rate is higher than the default rate schedule from PG&E.

Other factors that could help address economic constraints, if necessary, include revising the timeline for achievement of RPS goals, modifying the elements or timing of the 360 MW portfolio, and reallocating risk between the ESP and the Program as discussed above.

CCSF will also have rights to financial instruments known as Congestion Revenue Rights, which are administered by the CAISO. CRRs may help reduce the cost of the supply portfolio. Under CAISO rules, CRRs are associated with migrating load, and transfer from the old supplier (PG&E) to the new supplier. CCSF can initiate discussions with the CAISO to better define its entitlement to CRRs.

Summary of Recommendations

As discussed herein, Navigant Consulting makes the following recommendations in furtherance of Clean Power SF. These recommendations have been developed in consideration of CCSF's Draft CCA Implementation Plan, applicable ordinances, statutes and regulations, market observations, interaction with energy service providers, Navigant Consulting's direct experience with other CCA initiatives in California and various other factors. The recommendations included in this list have been structured to maximize CCSF's potential for successful implementation of the CCA energy service model as contemplated in its Draft Implementation Plan. To the extent practical, these recommendations attempt to minimize the need for substantive changes in local policy as well as programmatic goals and objectives. In support of CCSF's successful implementation of CCA, Navigant Consulting recommends:

- Conduct RFQ follow up interviews with both responsive and non-responsive providers to determine specific aspects of the Program that were attractive or created cause for concern.
- Engage in ongoing, bilateral communication with prospective energy suppliers to maintain a current understanding of market dynamics affecting CCA implementation, program pricing and other related considerations.
- Following implementation, the Program should actively monitor the creditworthiness of its chosen supplier for the purpose of maintaining an in depth, near-real time knowledge of the financial "health" and general business activities undertaken by this entity; the Program should consider establishing an internal position of "Supplier Relationship Manager" to complete monitoring activities and related reporting.
- CCSF should consider developing in-house expertise focused on requisite operational functions/responsibilities, both to help manage the supplier to minimize potential problems, and to build a capability of stepping into supplier functions if the supplier fails to satisfactorily meet expectations.
- Develop a contingency plan that could be implemented in the event of supplier failure, which would address the disposition of customers, physical facilities, supply contracts and commitments, and Clean Power SF in general.
- CCSF's energy supply contract should contain sufficient incentives and penalties to direct appropriate supplier performance, including incentives for completing the 360 MW rollout in accordance with defined milestones.
- CCSF should consider retaining an investment banker or financial advisory firm in the near future to begin efforts focused on structuring the bond financing and other financial matters related to Program operations (so that potential suppliers can have the benefit of this information prior to issuance of the RFP).
- CCSF should develop a compelling messaging and branding initiative, focused on benefits of the Program, to provide public education and encourage customer participation in the face of PG&E opposition.

- CCSF could consider having legislation introduced to revise Public Utilities Codes section 366.2 to clarify that the requirement for a utility to fully cooperate with the CCA program precludes the utility from marketing against or undermining the CCA program; furthermore, CCSF should continue to monitor regulatory developments and actively participate in those that may affect CCA viability.
- As part of Program implementation, CCSF should establish an outstanding customer service program to maintain its base of customers.
- CCSF should begin defining the Program’s policies and procedures for treatment of delinquent accounts.
- CCSF should consider the nature of the desired rate bid and what constitutes “comparable” bids in light of likely timing differences between PG&E’s rates and Program rates over the duration of the supplier contract, and in light of potential changes to PG&E’s rate structure.
- CCSF’s bid acceptance criteria should favor bids that are consistent with the bond period for proposals that include H Bond financing.
- CCSF should initiate discussions with the CAISO and the CEC to better understand the resource adequacy value of its highly renewable 360 MW generation portfolio as well as specific requirements related thereto.
- Prior to and following bid receipt, CCSF should take the necessary administrative actions to be in a position to execute the ESP contract and commence program implementation when market conditions best allow for the City/County to meet its objectives.

Appendix A: Acronyms and Abbreviations

BNI	Binding Notice of Intent
CCA	Community Choice Aggregation
CCSF	City and County of San Francisco
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CPUC	California Public Utilities Commission
CRS	Cost Responsibility Surcharge
EI	Edison Electric Institute
ESP	Energy Service Provider
FERC	Federal Energy Regulatory Commission
LAFCO	Local Agency Formation Commission
LSE	Load Serving Entity
MEA	Major Environmental Analysis Division
NEPA	National Environmental Policy Act
PG&E	Pacific Gas and Electric Company
RAR	Resource Adequacy Requirements
RECs	Renewable Energy Certificates
RFP	Request for Proposals
RFQ	Request for Qualifications
RPS	Renewable Portfolio Standard
SFPUC	San Francisco Public Utilities Commission
SJVPA	San Joaquin Valley Power Authority
WSPP	Western States Power Pool

**DRAFT COMMERCIAL TERMS OF ENERGY SERVICES AGREEMENT
FOR CLEAN POWER SF COMMUNITY CHOICE AGGREGATION PROGRAM**

VERSION 1.2

Seller	[TO BE DETERMINED]
Buyer	City and County of San Francisco through the San Francisco Public Utilities Commission (“CCSF”)
Contemplated Transaction	Supplier to provide energy services, as specified under Product below, to CCSF for provision of retail electric service to customers participating in the Clean Power SF (Community Choice Aggregation) program. [IN ACCORDANCE WITH THE DRAFT IMPLEMENTATION PLAN, A SINGLE SUPPLIER WILL BE SELECTED FOR ALL REQUISITE ENERGY SERVICES]
Product	Product shall include (i) full requirements electric supply including all electric energy, renewable portfolio standards energy, capacity, planning reserves/resource adequacy requirements, ancillary services, load following, and scheduling coordination required to deliver electricity to meet the needs of end use customers participating in the CCA program; (ii) energy efficiency, conservation and load management projects; (iii) renewable energy project development, operation and maintenance; and (iv) customer account services including all services necessary to administer customer enrollments and departures from the CCA program including exchange and processing of Community Choice Aggregation Service Requests with PG&E (customer enrollment); all services necessary to issue monthly bills to participating customers through PG&E’s billing process and to track customer payments (billing administration) and call center services to respond to customer billing inquiries and requests for general program information (customer services). [NEED CLARIFICATION REGARDING CCSF’S RESPONSIBILITIES PER IMPLEMENTATION PLAN AT PAGE 94]
Points of Delivery	For all energy supplied under the Agreement, the Point of Delivery shall be the default PG&E Load Aggregation Point as defined by the CAISO.
Specified Resources/ 360 MW	Supplier shall design, develop, construct, operate and maintain certain Specified Resources which may be financed in whole or in part by the CCSF and dedicated to supplying program loads. Specified Resources

include 31 MW (direct current) of solar photovoltaic cells, 72 MW of distributed generation and 107 MW of efficiency and conservation measures throughout the City and County, and 150 MW of wind turbine capacity. All Specified Resources shall be commercially operable no later than five years from execution of the supply agreement. [PER IMPLEMENTATION PLAN AT PAGES 5 AND 12.]

Opt-Out Adjustment

If customers representing more than 10% of the eligible aggregate energy sales choose not to participate in the Clean Power SF program during the initial opt-out period, the MW associated with each element of the Specified Resources shall be reduced on a pro rata basis. [PER IMPLEMENTATION PLAN AT PAGE 34]

Technical Specifications

For each project comprising the Specified Resources, Supplier shall set forth in separate Technical Specifications a detailed technical description that includes facility design, location, point of interconnection, Initial Capacity, operating characteristics, Critical Milestones, Performance Guarantees, Performance Testing Procedures and Warranties. Upon acceptance by CCSF, the Technical Specifications will become addenda to the Agreement.

Engineering and Design Procurement

Supplier shall be responsible for all engineering, design and procurement necessary for the financing and construction of the Specified Resources. All designs shall be submitted to the CCSF for approval prior to commencement of equipment and materials procurement and construction.

Supplier's Development Obligations

Supplier's Development Obligations include the following:

- 1) Develop, finance and construct the project and interconnection facilities, including project ownership, project planning and administration, asset and property acquisition, project financing (in conjunction with CCSF's issuance of Revenue Bonds), and engineering, procurement and construction activities.
- 2) Preparation of development schedules and monthly progress reporting.
- 3) Provide CCSF access to a "real time" plant monitoring system providing, at a minimum, "real time" information regarding the net output of the plant.

- 4) Seek, obtain, maintain, comply with and, as necessary, renew and modify from time to time, all permits, certificates or other authorizations which are required by any requirements of law or governmental authority as prerequisite to engaging in the activities required of Supplier by the Agreement.
- 5) Operate, maintain, and repair the Plant in accordance with the Agreement, all requirements of law applicable to Supplier or the plant, contractual obligations, permits and in accordance with Prudent Utility Practice, including with respect to efforts to maintain availability of the plant capacity.
- 6) Obtain and maintain the policies of insurance and credit security in amounts and with coverages as set forth by CCSF.
- 7) Annually notify CCSF of scheduled outages for the following calendar year, and notify CCSF as soon as practicable of any outage whether scheduled or unscheduled.
- 8) Negotiate and enter into an Interconnection Agreement with PG&E to enable CCSF to receive energy through the ISO-controlled grid.
- 9) Negotiate and enter into a Participating Generator Agreement and a Meter Service Agreement for ISO Metered Entities with the ISO, if applicable to the interconnected generator.
- 10) Operate and maintain the facilities and cooperate with PG&E in the physical interconnection of the Plant to the PG&E system in accordance with the Interconnection Agreement.
- 11) Register eligible facilities with the Western Renewable Generation Information System.
- 12) Maintain the Performance Guarantees set forth in the associated Technical Specifications.

**Specified Resources
Ownership**

For all facilities financed with tax-exempt revenue bonds or financed via the power purchase agreement with the CCSF, ownership shall transfer to the CCSF upon retirement of the revenue bonds or upon termination of the Agreement [PER IMPLEMENTATION PLAN AT PAGES 53 AND 119]. CCSF may acquire ownership during the term of the Agreement for fair market value. For all facilities financed with taxable revenue bonds,

ownership shall transfer to the customer upon retirement of the revenue bonds or termination of the Agreement. [PER IMPLEMENTATION PLAN AT PAGES 53 AND 120]

Transmission and Scheduling Supplier shall be responsible for bidding and scheduling the loads of all retail customers served, and all the generation and demand response resources owned and dedicated for use, by the Clean Power SF program in accordance with the California Independent System Operator tariffs, protocols and business practices.

Load Forecasting Supplier shall prepare short and long term electric load forecasts necessary for the performance of its supply obligations. CCSF shall make reasonable efforts to cooperate with Supplier in its load forecasting process, such as by requesting customer load data from PG&E and providing information known to CCSF that may impact the load forecast.

Regulatory Reporting Supplier shall provide resource information to CCSF necessary for compliance with regulatory reporting requirements for the Renewable Portfolio Standards, Resource Adequacy Demonstration, and any other reports required of Load Serving Entities by law or regulation.

Load Served Service will be provided to all customers, regardless of customer class, including Residential, Commercial, Industrial, Agricultural/Pumping, Street Lighting and Traffic Control. Customers will be switched over an approximately 30-day period, in accordance with the applicable meter read cycle. [NO PHASE-IN BY CUSTOMER CLASS OR GEOGRAPHIC AREA PER THE IMPLEMENTATION PLAN AT PAGE 35]

CCSF Facility Funding CCSF may issue revenue bonds and obtain Other Program Funds, which will be periodically drawn upon to fund Supplier's cost of development and construction of Specified Resources. [PER IMPLEMENTATION PLAN AT PAGES 62 AND 65]

Other Program Funds CCSF may make additional funds available to Supplier for construction of the Energy Efficiency and Conservation elements of the Specified Facilities through administration of Public Goods Charges collected by PG&E. Funding is estimated to be \$21 million available over a three year period. Supplier is to prepare a contingency plan should such funding not become available, including the impact on achieving the

specific energy efficiency and conservation targets and program costs; a fallback plan for using revenue bond financing, revenue from CCA sales or alternative subsidy sources. [PER IMPLEMENTATION PLAN AT PAGE 67]

Energy Pricing

Supplier to establish an initial rate schedule for all Clean Power SF customers that is equivalent to the currently applicable generation rates charged by PG&E less X% and less the currently applicable cost responsibility surcharges. Energy pricing will include dedicated rate components for payment of debt service and City administrative and general costs. Customized energy pricing may be offered to customers at whose premises renewable generation and/or energy efficiency projects are sited. [PER IMPLEMENTATION PLAN AT PAGES 19 AND 98]

Debt Service

The payments necessary for servicing the bonds or other financing used to fund program renewable energy and energy efficiency projects will be funded through the Supplier's energy pricing schedule. [PER IMPLEMENTATION PLAN AT PAGES 63-64]

CCSF Program Costs

The CCSF's costs of administering the program shall be funded through the Supplier's energy pricing schedule. The CCSF shall provide Supplier with an estimate of its annual Program Costs over the term of the agreement for inclusion in the Energy Price schedule. Changes to the CCSF Program Costs shall be included as a price adjustment. Supplier shall disburse funds for CCSF Program Costs to CCSF on a quarterly basis. [PER IMPLEMENTATION PLAN AT PAGES 62-63]

Exclusions from Price

The Energy Price does not include PG&E delivery charges for transmission, distribution, public goods and other non-bypassable surcharges, which shall be paid directly to PG&E by participating customers.

Price Adjustments

The Energy Price may be increased by no more than X per year with the exception that CCSF may direct Supplier to modify the Energy Price to recover actual CCSF Program Costs and Debt Service Costs. [X MAY BE A FIXED PERCENTAGE OR A CHANGE TO AN OBSERVABLE INDEX SUCH AS THE PRODUCER PRICE INDEX OR AN ELECTRICITY MARKET PRICE INDEX. PER IMPLEMENTATION PLAN AT PAGE 19]]

Renewable Portfolio Standards

Supplier shall ensure that at least 40% of annual retail sales are supplied by Eligible Renewable Energy by 2012 and 51% by 2017. The Supplier must ensure that the Renewable Portfolio Standards are met regardless

of the actual commercial operation dates and performance of the Specified Resources. The Supplier must also ensure that the minimum state renewable portfolio standards (i.e., currently 20% from qualified renewable resources) are met. [PER IMPLEMENTATION PLAN AT PAGE 15]

Eligible Renewable Energy Eligible Renewable Resources include energy efficiency, solar, combined heat and power (cogeneration), distributed generation using a renewable fuel source, wind projects, wave power, and geothermal resources. [PER CCSF REQUEST FOR QUALIFICATIONS]

Project Output All Project Output of Specified Resources will be dedicated to supplying energy under the Agreement and includes all energy, capacity, environmental attributes, ancillary services, contributions towards resource adequacy requirements, and any other reliability or power attributes.

Environmental Attributes CCSF shall have rights to all Environmental Attributes from Renewable Energy purchased under the Agreement, which includes any and all credits, benefits, emissions reductions offsets, and allowances attributable to the renewable generation or load reduction and its displacement of conventional energy generation.

Supplier Bonding Supplier shall post and maintain a bond or demonstrate insurance sufficient to cover the potential cost associated with the involuntary return of customers to PG&E resulting from Supplier default, as such reentry costs are established by the CPUC. Supplier shall be responsible for actual reentry fees assessed by PG&E regardless of the posted bond or insurance amount.

The Supplier shall obtain a performance bond, letter of credit, Corporate Guarantee or other financial instrument acceptable to the CCSF, to cover any of its performance failures in the construction of the Specified Resources [PER IMPLEMENTATION PLAN AT PAGE 19. INCLUDE CCSF SPECIFIC REQUIREMENTS].

Credit [TO BE DETERMINED].

Termination Payment In the event of Supplier default, CCSF may terminate the Agreement without liability or further obligation of any kind on the part of CCSF, and the Supplier shall pay a termination payment equal to the mark-to-market value of a replacement contract (“the “Termination Payment”). Such Termination Payment shall be calculated by CCSF in a commercially

reasonable manner and calculated as of the date of the termination of the Agreement.

Term [TO BE DETERMINED]

Non-Compete Supplier shall not offer substantially similar services as offered by CCSF to any customers within CCSF boundaries during term of Agreement and for the twelve month period following termination of the Agreement, except as may be required under preexisting direct access agreements. [PER IMPLEMENTATION PLAN AT PAGE 84]

Billing and Payment Supplier shall be paid for energy as funds are received from customers per Supplier's rate schedule [ASSUMES CCSF WILL NOT COVER WORKING CAPITAL – OTHERWISE REFERENCE STANDARD INDUSTRY BILLING TERMS]. CCSF will make commercially reasonable efforts to support collection of delinquent accounts, including initiating service transfer to PG&E. [PER IMPLEMENTATION PLAN AT PAGE 23. PROGRAM POLICIES AND PROCEDURES FOR DELINQUENT ACCOUNTS ARE NOT YET CLEARLY DEFINED]

Performance Testing Supplier shall coordinate and schedule with CCSF a Performance Test after completion of all equipment startup and commissioning activities. CCSF shall be permitted to witness the Performance Test, including access to and copies of control room logs, control system display screens, and instrumentation data for reasonable period of time before, during and after the Performance Test, and may also concurrently conduct a site inspection of the plant and associated facilities, systems and equipment. Supplier shall supply a written copy of the Performance Test results to CCSF within five business days following conclusion of the test.

The Performance Test shall continue for [] HOURS ("Test Period") to demonstrate the following [PERFORMANCE GUARANTEES AND TESTING PROCEDURES MAY VARY BY SPECIFIC TECHNOLOGY]:

1) Net Generator Output: The power output for each generator shall be recorded for the Test Period to verify the net initial capacities. This Performance Test shall be performed for all engine/generators simultaneously and will be considered successful if the average net output for the Test Period is equal to [] percent of the net Initial Capacity designed in the Agreement. All power measurement shall be based on a power factor of 0.90.

2) Compliance: The Performance Test shall also demonstrate the ability of the Plant to comply with all material safety, system reliability, environmental, and other requirements of its permits, this Agreement, and any interconnection agreements.

Performance Guarantees

Performance Guarantees for each project will be set forth in Technical Specifications and will include guaranteed base electrical output, a guaranteed availability threshold, and, if applicable, a guaranteed emissions limit. Should Supplier fail to maintain the Performance Guarantees, payments under the Agreement shall be reduced by the amount of [TO BE DETERMINED].

Critical Milestones

Supplier shall prepare an annual rollout schedule designating Committed Capacity (MW) that will be completed for each element of the Specified Resources, and prepare a project plan identifying Critical Milestones for completion of the rollout.

Critical Milestones for specific projects comprising the Specified Resources shall be set forth in separate Technical Specification addenda to the Agreement.

Critical Milestones include the following:

- 1) Design
- 2) Site Control
- 3) Permits
- 4) Interconnection Agreement
- 5) Financing
- 6) Construction
- 7) Commercial Operation Date

Progress Reporting

Starting from the effective date of the Agreement, Supplier will provide CCSF monthly progress reports concerning the progress towards completion of the Milestones. Supplier will provide certification to CCSF within five business days of the completion of each Milestone, along with any supporting documentation, demonstrating the satisfaction of the Milestone.

Supplier will notify CCSF as soon as reasonably practical upon becoming aware that it is reasonably likely to fail to achieve a Milestone by the required date. Supplier's notice will explain the cause of the delay, provide an updated date for achievement of the Milestone(s) and describe Supplier's plan for meeting the Milestone(s). Notice will also

explain the impact such delay may have on any other Milestone, and measures to be taken to mitigate such impact.

Incentive Mechanism

In the event that a Milestone is not achieved due to delays caused by CCSF's failure to timely issue permits, CCSF's failure to timely provide CCSF Facility Funding, failure of PG&E to timely complete facility interconnection in accordance with the terms of the Interconnection Agreement, or due to a Force Majeure event, the Milestone's deadline may be extended to account for the delay. The extension of the deadline for any Milestone shall extend the deadline for all subsequent Milestones.

In the event that Supplier fails to achieve the Commercial Operation Date by the applicable Milestone deadline (as may be extended), Supplier shall pay CCSF an amount equal to [\$_ per MW] times the Committed Capacity for each day until such Milestone is achieved.

Delays in achievement of the Milestones shall not relieve Supplier of its obligations to provide energy and meet the renewable portfolio standards under this Agreement.

Production Incentives

It is anticipated that tax credits, rebates, production incentives, and other subsidies associated with the Specified Facilities will accrue to the Supplier in most instances.

Energy Efficiency Projects

[DESCRIPTION OF EXISTING AND DESIRED PROJECTS TO BE PROVIDED IN CONSULTATION WITH THE SF DEPARTMENT OF ENVIRONMENT]

Performance Contract

Supplier shall design, finance and construct Energy Efficiency and Conservation measures. Customer payments will be based on the actual energy saved in accordance with a shared savings mechanism and the Evaluation, Measurement and Verification protocols attached to the Agreement. [PER IMPLEMENTATION PLAN AT PAGE 69]

Evaluation, Measurement and Verification

CCSF and Supplier will jointly develop protocols for Evaluation, Measurement and Verification of Energy Efficiency and Conservation projects which will be used for purposes of administering the shared savings performance contracting mechanism. The protocols will include provisions for keeping of records, reports, audits, field testing, independent performance monitoring, and the testing and certification of products eligible for use in program. [PER IMPLEMENTATION PLAN AT PAGE 69]

On-Bill Financing

CCSF will make commercially reasonable efforts to negotiate with PG&E to obtain the ability to fund Energy Efficiency and Conservation projects through a separate charge on participating customers' bills.

Additional Contract Provisions

- Change in Law/Regulations
- Events of Default
- Termination for Default
- Damages
- Governing Law
- Force Majeure
- Conditions Precedent
- Limitations
- Representations and Warranties
- Title and Risk of Loss
- Taxes
- Indemnity
- Assignment
- Governing Law
- Notices
- General
- Audit
- Confidentiality
- Sovereign Immunity
- Change in Control
- Ethics Provisions
- Dispute Resolution
- Suspension and Termination Processes
- Records Maintenance
- Change Management Provisions
- Subcontract Management and Payment Provisions
- Bonding, Insurance and Indemnifications
- Completion and Acceptance
- Warranties for the Work
- Local, State, and Federal Provisions
- Other City-Required Terms/Boilerplate



35 Grove Street, Suite 118
San Francisco, CA 94102

September 18, 2009

Nancy Miller, Interim Director
Jason Fried, Staff
San Francisco Local Agency Formation Commission
Office of the Clerk – Angela Calvillo
City Hall, San Francisco 94102

Dear Commissioners, Executive Director and Staff:

Local Power Inc. has been retained by the San Francisco Local Agency Formation Commission (SFLAFCO) to undertake a peer review of a Risk Assessment Report (RAR) of San Francisco's Community Choice Aggregation (CCA) Program, prepared by Navigant Consulting, Inc. ("Navigant" or "NCI") on behalf of SFLAFCO.

A draft copy of the RAR dated September 9, 2009 was provided to Local Power. We analyzed the document, and prepared this letter summarizing our assessment of the work performed by Navigant. We will then present this assessment to the upcoming joint SFLAFCO meeting with the San Francisco Public Utilities Commission.¹

Summary Assessment

In this evaluation by Local Power of the RAR report we highlight key areas identified by Navigant as requiring action by the City. Local Power also identifies some issues related to risk that remain to be dealt with, which are not found in Navigant's RAR. Local Power provides here a list of remaining questions that will need to be answered, and actions that need to be taken, in order to prepare San Francisco's CCA RFP for approval and issuance. Local Power believes that this supplemental work would have to be performed during the last quarter of 2009.

In general, we find the quality of the work by Navigant to be quite good. Navigant focuses on the challenges specific to San Francisco's adopted green power development, with its accelerated

¹ Robert Freehling assisted with analysis and preparation of this document.

Renewable Portfolio Standard adopted in San Francisco's CCA program Ordinances 86-04 and 147-07, and with its green power finance authority, or H Bond Authority (Charter Section 9.107.8, 2001). Navigant identifies several new risk issues and recommends useful mitigation measures to address them.

In its report, Navigant describes work that needs to be performed in order to successfully attract bidders when a CCA Request for Proposals (CCA RFP) is released. Navigant recommends that the City implement a process of 1) communication with energy service providers (ESPs), and 2) refinement of the RFP to facilitate meeting the renewable energy development standards adopted by the City and County of San Francisco. In Local Power's opinion, it should be feasible to accomplish the tasks outlined by Navigant for preparation of the RFP over the next three months.

Navigant has importantly highlighted CCSF's administrative costs as a risk factor that should be clarified for bidders prior to the release of a CCA RFP in order for them to include these costs in the econometric models underlying their rate schedules. The approach to CCA, which Navigant calls "visionary," does depend upon a greater level of municipal intelligence, shovel-readiness, and data-richness including major public and private partner opportunities, and even increased collection and analysis of utility data in order to enrich the bidding depth and density.

At Nancy Miller's request, LPI has proposed a related scope of work to be performed by SFLAFCO to provide information to supplement the CCA RFP document. The tasks aim to clarify or eliminate key risk areas for bidders facing the complex requirements of providing Full Requirements electricity service, while also designing, building, operating and maintaining new RPS-compliant and demand-side technology rollouts in a challenging urban environment. San Francisco's ordinances require the CCA RFP to make a qualifying supplier bid include in its proposed 51% Renewable Portfolio rate schedule all costs of providing power under its proposed rates, including development risks, permit delay risks, extra wholesale procurement as well as risk and costs due to delay in bringing projects online. This will require a high level of information and preparation regarding resource development opportunities, permitting and zoning, and regulatory action.

This work—proposed by Navigant and Local Power— could be undertaken by SFLAFCO in parallel with the SFPUC's ongoing CCA RFP drafting process (in which Local Power is not currently a party). As LAFCO has not yet been made privy to this draft RFP, a decision should be made regarding SFPUC and SFLAFCO staff being authorized to work on this draft together during this period to coordinate and expedite the parallel work tasks.

Key Points in Navigant Report Regarding Supplier Risk

Navigant defines two major risk areas, and suggests key mitigations to consider in solving them that LPW believes are particularly helpful for refining the risk profile of the CCA program for both ESPs and CCSF:

1. The CCA RFP will be too demanding to attract bidders. To mitigate this risk, Navigant recommends:

- providing additional information in advance to bidders
- or more significant—structural changes that would reallocate risk” between the ESP and the City.

LPI considers this an important observation relative to Navigant’s reminder that any changes “must be careful not to negate the basic rationale or objectives for the Program.” These two mitigation measures can work together. *Specifically, providing key additional information to bidders is required in order to minimize the need to alter or reallocate risk towards the City.* This underscores Local Power’s proposal to LAFCO that it implement a number of remaining elements identified in San Francisco’s adopted CCA Program Design, H Bond Action Plan and Draft CCA Implementation Plan² We believe that this package of work is achievable if SFLAFCO ramps up its pace of work for the remainder of the year for a December RFP.

2. The new CCA Supplier “fails to perform its obligations satisfactorily”. This can occur for a number of reasons that Navigant identifies. For instance, the supplier could become financially unsound during the course of the agreement, and potentially default on its obligations.”³ To this, Navigant recommends mitigation strategies including:

- ongoing close CCSF monitoring of supplier operations and fiscal soundness
- increased CCSF ownership of generation resources
- posting of performance bonds
- creating contingency plans to transfer operations to alternative wholesalers or CCSF staff if the supplier is unable to cover its obligations, with back-up plan to assure survivability of the CCA
- covering six months of cost related to an involuntary return of customers to PG&E

LPI fundamentally agrees with Navigant’s basic assessment that (1) San Francisco’s CCA Plan is itself a mitigation of risks currently faced by the City in relation to its energy supply, (2) a focus on H Bond-based

² San Francisco Ordinance 147-07 (Mirkarimi, Ammiano)

³ P.2.

ownership of generation is key to reduced CCA Supplier procurement risk, and that (3) a more hands-on approach by SFPUC/SFLAFCO may be recommended ⁴.

LPI has always believed that minimizing CCSF risk is a top priority in terms of program design. Increasing policy or financing risk outside adopted CCA program framework will ultimately require a decision of the Board of Supervisors, and should be considered in this light. Apart from the question of operational risk, LPI agrees that CCSF should provide more information to suppliers and play a more hands-on role in preparing for the development of what will be hundreds of millions of dollars in new local green power capacity that will become owned by San Francisco and/or the CCA participating customers . SFLAFCO would do CCSF a service by helping it prepare a fuller documentation of the San Francisco energy market so that prospective CCA Suppliers have ample opportunity to evaluate options for meeting the complex development tasks in the CCA Implementation Plan.

Apart from the existing 51% RPS adopted by Ordinance 147-07, bidders are already required to include in their rates all costs, including the following:

- 150 MW wind farm
- 107 MW efficiency & demand side technology
- 72 MW renewable distributed generation
- 31 MW minimum solar photovoltaics

LPI, in its major report to SFLAFCO last January, identified up to 580 MW of developable, in-City renewable and demand technologies.⁵ The benefit of CCSF and customer ownership is specifically the reduced exposure to wholesale procurement and its attendant risk, the cost for which will have to be assumed either by the CCA, the supplier, or both. By reducing the energy, the resource capacity, and the fuel that San Francisco's supplier will need to purchase, local resource development and physical load reduction will reduce the risk that the CCA supplier could fail to provide adequate security to protect CCSF from a variety of rate and potential default risks. This in turn protects the customer base and survivability of the CCA. Public and private investment in local green power infrastructure *reduces* CCA program failure risk from volatile conditions of energy (particularly natural gas) markets.

⁴ Risk Assessment Report, p. 2. This could be done with a “supply relationship manager,” or SFLAFCO/SFPUC consultants.

This ⁵ *CCA Program Report*, 2009, prepared by Local Power Inc for the San Francisco Local Agency Formation Commission.

Increased CCSF Ownership of Resources

Not discussed in the Navigant report are development opportunities for local owned power generation that go beyond what is specified in the 360MW rollout. Some of these might be implemented to meet the 51% RPS, which is well beyond what the 360 MW would be able to achieve. A range of options were highlighted in Local Power’s CCA Program Report:

- A larger opportunity for photovoltaics could be developed in part through a “Community Solar” program similar to that successfully implemented by the Sacramento Municipality Utility District (SMUD). LPI estimated that 85 MW of future local solar photovoltaic capacity were in the planning stage for San Francisco, including plans by SFPUC and the SF CCA. This did not include current installed capacity under the California Solar Initiative, and/or the new GoSolarSF program.

Transmission		
Gross Capacity 2003	1230	
PG&E upgrades	150	
Jefferson Martin line	200	
Gross Capacity 2008		1580
Transbay Cable (2010) total future addition	400	400
All Transmission (2010)		1980
Local Generation (2013)		
Potrero Retrofits	150	
Cogeneration	60	
Photovoltaics	60	
Total Existing		270
CCA Local Resource Plan (Phase I)		
Energy Efficiency Savings	107	
Photovoltaics	25	
Distributed Generation	72	
Total CCA Phase I		204
Cogen Potential		106
Total Local Resources with CCA		580

- There is currently 30 megawatts of combined heat and power (cogeneration) in the City, recovering waste heat from existing natural gas boilers. A study by SF Department of the Environment (SFDOE) showed potential for 106 mw of new cogeneration, a potential that— with some readjustment of siting assumptions— has been further confirmed by GES. SFDOE also identified key barriers to the deployment of new CHP in the City, including the need to clarify public/private partnership questions and concerns of potential site managers about ownership and operation of cogeneration. LPI recommended that the SFPUC boiler retrofit program also look at cogeneration on City sites, preferably in collaboration with SFPUC. SFLAFCO could pursue this program and help SF DOE prepare an expansion.

- Significant Hetch Hetchy Capacity could be made available to CCA ratepayers, though the exact amount depends upon weather and water use, and current delivery obligations. Under existing law, implementation of a “split delivery” transaction for the CCA would likely allow Hetch Hetchy power to be available to CCA customers without passing through the CCA supplier’s hands. This would be arranged by SFLAFCO working with the City on its Interconnect Agreement with PG&E. Using its rights to transmission under the Federal Power Act, the City could have a portion of Hetch-Hetchy power delivered to the City’s CCA customers. The customer would have two supply

sources: Hetch Hetchy plus the supplier's portfolio, structured to be transparent to the end-use customer and revenue-neutral between the City and Supplier. Were this to be developed, Hetch Hetchy could finally serve San Franciscans and provide high-quality, low cost power into the CCA portfolio and improve its economics directly, in addition to reducing the wholesale power procurement burden on prospective CCA supply bidders.

- Access to what currently amounts to approximately \$15 million per year in Public Goods Charge funds for Energy Efficiency programs could be used to fully pay for the 107 MW of local energy efficiency programs in the Implementation Plan. These funds will greatly impact the rate of annual load reduction that may be included in a CCA Supplier's economic model and the rate schedule in their bid. Accessing these funds is essential so that the supplier may compete with PG&E's rates. SF DOE has energy efficiency expertise and existing program can be built upon. The question of the availability of these funds should be clarified as much as possible prior to issuing the RFP. SFLAFCO discussions with CPUC commissioners, judges and staff to pursue clarification of this important economic factor, will help determine the feasibility of the CCA RFP. Bidders must know at a minimum that SFLAFCO and SFPUC are aggressively acting to resolve this issue as the RFP approaches, with a maximum degree of detail provided along with the CCARFP.

Additional potential local renewable energy projects, such as tidal power under the Golden Gate Bridge, were also proposed in the SFLAFCO CCA Program Report. George E. Sansoucy and Associates (GES), SFPUC's CCA Consultant, has recently proposed additional opportunities for economically and technologically feasible development, which together form the basis of a more complete preparation of the City and County for what will be a major City project in the early years of the new service, and when the 360MW+ of resources are rolled out.

Discussion of Risk Areas

The Navigant RAR includes discussion six general areas of risk:

- Supplier Selection
- Political Opposition
- PG&E Opposition
- Customer Service and Opt-out levels
- Credit and Security for the purchased power
- Power Market Conditions

The report details a number of specific risks associated with each general area. Local Power offers comments on these, and would recommend further development beyond Navigant's analysis for several risk elements described below.

Capital Program Risks

The core goal of the SF CCA is to actually build new clean energy generation capacity. Stating that more information is needed on the capital program, such as site locations, the report gives limited attention to some of the capital program risk areas associated with the 360MW Roll-out that were identified in the risk analysis sections of the Draft Implementation Plan. The report highlights the importance of conducting a risk assessment with reference to the bond financing; pointing out on p. 24 that potential bond financiers will evaluate the thoroughness of the capital program planning as a condition of providing the financing.

Efficiency Program

One of the keys to success in the efficiency program is successful application for and use of the Public Goods Charge funds. Failure to secure these funds presents risks to the efficiency program, yet this process is has very limited discussion in the report. The report does not address the content of the efficiency program as such, so other risks associated with this part of the CCA need also to be addressed. This is especially important since efficiency and demand reduction accounts for nearly 1/3 of the 360 MW rollout. It also represents the least cost resource that reduces reliance on volatile fossil fuel prices, risk associated with transmission access, and is the prime alternative tool for lowering total customer bills outside of rates.

The Energy Efficiency program is correctly stated in the report to be included in the suppliers bid for "all in" rates. The CCA is the only entity in the position of being able to apply to administer these funds prior to initiation of the contract. If the CCA waits until after the contract is signed, then the ESP will be taking undue risk over whether it will have the necessary revenue to implement the program. SF should apply for the PGC funds prior to issuing the RFP, and seek to get a determination from the CPUC at the earliest possible date.

In addition, it will be important for the City to outline a plan for implementation of the efficiency program, including what the City's role in the implementation will be and what its relationship to the ESP will be. Efficiency resources should be inventoried, at least in outline form. It would be most appropriate for the SF DOE to work on this program design with SFPUC under the supervision of LAFCO. This would allow the ESP to begin to evaluate the program cost, revenues and target customers. On page 10, the report states that the efficiency program would be managed by SFPUC. It is our understanding the SFDOE will be playing a key role in this program as well.

The potential revenue is quite significant: the SFCCA represents approximately 4000 GWh out of a total 195,000 GWh of IOU energy sales, or 2% of IOU energy sales. The current budget for efficiency is \$800 million; 2% fair share of this budget equals \$16 million per year. The program budget is expected to double over the next 3 year planning cycle, which implies a budget increasing to over \$30 million per year. Over a 5 year period cumulative public goods funds could potentially total over \$100 million if the entire fair share of the City is obtained. This would likely be sufficient to pay for the entire efficiency program target of 107 megawatts. If, on the other hand, the City does not secure these funds, then the cost of the efficiency program may have to be borne in part or full by the rate base. This will affect customer rates.

Assignment of Responsibilities

One important facet of risk mitigation is to correctly assign roles and responsibilities for the City and for the ESP. While Navigant has significant discussion of this topic, there are important concerns that LPI has with some of these assignments. The assignment of responsibility for the efficiency program is discussed above, and is one example of how to distribute roles. This area needs to be much more carefully and full developed.

Revenue Flow to City

It will be necessary to assign a specific revenue flow to the City for its particular share of the program operational/administrative costs. It is not clear that this revenue needs to flow through the ESP. Both the ESP and the CCA will need to clearly understand how this takes place, with especial attention to assurance that key responsibilities are met and financial risks to the program avoided. Repayment of bonds, covering CCA internal costs, and who bears the burden of under-collection of revenues need to be clarified. Some of this is discussed in the Navigant Report, but further development of the cash flow is needed.

Rate Stabilization Fund

The report mentions various contingencies where CCA rates might vary above or below PG&E's rates. A common practice in the utility industry is to establish a fund which collects revenues during years when costs of energy are lower, and pays out in years when costs are high. This serves as a critical buffer and balancing mechanism to mitigate rate risks, and we would recommend strongly that SF CCA incorporate this element.

Administrative Costs

The Navigant report states⁶ that the Implementation Plan requires ESP bidders to include CCSF's program administrative costs in their bids. Without a page reference to the Draft Implementation Plan, the source of this point is unclear. Our impression of the approach to the administrative costs is that the intent may have been to have these costs included in the amount financed under the H Bonds, not in the ESP bids. However, this may not be the best way to handle this ongoing expense since it is not an "upfront" cost, and it is not clear why it would need to be capitalized through a bond. This needs to be carefully evaluated and clarified.

Permits and Authorization

Navigant assigns responsibility for obtaining all permits and authorization to the ESP. While the ESP will doubtless need to do this, the City can play a key role to the extent that these involve City jurisdiction. It is important for ESPs to know what role the City will play in this, and for the City to define and clearly state to the ESP the roles and risks assumed by the different parties in this regard.

Correction of Information Regarding PG&E

One of PG&E's techniques for reducing the appeal of CCA to customers is to frame information about the company itself. It is important for the SF CCA to remain vigilant about PG&E "spin", correctly identify it, and take measures to neutralize it. Relying on PG&E for information about itself makes one more vulnerable to this risk, and the draft report from Navigant that we are reviewing provides some examples. PG&E originally titled its ballot initiative the "Taxpayers Right to Vote Act", a title that was widely circulated in the press and is even referred to on p. 21 of the report. The Attorney General rejected this title as inaccurate, and gave it a new name "New Two-Thirds Requirement for Local Public Electricity Providers. Initiative Constitutional Amendment."

PG&E also has a custom of overstating the renewable energy content of its electricity supply. Navigant, in citing that PG&E provided 14% renewable electricity in 2008 (p. 6) is simply relating the information provided by the utility in their April 2009 bill insert. The CPUC, in their July 2009 quarterly report to the legislature on the RPS program states that PG&E only had 11.9% renewable electricity in 2008. This is a lower percentage than the 12.4% renewables that PG&E had in 2003.

The information quoted from PG&E does not affect the points Navigant makes in any significant way. But they do illustrate the need to be wary of certain types of commercial information from PG&E. Mitigating this risk takes significant effort. It would require vigilant checking of information provided by PG&E, and when misinformation is discovered, a willingness to challenge this.

⁶ p.29

H Bonds

Navigant identifies Program Financing Risk with the bond structuring or issuance, explaining that CCSF must demonstrate “to the satisfaction of investors and credit rating agencies... a secure revenue stream sufficient to cover debt service,”⁷ and to mitigate this risk Navigant recommends that the CCA Program retain a financial advisor “to begin structuring the H bond issuance.” LPI agrees; we believe that this is very important, and that work preparing H Bonds should be undertaken immediately in order to adequately clarify H Bond issues for the CCA RFP.

Pricing Structure

Navigant recommends providing additional clarity about what pricing structures would be acceptable to CCSF, “particularly in regards to how the meet or beat requirement will be measured initially and over time and PG&E’s future rates are highly unpredictable,”⁸ specifically “whether the ESP is required to match all rate structures offered by PG&E or if the meet or beat requirement is measured on a different basis, such as a weighted average for all customers, potentially with adjustments for energy efficiency and conservation impacts.” While LPI does not object in principle to considering options for rate structure, this is limited by existing law. Ordinance 86-04 and 147-07 both require the CCA Supplier to provide rates that are equitable to all classes, and as a matter of policy state that “political ratesetting” or cherry picking that favors one class of customers over another must not be allowed.

Hetch Hetchy

Navigant indicates that “Hetchy Hetchy power is, by law, limited to municipal use and not currently available to be sold directly to residents.”⁹ However, as referenced elsewhere in this report, the January 2009 CCA Program Report, prepared by Local Power with particular assistance of Nixon Peabody attorney Howard Golub, proposed a legal mechanism by which a portion of Hetch Hetchy power may indeed be made available to the CCA by selling directly to customers, using a “split transaction” mechanism and a transmission order process subject to federal law. LPI recommends that SFLAFCO give high priority to an active engagement of the SFPUC and the City Attorney, and clarify this opportunity as part of the CCA RFP preparation.

360 MW + Facility Permit Risk

Navigant correctly observes that the CCA program requires a CCA supplier’s rates to be “all in,” including the costs for “acquiring and maintaining permits, certificates, and other authorizations for constructing and

⁷ P.4

⁸ p.4.

⁹ p.6

operating the above (360 MW) facilities,”¹⁰ and that CCSF will not change the rate structure approved in the ordinance awarding the contract to the chosen supplier, “except as an emergency measure.”¹¹

Navigant also points out that while increasing CCSF-owned generation facilities above 360 MW is key to reducing supplier procurement risk, there remain risks to the supplier from potential delays it may suffer in getting required new renewable generation facilities online. “The completion bonds specified in the Draft Implementation Plan further mitigate this risk by ensuring that the renewable generation facilities will be built. However, delays in construction are possible, and replacing the power in the interim will be the responsibility of the ESP, with attendant credit implications.”¹² This underscores a burden on SFLAFCO and SFPUC to work to minimize the role of development timing risks in the RFP, such as a clarification of the permitting environment and the provision of site and customer data and analysis, which LPI agrees are key to reducing this risk for bidders.

“Involuntary Return” Bond

Navigant observes that the CCA Program requires qualifying CCA Suppliers to include in their financial risk the posting of a bond or a demonstration of insurance to cover PG&E’s market exposure if CCA customers are returned to PG&E service involuntarily. “The amount of the bond or other assurance must cover six months of related costs. This may be difficult and/or expensive to obtain.”¹³ A strategic approach to this problem will need to be addressed prior to issuing the RFP.

Procurement Credit

Navigant’s treatment of credit issues suggests an increased assumption of credit risk by CCSF in order to attract a supplier.

First, Navigant suggests that it will be difficult to find a supplier to provide credit support for its wholesale procurement. Navigant says that “typical credit arrangements in wholesale power contracts provide for defined credit thresholds that, once exceeded by the mark-to-market value of the contract, trigger a requirement to post a letter of credit or other form of acceptable credit support.”

Navigant warns that “it may be difficult to find an ESP willing to enter into a contract that requires it to post hundreds of millions of dollars of credit support.” They suggest that “as a practical matter, due to the sheer value of the contract, respondent ESPs may seek to negotiate for a relatively high credit threshold for the ESP or waiver of such a threshold altogether as long as the ESP maintains an acceptable credit

¹⁰ p.10.

¹¹ p.11.

¹² p.16.

¹³ p.14.

rating. In that case, CCSF would be relying upon the general creditworthiness of the ESP, or its credit support provider.”

Navigant cites an example of the San Joaquin Valley Power Authority (SJVPA) supplier, Citigroup Energy (ECI), which provided a parental guarantee from Citigroup or a replacement guarantee or a replacement guarantee from an entity with a credit rating of A3/A- or better. Navigant emphasizes the credit rating of the supplier to be a key issue.

Navigant also suggests that it may be necessary for the CCA program to provide additional support to bolster the position of its supplier, citing the SJVPA CCA program granted a security interest to its chosen supplier, Citigroup Energy, Inc. for its customer accounts receivable, and committed to using bonds to prepay its energy purchases, if such a prepayment was determined to be feasible and provide economic benefits to the program.”¹⁴

In fact, by providing H Bond financing for 360 MW or more of new renewable resources, amounting to several hundred million dollars, San Francisco is already providing substantial financial “prepayment” support for the supplier, which would distinguish it from other examples. This prepayment can be enhanced by further development of CCA-owned and financed infrastructure. Typical credit arrangements in the wholesale markets lack San Francisco’s voter approved bond financing for substantial development of power generation. Navigant agrees that this investment substantially reduces the burden for bidders.

While LPI believes a degree of flexibility will be appropriate in negotiating a credit relationship with its CCA supplier, the City should focus its credit on the assets it will own and less on subsidizing procurement of power on the open market in a manner that increases CCSF financing risk. In no case should using bonds for advanced fossil fuel purchases be made a long-term risk management strategy, as this will carry a double premium for fuel hedging contracts as well as interest on the bond. The CCA would in this case be trading reduced fuel price risk with no certainty of future savings for increased financing risk and a certainty of an extra cost premium.

Navigant also recommends requiring the supplier to report in detail on its purchased power and gas portfolio, to assure the portfolio is diversified and to reveal counterparties so that CCSF has a recourse to maintain service in the event that the supplier fails to meet its obligations.¹⁵ To the extent that suppliers are seeking CCSF credit support, this would appear reasonable; however, suppliers willing to provide their own letters of credit or bonds may not wish to share this information, and it may be preferable to an

¹⁴ p.16.

¹⁵ 17.

open book approach that ultimately places CCSF in a higher risk position if the CCA's credit is put on the line as a result. We believe this question should be decided in the negotiation process.

Opt-Out Minimization

Since the beginning of the CCA Program, the City has affirmed and reaffirmed its confidence that the best argument against opting out for a customer will be that rates will not rise above the rates PG&E charges customers on the day they receive the Opt-Out Notification, that the CCA rates will be competitive over the long term, and that San Francisco's power mix will be dramatically greener than PG&E. These factors, more than any other, will determine the Opt-Out rate. Changes that confuse this apple-to-apple comparison for the consumer do more basic harm than the complicated benefits they might achieve.

Navigant addresses political risks of opposition campaigns by Pacific Gas and Electric, which is already manifest in San Francisco. PG&E has shown active opposition since approximately 2004 when the City adopted its first CCA ordinance, in part through its \$20 million "Let's Green This City" campaign during 2007 when the San Francisco Board of Supervisors adopted the Draft Implementation Plan.

Specifically, Navigant is concerned with opt-out risk caused by negative PG&E marketing. Navigant suggests that a pilot program to start the CCA, including a neighborhood-by-neighborhood approach or an "opt-in"¹⁶ which signs people up for extra programs such as a 100% green program like Marin's CCA has. This concept has significant problems in our judgment. First, it implies slowing down the process of setting up the CCA, which may be counter-productive for consumer education, in which a mobilization of PR and public education for all San Franciscans which must induce residents and businesses not to opt-out. Secondly, an opt-in program for retail electricity service is not legal in California at this time, and any opt-in to an alternative program such as receiving home solar or energy efficiency would mean be sidetracked in a manner that results in CCA not being implemented. In fact, this has been an explicit policy of PG&E for undermining CCA. Finally, as Navigant concedes, the CCA Program Definition repeatedly rejects a Phase-In as a desirable policy. Unless there is some obvious positive reason to reconsider this matter, Local Power recommends against it.

Navigant suggests that CCSF should consider negotiating with PG&E for audit rights related to customer data, particular during the opt-out process.¹⁷ In fact, CCA regulations provide for unlimited access to PG&E data by San Francisco. PG&E's CCA data request tariff provides a limited set of data available for standardized charges to CCA's, however, the California Public Utilities Commission stated clearly in its Phase I decision that CCAs may request all appropriate data, and that investor-owned utilities like PG&E

¹⁶ P.20.

¹⁷ p.23.

may not question what data is appropriate, and must provide it at cost.¹⁸ LPI strongly supports Navigant's recommendation that SFLAFCO and SFPUC pursue an audit-level of access to PG&E's customer data and other data about electricity use within the jurisdiction of the City and County of San Francisco. Further, we believe it is urgent that this process be initiated immediately in order to provide data within a timeframe that benefits the RFP process as well as the opt-out process. Since such data is not under tariff, months of effort will be required to secure this kind of access, so that waiting now may cause harmful delays during the critical RFP negotiation and program initiation period.

Energy Efficiency Funds and the RFP

Navigant rightly emphasizes the availability of Energy Efficiency PGC funds as germane to organizing a successful RFP. This in turn will affect the CCA revenues, potentially the creditworthiness of the CCA and its ESP, and through these the rates customers have to pay. This is especially important if H Bonds are to be used for financing efficiency measures. As Navigant points out, "A strategic risk for Clean Power SF is failing to satisfy the credit agencies that components risks have been sufficiently identified and planned for, leading to unaffordable pricing or suboptimal market acceptance of the H Bonds." Specifically, "(t) the extent H bond proceeds are made available to the ESP, the revenue needed to service the H Bonds will be funded through the supplier's energy pricing schedule implicit in its bid. Since any bond issuance would occur after the ESP is under contract, the ESP must estimate the revenue that will be available from the bonds if it is proposing use of such funding. The accuracy and supportability of the rates that the supplier bids may be affected by the need for the supplier to estimate these costs with very limited data."

In addition to recommending hiring a financial advisor and clarifying policies for customer payment, Navigant emphasizes the importance of clarifying the critical availability of Energy Efficiency PGC funds from the CPUC. "Concurrently, to the extent CCSF anticipates making public goods funds available to the ESP, it should more clearly define the amount of such funding and the process and timing for making the funds available."¹⁹ Navigant concludes that CCSF "should provide as much direction and support data as possible to assist the bidders in formulating accurate rate estimates. The more accurate the data, the more supportable the bids, which will reduce the chance of problems with the supplier not being able to support its bid in the implementation phase..." LPI agrees with this statement, and urges SFLAFCO to ramp up its work to clarify this critical question facing the CCA RFP issuance later this year.

Market Timing

Navigant observes that timing issues and delays in the CPUC Implementation Plan certification process may also pose risks for bidders that may be avoided with a proper timing strategy. First, the ESP will need to be identified in the Implementation Plan before it is certified and before Clean Power SF can be

¹⁸ California Public Utilities Commission Rulemaking R.03-10-003, December 15, 2005.

¹⁹ p.24.

registered to begin offering services to customers. “The possibility for delay in the CPUC’s review can create risk to the ESP if it causes a delay in the agreed upon start date, as its supply acquisition commitments would become out of synch with its supply delivery obligations, requiring the supplier to dispose of supply at the prevailing market price.” Navigant predicts that getting timely regulatory approvals, including CPUC approval of the Implementation Plan, would likely be a condition precedent in the ESP agreement. Navigant recommends that CCSF allow for a 90 day CPUC certification schedule, and providing six to nine months lead time between execution of the ESP contract and the commencement of service under the contract mitigates the risk of delays in obtaining regulatory approvals.²⁰

LPI agrees with the importance of timing for the negotiation, and has no objection to the concept put forth by Navigant, but believes that the ultimate protocol for timing between contract execution and commencement of service should be subject to negotiation with suppliers based on the unique timelines involved in their bids and rollout plans, as some suppliers may request a shorter window based on market or other conditions.

Regulatory Risk

Navigant observes that regulatory and legal changes may pose risks for which suppliers are unprepared to bear. “Regulatory and legal changes cannot be controlled by the ESP. Its acceptance of such risks would come at a premium...doing so would result in risk adders to the supplier’s bid that may undermine the ability of rates to meet or beat PG&E’s.”²¹ Navigant recommends that “(R)egulatory changes that affect all load serving entities, such as changes to the RPS, (Resource Adequacy) requirements or cost of carbon regulation, are best borne by the Program because these changes are likely to impact PG&E’s rates as well, so customers would be no worse off by bearing them under the Program than under the status quo.” The Material Changes clause of the ESP contract would include such provisions. While LPI agrees that in certain instances regulatory changes would impact PG&E customers equally, under others it would not. A careful look at such provisions will be in order during contract negotiations.

Finally, Navigant recommends that regulatory risk demands an “expanded regulatory organization to support Clean Power SF as it comes to fruition.”²² LPI agrees with this statement, and recommends that SFLAFCO begin to participate in a sustained manner in CCA-related discussions and activities at state agencies such as the CPUC, the California Energy Commission (CEC) and Independent System Operator (CAISO) prior to the CCA RFP so that regulatory risk issues handled by these agencies is fully outlined and analyzed in the CCA RFP and accompanying support documents.

²⁰ p.25.

²¹ p.27.

²² p.28.

Cost Responsibility Surcharge

Navigant says that the Customer Responsibility Surcharge creates risk based on its “annually determined rate that changes based on both the costs of PGE energy supply portfolio and to the market price benchmark used to derive the CRS. As such, it is essentially impossible to forecast accurately.”²³ While the CRS will generally decline over time as a factor on the monthly CCA bill as supply commitments expire, LPI agrees that the short term risk must be addressed. Navigant believes that “(i)t is unlikely that an ESP would accept the risk of changes in the CRS without charging a risk premium that could undermine the ability to offer competitive rates.”

Navigant suggests that the “Open Season” process in PG&E Rule 23.2 be considered, under which CCSF would make a Binding Notice of Intent (BNI) to initiative service to customers in order to eliminate the risk of new costs in the CCA CRS resulting from any PG&E supply commitments made after the date of the BNI.²⁴ Navigant does not recommend this approach, but suggests it should not be ruled out.

LPI agrees that CCSF should continue to monitor some variation of the Open Season process once the CCA RFP process is underway.

CCSF Administrative Cost Risk

Navigant cites City CCA policy that the CCSF’s administrative costs are to be rolled into the supplier’s rate bid. This poses a risk, and a bid premium may be caused unnecessarily if suppliers do not know how great a role SFPUC and SFLAFCO intend to play in the CCA Program.

Navigant recommends that “the City’s administrative costs estimates must be provided in advance for the suppliers to include in their bids,”²⁵ and that CCSF might consider a fixed amount that the supplier must be responsible for to support the cost of the CCSF administration of Clean Power SF in its bid. If so, City costs in excess of the agreed upon amount would not be the supplier’s responsibility.

LPI agrees that CCSF must place limits on its administrative costs and inform bidders of those limits on a multi-year basis so that they may incorporate accurate assumptions about these costs into their economic models and their proposed rate schedules. We also agree with the overall approach suggested here by Navigant.

²³ p.28.

²⁴ p.28.

²⁵ p.29.

Rate Management

Navigant observes that Ordinance 147-07 requires that the CCA supplier meet or beat PG&E's generation rates that are in effect at the time of the initial opt-out period, and commit to a structured schedule for rates thereafter— either with CCA rates indexed to PG&E's rates or a fixed year-to-year schedule based on a forecast of PG&E retail rates and wholesale power market prices. Navigant is particularly concerned that if a forecast is wrong and PG&E's rates drop, then the CCA rates could prove higher than PG&E's for periods of time.²⁶

Navigant proposes to define what constitutes “comparable” bids, using a “weighted average rate” for all customers. They also suggest a variation under which “adjustment for energy efficiency and conservation impacts appears to be a viable method.” While LPI supports creative rate approaches to customers who participate as owners in the Community Solar or other offerings, and has no objection to a weighted average approach to the requirement, we restate the policy in both Ordinance 86-04 and 147-07 that all ratepayers must be treated equitably, with no political ratesetting or cherry picking of customers through more or less favorable rates compared to PG&E's rate for that class. The original fixed or indexed pricing approaches was agreed upon by CCSF because it left flexibility to bidders on how to manage this issue without diluting the simple apple to apple commitment of equitable treatment and rate impacts. This has obvious implications for the opt-out risk issue too, as some larger customers may fear unfavorable treatment by CCSF if these rules are too opaque for the non-energy specialists who will have the decision whether to participate.

Contract Term

Navigant observes that the Draft Implementation Plan requires the contract term to be bid by the supplier, and assumes that the term is likely to be consistent with the H Bond payback period assuming it is using H Bonds. “It is conceivable that a supplier might bid less than the expected 15-20 year term of the proposed bonds.”²⁷ Navigant suggests that CCSF's bid acceptance criteria should favor bids that are consistent with the bond period for proposals that include H Bond financing. Navigant recommends that additional work on structuring the bonds will...help tighten the bidding requirements for acceptable contract terms. LPI agrees with these assessments.

Resource Adequacy Requirements

Navigant correctly observes that the CCA Program's development of 360MW of new resources will substantially reduce the CCA supplier's procurement burden for CPUC's Resource Adequacy Requirements (RAR), which CPUC regulations require Load Serving Entities (LSEs) to control operating and planning reserves that exceed peak load by a minimum of 15 percent for current demand as well as

²⁶ p.32.

²⁷ p.32.

the year-ahead summer peak. “The 360 MW rollout will help meet the Program’s resource adequacy requirements...” Navigant recommends that “CCSF should initiate discussions with the CAISO to better understand the resource adequacy value of the 360 MW portfolio components as these resources are more definitively specified.”²⁸ As we have recommended in the recent past, LPI agrees that SFLAFCO and SFPUC should actively engage the CAISO on matters relating to the load carrying capacity assumptions about the CCA Program’s *de minimis* 360 MW rollout as required by Ordinance 86-04 and 147-07 as well as a *de maximis* rollout based on additional price competitive resources identified by SFLAFCO and SFPUC consultants during 2009.²⁹

Additional Research and Information for Bidders

LPI agrees with Navigant’s emphasis that “the more information and certainty that can be provided to potential suppliers regarding the sources of CSF funding, including both H Bond proceeds and public Goods funding available for energy efficiency investments, the lower will be the perceived risk profile from the bidder’s perspective” and that “Benefits of providing more information include encouraging a more diverse asset of bidders and reducing the risk premiums that suppliers must charge to cover risk contingencies.”³⁰

Navigant points out rightly that, to date, “the locations and detailed specifications of the individual infrastructure projects remain to be identified,” adding that it may be appropriate to leave the detailed design of the infrastructure up to the entities that will be responsible for its deployment, i.e., the ESP, but this...introduces a fairly high hurdle to preparing a responsible proposal to the RFP.” Navigant suggests that CCSF “may wish to contract out further work to specify in detail the projects it intends for respondents to include in their bids. This would include identifying potential sites for the photovoltaic rollout, and identifying sites and preparing technical descriptions of the distributed generation, conservation, and energy efficiency projects. LPI agrees with this recommendation, as with Navigant’s assertion that “additional work to clarify how the benefits and costs of behind-the-meter generation and efficiency investments should be allocated between the ESP, the participating customer, and non-participating customers might further mitigate this risk.” As referenced elsewhere, LPI has proposed expanded work by LAFCO in these categories for the last quarter of 2009 in order to fully prepare a market-ready RFP for release during this year.

Short of this, Navigant identifies one alternative – to break up the RFP into stages. In the first stage, a supplier would be selected for exclusive negotiations based on its qualifications. Under an agreement,

²⁸ P.32.

²⁹ *CCA Program Report* by Local Power Inc. – SFLAFCO, January, 2009 and *CCA Tasks 1 and 2 Report* by GES – SFPUC, August, 2009.

³⁰ P.33.

CCSF and the supplier would then jointly explore and identify sites, identifying what will be built and where. CCSF would prepare bond financing, PGC funds and other funding available to the ESP. Once the information is assembled, the exclusive supplier would present an offer to CCSF, which would only be accepted if it met the requirements of the CCA Implementation Plan. If rejected, CCSF could reopen bidding.

This is a creative idea, but has some problems. Because the CCA program requirements are so innovative, narrowing the pool to a single bidder before negotiation will run a substantial risk of (1) choosing the wrong bidder based on lack of information at the time it is chosen, and (2) lacking leverage in negotiating with an exclusive bidder rather than a robust bidding pool.

LPI believes that CCSF must get the RFP right from the start, but a middle ground exists between leaving this key data up to bidders to figure out (they will not) and selecting the details of every facility to be developed according to design specifications. LPI believes that an adequate supplement of data for the CCA RFP may be completed by SFPUC and SFLAFCO consultants before the end of the year if SFLAFCO ramps up its work to survey, analyze and document this data.

Overcoming Potential Economic Constraints

Navigant suggests that, in the event suppliers are unable to meet or beat PG&E's rates, CCSF may wish to alter this requirement from the City's governing ordinances. Specifically, "(i)n the event that bidders are not able to offer rates that meet or beat PG&E, CCSF could consider a pricing strategy that differentiates the higher quality service. For example, a premium (likely temporary) could be charged to customers who desire a higher renewable energy content" as is being proposed by MEA.³¹ Navigant also suggests offering a fundamentally different rate structure from PG&E's.


While LPI has proposed and supports creative new rate classifications for service packages that include energy efficiency services or distributed solar installations "in combination with a fixed monthly charge," we do not believe that this changes the need to offer San Francisco residents and businesses competitively priced power in order to avoid substantial Opt-Out Risk. CCSF may wish to add "pay extra" options for products such as 100% renewable power, in addition to the solar/efficiency ownership options. Nevertheless, CCSF's CCA Implementation Plan and RFP must provide for a 51% RPS by 2017 for all ratepayers, and this economic challenge is unchanged by such actions. Re-spinning the program in a manner that ignores perceptions of the average customer would risk adverse decisions by those customers when they read the Opt-Out Notification that arrives in the mail. LPI believes the CCA RFP process will provide a key dialogue with bidders that will clarify the challenges inherent in "visionary"

³¹ p.35.

innovation such as the City's CCA Program, and that the City should walk into those negotiations with its vision undiluted.

All in all, LPI repeats that with the issues raised, this is a good piece of work. With the recommended modifications and emphases in recommended SFLAFCO work to prepare for the CCA RFP issuance later this year, LPI looks forward to working with Navigant, GES and other SFPUC/SFLAFCO consultants in coming months to bring a new energy supply to San Francisco that achieves the important and timely policy objectives of the Draft Implementation Plan. Thanks for inviting Local Power to prepare this Peer Review of Navigant's Risk Assessment Report. If you have any questions or wish to discuss this letter, do not hesitate to contact me.

Yours truly,

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

**Paul Fenn, Chief Executive Officer
Local Power Inc.**