CITY OF HUNTINGTON BEACH

City Council Interoffice Communication

To:	Honorable Mayor and City Council Members
From:	Travis Hopkins, Assistant City Manager
Date:	January 31, 2020
Subject:	**SUPPLEMENTAL COMMUNICATION FOR AGENDA ITEM 21**

This memorandum is to provide additional information in regards to Item #21.

Please see attached Executive Summary of the California Community Choice Energy Feasibility Study and Technical Assessment prepared for the City of Irvine, California by EES Consulting, and include this as part of the Agenda for February 3, 2020 City Council Meeting.

SUPPLEMENTAL COMMUNICATION

Meeting Date: 2/3/2020

Agenda Item No.: 21 (20-1375)

City of Irvine, California

Community Choice Energy
Feasibility Study and Technical Assessment

Prepared for:
The City of Irvine, California

FINAL
January 16, 2020

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SUPPLEMENTAL COMMUNICATION

Meeting Date: 2/3/2020

Agenda Item No.: 21 (20-1375)

EES Consulting, Inc.

January 16, 2020

Mr. Mark Steuer
City of Irvine
P.O. Box 19575
Irvine, CA 92623-9575

SUBJECT: Final Community Choice Energy Feasibility Study and Technical Assessment

Dear Mr. Steuer:

Please find attached the Final Community Choice Energy Feasibility Study and Technical Assessment (Study) for City of Irvine, California (the City).

It has been a pleasure working for the City and we very much appreciate all the effort this working team has spent on the Study.

We look forward to receiving all stakeholder comments after which we will finalize this Study.

Very truly yours,

Gary Saleba
President/CEO

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Executive Summary

As part of preparations for future energy demands, the City of Irvine's City Council approved funding for two initiatives which will help define an energy vision for Irvine (City): a Strategic Energy Plan and a Community Choice Aggregation (CCA) Feasibility Study. Commonly referred to as Community Choice Energy (CCE), these programs have grown significantly in California since the State's first CCE program was launched in Marin County in 2010. There are currently 19 operating CCEs in California with potentially another dozen planning to launch between now and 2021. CCEs currently serve over 10 million customers who were previously covered by investor-owned utilities (IOUs).

The City's CCE Feasibility Study efforts are one of the first to be conducted by a jurisdiction within Orange County and will be the most comprehensive. This Study's results show that even though a CCE in Irvine is financially possible, there are risks that need to be mitigated. The Study estimates that a CCE can provide a 2% discount on electricity rates to Irvine customers when compared to Southern California Edison (SCE) while matching SCE's projected renewable energy portfolio. This discounted rate translates to an estimated $7.7 million in electricity savings to the community each year. Further, a CCE can provide other local benefits to the City and its constituents such as rebates to incentivize energy efficiency and economic development opportunities. Lastly, this study assumes that the CCE will meet all known state environmental goals and mandates[1] and shows that a CCE program is a viable method for the City to utilize in meeting City-initiated environmental goals related to clean energy programs, renewable energy utilization, and City-wide greenhouse gas emissions reductions.

Key Study Findings

CCEs and utilities must meet State-mandated Renewable Portfolio Standard (RPS) requirements. Therefore, the base case scenario presented in the financial results of this Study illustrate a renewable portfolio option equivalent to SCE's portfolio which meets the State's RPS mandate. Other, higher renewable energy content portfolios are also evaluated in the Study. Based on the Study's analysis of the City's electricity demands, power procurement costs, forecast of SCE rates and stranded costs, the formation of a CCE by the City is financially feasible and would yield considerable benefits for all participating residents and businesses. This Study assumed that the City would form its own CCE program, and as discussed in the Governance section of the Study, potential benefits and drawbacks are described if the City were to join other CCE programs or partner with other jurisdictions in creating a regional CCE.

The following key findings and conclusions are made based on the City operating its own CCE program:

[1] Included under SB 100 and SB 350.

- Electric retail rates are predicted to be at least 2% lower than current SCE rates using extremely conservative modeling parameters and assuming participation rates for residential customers of 95% and non-residential customers participation rates of 90%. These assumptions on customer participation are conservative compared with recent CCE program participation.
- City-wide electricity cost savings are estimated to average about $7.7 million per year for Irvine residents and businesses. Annual City municipal utility account cost savings are estimated at $112,000.
- CCE start-up and working capital costs (estimated at $10.05 million, and assumed to be financed) could be fully recovered within the first three years of CCE operations while still achieving a 2% rate discount compared to SCE's current rates. The City could also choose to recoup costs associated with the Study development and Implementation Plan.
- The Study analyzed CCE rate results under scenarios with high and low participation rates, high and low market power costs, and high and low stranded costs. The findings identify key risks with regard to stranded cost recovery (via SCE) and power supply. The Study's section on Risks and Sensitivity Analysis describes the magnitude of those risks and measures for mitigating risks.
- The CCE is estimated to have an average, annual $10.6 million revenue stream after start-up and working capital are repaid, as well as financial reserves being met, that can be used for electric customer-related programs such as:
  - Funding for customer energy efficiency programs.
  - Local renewable energy resource programs, such as renewable energy net-metering.
  - Customer rate savings beyond the 2% target.
- The savings to customers under the CCE's rates would drive additional local economic development benefits, such as 85 new jobs and a total of $10 million in annual economic output.

The City will need to fund some of the upfront costs of developing a City CCE. These are expenses that would need to be paid prior to obtaining financing including: staffing expenses prior to program launch, payment of various bonds to the CPUC and SCE, and consultant costs. Staffing costs assume City staff are required to manage the Implementation Plan development, consultant costs in support of pre-launch activities, developing joint power authority (JPA), if applicable; and meeting with SCE and stakeholders. Consultant costs would include support to City staff on these tasks and updating the program's technical and financial Study forecasts. These costs are estimated at $600,000 based on the experience of other operating CCEs. The City could recoup these expenses after program launch; typically, CCE's consider these costs as part of the startup loan. Depending on the governance structure selected, these costs may vary.

Key Operating Figures for a City-CCE as modeled against SCE's current power portfolio are shown in Exhibit ES-1 below:

Exhibit ES-1 CCE Key Operating Figures	
First Year Operating Budget	$81.0 Million
First Year Revenues	$87.7 Million
First Year Net Income	$6.7 Million
First Year Load Served	1,475 GWh
Average Operating Budget (2022-2030)	$124.4 Million
Average Revenues (2022-2030)	$140.5 Million
Average Net Revenue (2022-2030)	$16.1 Million
Average Annual Municipal Cost Savings	$112,000
Average Load Served (2022-2030)	1,922 GWh
Startup Loan (Including Pre-Startup Costs and Working Capital)	$10.05 Million
Startup Loan Term	60 Months
Early Repayment of Startup Loan	36 Months
Economic Impacts: Orange County	85 New Jobs/year $10 million in output/year
Greenhouse Gas Reductions, tons CO2/year	SCE Equivalent Portfolio: 0 100% Renewable by 2035: 191,000 100% Renewable: 360,000

Risks and Mitigation Measures

While the study shows that forming a CCE is financially feasible under a wide range of scenarios, doing so is not without risk. The feasibility of the CCE, that is maintaining customer rates competitive with SCE, primarily depends on power supply costs (which make up approximately 90% of the overall CCE operating budget) and how those costs compare to SCE's power supply costs, and ultimately their customer rates. Other factors impacting the financial viability of the CCE include: costs that SCE directly passes through to all customers (including the Power Charge Indifference Adjustment or PCIA), market supply of renewable power, availability and cost of financing CCE operations, and legislative and regulatory actions.

To assess the magnitude of the risks imposed on the CCE by these factors, the Study includes a Sensitivity and Risk Analysis section which established a range of high and low scenarios for: prices for CCE-procured market power, SCE's customer rates, CCE financing costs, and the level of SCE's PCIA. As a result of the impact on CCE rates of these risk scenarios, the Sensitivity and Risk Analysis section also assumed a worst case CCE customer retention level and its impact on CCE rates.

The results of the Sensitivity and Risk Analysis indicate under what scenarios the CCE's rates may exceed SCE's customer rates, and also suggest actions the CCE may take to manage those risks. The risk mitigation actions consist of industry standard best operating practices and strategies employed by other operating CCEs including: conservative power procurement strategies employing market risk management policies, developing a cash reserve fund from annual net

revenues, and engaging in regulatory and legislative issues through the Statewide CCE organization– the California Community Choice Association (CalCCA).

Conclusions

The Study results suggest that CCE implementation is financially feasible, and the risks are manageable, should the City wish to further pursue it. The City CCE is expected to offer customers lower rates than both SCE's base rate and 100% renewable rate. The City CCE is estimated to generate average, annual net revenues of $16.1 million which can be used for multiple CCE-related purposes; including building CCE operations financial reserves, lowering customer rates, or offering customer programs. The savings to City ratepayers can drive additional economic output and create new jobs in the region.

The positive impacts on the City and its constituents of forming a CCE documented in this Study were determined under a very conservative set of technical and financial assumptions. Particularly, power supply costs are estimated at rates above current prices for long-term renewable contracts; customer participation rates are lower than recent Statewide CCE experiences; and the forecasted growth in SCE generation rates is lower than the historic average. The CCE could collect sufficient net revenues and operating cash reserves and continue to operate even if power prices are higher than forecasted, participation rates are as low as 80%, or SCE's stranded cost recovery rate is higher than forecasted. Even under extreme conservative risk scenarios on these factors which impact CCE financial viability, the risks are manageable through what is developing as industry standard, CCE best operating practices, such as conservative power procurement strategies and development of a cash reserve fund.

Suggested next steps for the City include: complete an internal review of this Study, conduct public outreach activities to share the results of the Study with City constituents and other stakeholders and receive their input, adopt the Study results through City Council action and determine whether to move forward with CCE implementation.