

JANUARY 22, 2020 CITY COUNCIL CHAMBERS 5:30 P.M. Closed Session; 6:00 P.M. Regular Session 201 N. Broadway, Escondido, CA 92025

MAYOR Paul McNamara

DEPUTY MAYOR Consuelo Martinez

COUNCIL MEMBERS Olga Diaz
John Masson

Michael Morasco

CITY MANAGER Jeffrey Epp

CITY CLERK Zack Beck

CITY ATTORNEY Michael McGuinness

DIRECTOR OF COMMUNITY DEVELOPMENT Bill Martin

DIRECTOR OF ENGINEERING SERVICES Julie Procopio

ELECTRONIC MEDIA:

Electronic media which members of the public wish to be used during any public comment period should be submitted to the City Clerk's Office at least 24 hours prior to the Council meeting at which it is to be shown.

The electronic media will be subject to a virus scan and must be compatible with the City's existing system. The media must be labeled with the name of the speaker, the comment period during which the media is to be played and contact information for the person presenting the media.

The time necessary to present any electronic media is considered part of the maximum time limit provided to speakers. City staff will queue the electronic information when the public member is called upon to speak. Materials shown to the Council during the meeting are part of the public record and may be retained by the Clerk.

The City of Escondido is not responsible for the content of any material presented, and the presentation and content of electronic media shall be subject to the same responsibilities regarding decorum and presentation as are applicable to live presentations.



January 22, 2020 5:30 p.m. Meeting

Escondido City Council

CALL TO ORDER

ROLL CALL: Diaz, Martinez, Masson, Morasco, McNamara

ORAL COMMUNICATIONS

In addition to speaking during particular agenda items, the public may address the Council on any item which is not on the agenda provided the item is within the subject matter jurisdiction of the City Council. State law prohibits the Council from discussing or taking action on such items, but the matter may be referred to the City Manager/staff or scheduled on a subsequent agenda. (Please refer to the back page of the agenda for instructions.) Speakers are limited to only one opportunity to address the Council under Oral Communications.

CLOSED SESSION: (COUNCIL/RRB)

I. CONFERENCE WITH LEGAL COUNSEL-- EXISTING LITIGATION (Government Code 54956.9(d)(1))

a. Case Name: Chavez v. City of Escondido, et. al.
Case No: Case No: 37-2018-00051135-CU-CR-NC

ADJOURNMENT



January 22, 2020 6:00 P.M. Meeting

Escondido City Council

CALL TO ORDER

MOMENT OF REFLECTION:

City Council agendas allow an opportunity for a moment of silence and reflection at the beginning of the evening meeting. The City does not participate in the selection of speakers for this portion of the agenda, and does not endorse or sanction any remarks made by individuals during this time. If you wish to be recognized during this portion of the agenda, please notify the City Clerk in advance.

FLAG SALUTE

ROLL CALL: Diaz, Martinez, Masson, Morasco, McNamara

PROCLAMATIONS: Martin Luther King Jr. Day

CLOSED SESSION REPORT

ORAL COMMUNICATIONS

The public may address the Council on any item that is not on the agenda and that is within the subject matter jurisdiction of the legislative body. State law prohibits the Council from discussing or taking action on such items, but the matter may be referred to the City Manager/staff or scheduled on a subsequent agenda. (Please refer to the back page of the agenda for instructions.) NOTE: Depending on the number of requests, comments may be reduced to less than 3 minutes per speaker and limited to a total of 15 minutes. Any remaining speakers will be heard during Oral Communications at the end of the meeting.

CONSENT CALENDAR

Items on the Consent Calendar are not discussed individually and are approved in a single motion. However, Council members always have the option to have an item considered separately, either on their own request or at the request of staff or a member of the public.

1. AFFIDAVITS OF PUBLICATION, MAILING AND POSTING (COUNCIL/RRB)

2. APPROVAL OF WARRANT REGISTER (Council)

Request the City Council approve the City Council and Housing Successor Agency warrant numbers:

338078 338294 dated January 8, 2020

Staff Recommendation: Approval (Finance Department: Joan Ryan)

3. NOTICE OF COMPLETION FOR THE KIA DEALERSHIP GRADING PROJECT -

Request the City Council approve authorizing the Director of Utilities to file a Notice of Completion for the Kia Dealership Grading Project.

Staff Recommendation: Approval (Utilities Department: Christopher W. McKinney)

RESOLUTION NO. 2020-10

4. NOTICE OF COMPLETION FOR THE STORM DRAIN PIPE LINING AND REHABILITATION PROJECT PHASE I

Request the City Council approve authorizing the City Engineer to file a Notice of Completion for the Storm Drain Pipe Lining and Rehabilitation Project Phase I.

Staff Recommendation: Approval (Engineering Services Department: Julie Procopio)

RESOLUTION NO. 2020-06

CONSENT RESOLUTIONS AND ORDINANCES (COUNCIL/RRB)

The following Resolutions and Ordinances were heard and acted upon by the City Council/RRB at a previous City Council/Mobilehome Rent Review meeting. (The title of Ordinances listed on the Consent Calendar are deemed to have been read and further reading waived.)

CURRENT BUSINESS

5. <u>CONTRACT AWARD AND COST SHARING AGREEMENT FOR COMMUNITY CHOICE</u> AGGREGATION/ENERGY TECHNICAL FEASIBILITY STUDY -

Request the City Council approve authorizing the City Manager, in consultation with the City Attorney, to execute a cost sharing agreement to prepare a Community Choice Aggregation/Energy Technical Feasibility Study for the cities of Escondido, San Marcos, and Vista.

Staff Recommendation: Approval (Community Development Department: Bill Martin)

FUTURE AGENDA

6. FUTURE AGENDA -

The purpose of this item is to identify issues presently known to staff or which members of the City Council wish to place on an upcoming City Council agenda. Council comment on these future agenda items is limited by California Government Code Section 54954.2 to clarifying questions, brief announcements, or requests for factual information in connection with an item when it is discussed.

Staff Recommendation: None (City Clerk's Office: Zack Beck)

COUNCIL MEMBERS SUBCOMMITTEE REPORTS

CITY MANAGER'S WEEKLY ACTIVITY REPORT

The most current information from the City Manager regarding Economic Development, Capital Improvement Projects, Public Safety and Community Development. This report is also available on the City's website, www.escondido.org.

WEEKLY ACTIVITY REPORT -

ORAL COMMUNICATIONS

The public may address the Council on any item that is not on the agenda and that is within the subject matter jurisdiction of the legislative body. State law prohibits the Council from discussing or taking action on such items, but the matter may be referred to the City Manager/staff or scheduled on a subsequent agenda. Speakers are limited to only one opportunity to address the Council under Oral Communications.

ADJOURNMENT

UPCOMING MEETING SCHEDULE						
Date	Day	Time	Meeting Type	Location		
January 29	-	-	No Meeting	-		
February 5	Wednesday	5:00 & 6:00 p.m.	Regular Meeting	Council Chambers		
February 12	Wednesday	5:00 & 6:00 p.m.	Regular Meeting	Council Chambers		
February 19	-	-	No Meeting	-		

TO ADDRESS THE COUNCIL

The public may address the City Council on any agenda item. Please complete a Speaker's form and give it to the City Clerk. Submission of Speaker forms <u>prior</u> to the discussion of an item is highly encouraged. Comments are generally limited to 3 minutes.

If you wish to speak concerning an item not on the agenda, you may do so under "Oral Communications." Please complete a Speaker's form as noted above.

Nomination forms for Community Awards are available at the Escondido City Clerk's Office or at http://www.escondido.org/city-clerks-office.aspx

Handouts for the City Council should be given to the City Clerk. To address the Council, use the podium in the center of the Chambers, STATE YOUR NAME FOR THE RECORD and speak directly into the microphone.

AGENDA, STAFF REPORTS AND BACK-UP MATERIALS ARE AVAILABLE:

- Online at http://www.escondido.org/meeting-agendas.aspx
- In the City Clerk's Office at City Hall
- Placed in the Council Chambers (See: City Clerk/Minutes Clerk) immediately before and during the Council meeting.

AVAILABILITY OF SUPPLEMENTAL MATERIALS AFTER AGENDA POSTING: Any supplemental writings or documents provided to the City Council regarding any item on this agenda will be made available for public inspection in the City Clerk's Office located at 201 N. Broadway during normal business hours, or in the Council Chambers while the meeting is in session.

LIVE BROADCAST

Council meetings are broadcast live on Cox Cable Channel 19 and U-verse Channel 99 – Escondido Gov TV. They can also be viewed the following Sunday and Monday evenings at 6:00 p.m. on those same channels. The Council meetings are also available live via the Internet by accessing the City's website at www.escondido.org, and clicking the "Live Streaming –City Council Meeting now in progress" button on the home page.

Please turn off all cellular phones and pagers while the meeting is in session.

The City Council is scheduled to meet the first four Wednesdays of the month at 5:00 in Closed Session and 6:00 in Open Session.

(Verify schedule with City Clerk's Office)

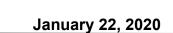
Members of the Council also sit as the Successor Agency to the Community Development Commission, Escondido Joint Powers Financing Authority, and the Mobilehome Rent Review Board.

CITY HALL HOURS OF OPERATION Monday-Friday 8:00 a.m. to 5:00 p.m.



If you need special assistance to participate in this meeting, please contact our ADA Coordinator at 839-4643. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility.

Listening devices are available for the hearing impaired – please see the City Clerk.





AFFIDAVITS





Consent Item No. 2 January 22, 2020 File No. 0400-40

<u>SUBJECT</u>: Approval of Warrants

<u>DEPARTMENT</u>: Finance Department

RECOMMENDATION:

Request approval for City Council and Housing Successor Agency warrant numbers 338078 – 338294 dated January 8, 2020.

FISCAL ANALYSIS:

The total amount of the warrants for the period of January 1 – January 8, 2020, is \$1,213,361.57.

BACKGROUND:

The Escondido Municipal Code Section 10-49 states that warrants or checks may be issued and paid prior to audit by the City Council, provided the warrants or checks are certified and approved by the Director of Finance as conforming to the current budget. These warrants or checks must then be ratified and approved by the City Council at the next regular Council meeting.



CITY COUNCIL STAFF REPORT

Consent Item No. 3

January 22, 2020

File No. 0600-10, A-3305

SUBJECT:

Notice of Completion for the Kia Dealership Grading Project

DEPARTMENT:

Utilities Department, Construction and Engineering Division

RECOMMENDATION:

It is requested that the City Council adopt Resolution No. 2020-10, authorizing the Director of Utilities to file a Notice of Completion for the Kia Dealership Grading Project.

FISCAL ANALYSIS:

The Kia Dealership Grading Project was completed for \$144,080.35. This amount exceeded the originally approved contract amount by 8.3 percent, which is within the 10 percent contingency permitted for construction projects.

PREVIOUS ACTION:

On August 7, 2019, the City Council adopted Resolution No. 2019-99, authorizing the Mayor and the City Clerk to execute a Public Improvement Agreement with Whillock Contracting, Inc., the lowest responsive and responsible bidder, in the amount of \$133,059 for construction of the Kia Dealership Grading Project.

BACKGROUND:

The Kia Dealership Grading Project installed a stabilized decomposed granite (DG) surface on a 0.5-acre portion of City-owned property that was disturbed during the construction of the Brine Line Project. This property is currently being leased by the adjacent Kia Dealership and is used for additional vehicle parking.

The Project work included: grading, installing decomposed granite stabilized with a pervious binder, and adjusting existing valve cans and manhole rings to finished grade. The installation of a stabilized DG surface is labor intensive. After the area was excavated, decomposed granite was mixed with a liquid binder, then installed in multiple lifts approximately two-inches high. Each layer was compacted and leveled before the next layer was installed. Stabilized DG surfaces look almost identical to regular DG surfaces; however, they are less susceptible to rutting, and they minimize weed growth and reduce dust.

APPROVED AND ACKNOWLEDGED ELECTRONICALLY BY:

Christopher McKinney, Director of Utilities 1/15/2020 6:34 p.m.

ATTACHMENTS:

1. Resolution No. 2020-10

Staff Report - Council

RESOLUTION NO. 2020-10

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ESCONDIDO, CALIFORNIA, AUTHORIZING THE DIRECTOR OF UTILITIES TO FILE A NOTICE OF COMPLETION FOR THE KIA DEALERSHIP GRADING PROJECT

WHEREAS, on August 7, 2019, the City Council adopted Resolution No. 2019-99, authorizing execution of the Public Improvement Agreement for construction of the Kia Dealership Grading Project in the amount of \$133,059; and

WHEREAS, the construction for the Kia Dealership Grading Project was completed by Whillock Contracting, Inc. for the amount of \$144,080.35; and

WHEREAS, the City of Escondido staff and Director of Utilities deems the filing of the Notice of Completion to be valid and recommends approval; and

WHEREAS, this City Council desires at this time and deems it to be in the best public interest to approve the filing of the Notice of Completion.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Escondido, California, as follows:

- 1. That the above recitations are true.
- 2. That the City Council accepts the recommendation of the Director of Utilities.
- 3. That the City Council hereby approves the request to file a Notice of Completion for the Kia Dealership Grading Project.



CITY COUNCIL STAFF REPORT

Consent Calendar No. 4

January 22, 2020

File No. 0600-10 A-3281

SUBJECT:

Notice of Completion for the Storm Drain Pipe Lining and Rehabilitation Project

Phase I

<u>DEPARTMENT</u>:

Engineering Services

RECOMMENDATION:

It is requested that the City Council adopt Resolution No. 2020-06 authorizing the City Engineer to file a Notice of Completion ("NOC") for the Storm Drain Pipe Lining and Rehabilitation Project Phase I ("Project").

FISCAL ANALYSIS:

The Project is funded through Gas Tax funds. The final Project cost of \$839,828.95 is \$1,481.05 lower than the original bid price.

PREVIOUS ACTION:

On January 23, 2019, the City Council adopted Resolution No. 2019-02, authorizing the Mayor and City Clerk to execute a Public Improvement Agreement with Sancon Engineering Inc. ("Contractor"), the lowest responsible bidder, for the amount of \$841,310.00 for construction of the Project.

BACKGROUND:

This Project was the first phase of the City's Storm Drain Pipe Lining and Rehabilitation Project. In this first phase, eighteen (18) of the City's most critical Red Flag storm drain facilities were rehabilitated. The project rehabilitated storm drains by grouting voids, performing point repairs / pipe replacements, and installing a cured in place pipe (CIPP) liner.

The project rehabilitated 2,122 lineal feet of Corrugated Metal Pipe (CMP) Storm Drain. It was determined to be infeasible to line a storm drain located near Fondale Court due to its condition. Public Works replaced this storm drain at a cost lower than the contractor's price; this segment was removed from the contract. Lining of a pipeline near Kenora Drive was added to the contract as the next highest priority red flag pipeline. The total project cost was \$1,481.05 less than the original contract price.

Before and after pictures highlighting the improvements have been provided in Attachment "1".

Notice of Completion for the Storm Drain Pipe Lining and Rehabilitation Project Phase I January 22, 2020 Page 2

APPROVED AND ACKNOWLEDGED ELECTRONICALLY BY:

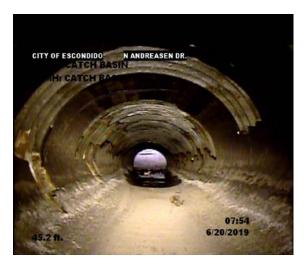
Julie Procopio, Director of Engineering Services 1/16/2020 5:09 p.m.

ATTACHMENTS:

- 1. Attachment "1" Project Photos
- 2. Resolution No. 2020-06

Facility 11287 – N. Andreason Dr. near Industrial Ave.

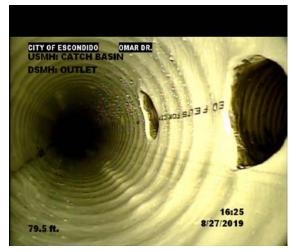
Before After





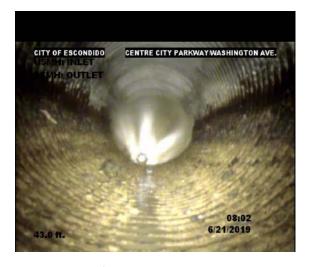
Facility 15173 – Omar Dr. to 7th





Facility 15647/A – Centre City Parkway near Washington Ave.

Before After





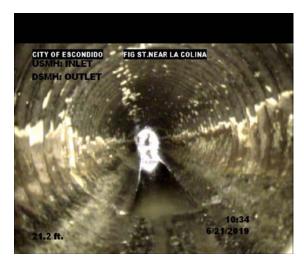
Facility 13225/A - Felicita Rd. near Brotherton





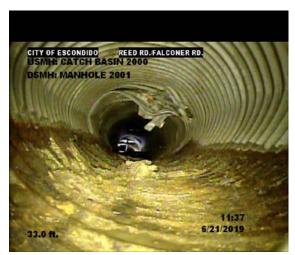
Facility 11046 - Fig St. near Lincoln Ave.

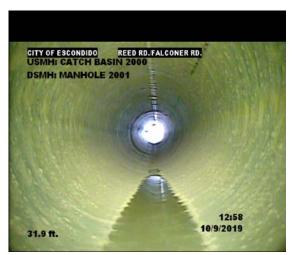
Before After





Facility 11142 - Reed Rd. near La Colina

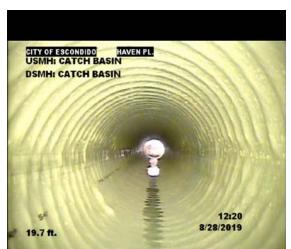




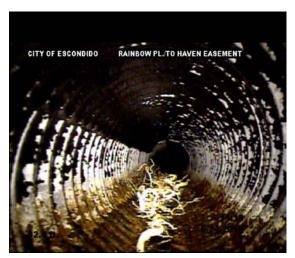
Facility 11082 - Haven Pl. cul-de-sac

Before After





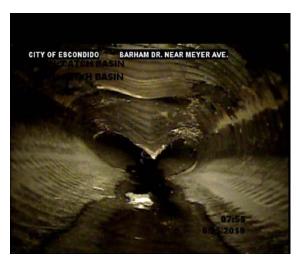
Facility 12496 - Rainbow Pl. to Haven Pl.





Facility 10319 - Barham Dr. near Meyers

Before After





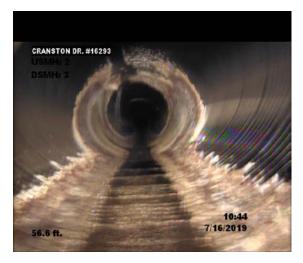
Facility 10063 - Quince near Valley Parkway





Facility 16293 – Cranston

Before After





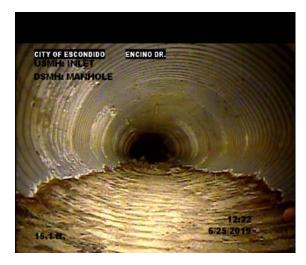
Facility 16136 – Cranston





Facility 13467 – Encino and El Dorado Dr.

Before After





Facility 12497 – E. Grand near Midway

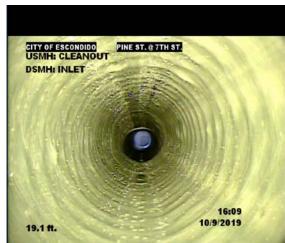




Facility 14328 – Pine St. near 7th Ave

Before After





Facility 10887 – Centre City Parkway near 7th Ave





Facility 15713 – Kenora Drive





14328 - 7th and Pine - Added Cleanout



10319 – Barham Dr. and Meyers Ave. - Point Repair



11287 N. Andreason Dr. and Industrial Ave. - Point Repair



11142 Reed Rd. near La Colina Dr. – Point Repair



12497 E. Grand Ave. near Midway Dr. – Pipe Replacement



10063 Quince near W. Valley Parkway – Point Repair



RESOLUTION NO. 2020-06

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ESCONDIDO, CALIFORNIA, AUTHORIZING THE CITY ENGINEER, ON BEHALF OF THE CITY, TO FILE A NOTICE OF COMPLETION FOR THE STORM DRAIN PIPE LINING AND REHABILITATION PROJECT PHASE 1

WHEREAS, on January 23, 2019, the City Council adopted Resolution No 2019-02, authorizing execution of the Public Improvement Agreement for the construction of the Storm Drain Pipe Lining and Rehabilitation Project Phase I ("Project") in the amount of \$841,310.00; and

WHEREAS, this City Council desires at this time and deems it to be in the best public interest to close the contract based on the actual and final contract value of \$839,828.95; and

WHEREAS, the construction for the Storm Drain Pipe Lining and Rehabilitation Project was completed by Sancon Engineering Inc.; and

WHEREAS, the City of Escondido ("City") staff and the City Engineer deems the filing of the Notice of Completion ("NOC") to be valid and recommends approval; and

WHEREAS, this City Council desires at this time and deems it to be in the best public interest to approve the filing of the NOC.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Escondido, California, as follows:

- 1. That the above recitations are true.
- 2. That the City Council accepts the recommendation of the City Engineer.

3. That the City Council hereby approves the request to file a NOC for the Storm Drain Pipe Lining and Rehabilitation Project Phase 1.





Current Business Item No. 5

January 22, 2020

File No. 0600-11

SUBJECT:

Contract Award and Cost Sharing Agreement for Community Choice

Aggregation/Energy Technical Feasibility Study (MISC 19-0016)

DEPARTMENT:

Community Development Department, Planning Division

RECOMMENDATION:

Authorize the City Manager, in consultation with the City Attorney, to execute a cost sharing agreement to prepare a Community Choice Aggregation/Energy ("CCA/CCE") Technical Feasibility Study for the cities of Escondido, San Marcos, and Vista.

FISCAL ANALYSIS:

There is no direct fiscal impact associated with the staff recommendation. Funding was approved on June 12, 2019, with the FY 2019/2020 operating budget, appropriating \$50,000 to prepare the study.

The total fee estimate received from the preferred consultant firm is \$49,930. The City of Escondido's ("City") share of the total cost was \$21,021. The cost allocated for each city was calculated based on the respective share of energy loads from each of the three (3) cities. If the City opts to develop a CCA/CCE program, the total cost of the feasibility study may be repaid to all participating cities, including Escondido, from the revenues generated by the CCA/CCE.

PREVIOUS ACTION:

On July 17, 2019, the City Council adopted Resolution No. 2019-94 to approve the release of a Request for Proposals ("RFP") for a joint CCA/CCE technical feasibility study.

BACKGROUND:

In 2006, the Legislature passed the California Global Warming Solutions Act of 2006 [Assembly Bill 32 (AB 32)], which created a comprehensive, multi-year program to reduce greenhouse gas emissions, statewide. In 2016, Senate Bill 32 (SB 32) put into law a statewide goal to reduce greenhouse gas emissions 40 percent below 1990 levels by 2030. Altogether, the state is making progress and California is well on its way to meeting the 2020 target, but despite these efforts much more action is needed. The new 2030 requirement is much more ambitious. As a result of the 2030 goal, California cities and counties are seeking out new ways to reduce greenhouse gas emissions and address the impact of climate change by cutting energy consumption. One of the more common methods of mass-switching to renewable energy sources is through a CCA/CCE program or similar program. CCA/CCE is an alternative to the investor owned utility energy supply system to secure

Contract Award for Community Choice Aggregation/Energy Technical Feasibility Study January 22, 2020
Page 2

alternative energy supply contracts. CCA/CCE is a mechanism that enables cities and counties to aggregate the buying power of individual customers within a defined jurisdiction in order to secure alternative energy supply contracts. CCA/CCE provides more choices, more control, and possibly better prices. Since the procured energy can be cleaner for the environment, forming a CCA/CCE can reduce fossil fuel consumption for residents and local businesses.

ANALYSIS:

California is experiencing the emergence of community choice aggregators, a new type of utility. There are currently nineteen (19) operational CCA/CCE programs in the State of California, and another twelve (12) emerging joint agencies considering the same. Under a CCA/CCE, these communities are in control over where their electricity will come from, whether to purchase electricity on the market, or more importantly, to build local renewable energy resources in their respective communities. A local CCA/CCE, if determined to be technically and financially feasible, would procure energy from renewable sources and reduce greenhouse gas emissions generated by residential and commercial sectors of the Escondido community. Furthermore, a CCA/CCE could provide substantial environmental and economic co-benefits and provide the opportunity to fund and implement a wide variety of energy related programs of interest to the community.

On August 8, 2019, a request for proposals was issued to open the requisition process. Two (2) proposals were received by the bid deadline from EES Consulting, Inc. with a proposed study cost of \$49,930; and MRW & Associates, LLC with a proposed study cost of \$103,000. The two (2) proposals, which are provided in Attachments 1 and 2 respectively, were reviewed by staff from the three (3) participating cities. While both proposals were deemed to be responsive and both firms are fully capable of providing professional services, staff determined that EES was qualified and able to do the work at a lower cost. It is important to note that EES prepared the CCA/CCE feasibility study for the coastal cities of Del Mar, Encinitas, Carlsbad, and Oceanside. In order to initiate the study jointly, all three (3) cities must receive cost-sharing authorization by their respective city councils.

As provided in the attached scope of services, in preparation for the study, EES will first assist staff from partner cities in evaluating the data needs for the feasibility analysis, submitting the request for that data to San Diego Gas and Electric (SDG&E), and then verifying the satisfactory fulfillment of that data request. EES will then develop a load forecast, power supply scenarios, a comparative rates analysis, an economic impacts assessment, and a pro-forma analysis for the potential CCA/CCE. EES will also conduct an extensive sensitivity analysis exploring a range of possible outcomes for key variables in the analysis. This will be combined with an analysis of possible regulatory changes and risks to the CCA/CCE. Finally, EES will explore possible models for the governance and management as well as funding. Throughout the study process, EES will check-in regularly with staff from the partner cities to provide updates, solicit feedback, and ensure client expectations are fulfilled. EES will then be available to present the study to staff and city councils as needed by the partner cities.

ENVIRONMENTAL REVIEW:

Contract Award for Community Choice Aggregation/Energy Technical Feasibility Study January 22, 2020
Page 3

The action being considered by the City Council is exempt from the California Environmental Quality Act ("CEQA") because it is not a "project" under Section 15378(b)(5) of CEQA Guidelines. The action involves an organizational or administrative activity of government that will not result in the direct or indirect physical change in the environment. This item is related to the forthcoming Climate Action Plan Update. A CCA/CCE program is likely to be included as a draft city action or measure and would help the city meet greenhouse gas emissions reduction targets and goals established in the Climate Action Plan Update.

APPROVED AND ACKNOWLEDGED ELECTRONICALLY BY:

Bill Martin, Director of Community Development 1/16/2020 9:12 a.m.

Mike Strong, Assistant Director of Planning 1/16/2020 9:43 a.m.

ATTACHMENTS:

- 1. Attachment 1 Proposal from MRW and Associates, LLC
- 2. Attachment 2 EES Consulting, Inc.

MRW & Associates, LLC

Response to Request for Proposal for Community Choice Aggregation Technical Feasibility Study Services

Submitted to The Cities of Vista, San Marcos, and Escondido, CA



MRW & Associates, LLC 1736 Franklin Street, Suite 700 Oakland, CA 94612 Tel: (510) 834-1999

With:



Sage Energy Consulting, Inc. 1719 Fifth Avenue San Rafael, CA 94901 Tel: (415) 663-9914



Economic Development Research Group, Inc 155 Federal Street, Suite 600 Boston, MA 02110 Tel: (617) 338- 6775

Contact: Mark Fulmer

510-834-1999, ext. 240 mef@mrwassoc.com

October 24, 2019

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1. Introduction

This is an exciting but challenging time to be involved in California's energy markets. Broad public policy goals to reduce greenhouse gas emissions and to increase the state's reliance on renewable energy must now be carefully considered in evaluating power procurement options. This is especially true for jurisdictions contemplating instituting a Community Choice Aggregation (CCA) program. In addition to the challenge any new entrant into the market would face, CCAs also must comply with shifting renewable procurement requirements and exit fees. Navigating the complex regulatory, market, and policy interactions of these and related energy issues is critical in making effective decisions regarding the challenges and opportunities presented by a CCA. The MRW Team looks forward to assisting the Cities of Vista, San Marcos, and Escondido, California (the Partners) in their evaluation of implementing a new CCA.

A. The Project

The key to preparing a thorough and accurate feasibility study is understanding and addressing the myriad of interconnections between the different pieces of the analysis. For example, the load forecast is a function of not only the load analysis, but also of projections of economic activity in the Partner Cities and growth assumptions regarding energy efficiency and distributed energy resources. The MRW Team's approach accounts for these interconnections and interactions so that ripple-through effects are taken into account.

Two critical but easily overlooked elements of the study will be addressed by the MRW Team. First, keeping the wholesale power market and prices assumptions consistent between the CCA and San Diego Gas & Electric (SDG&E) is critical. While there are reasons that one might have lower or higher costs than the other for a particular product (e.g., CCAs can use tax-free debt to finance generation projects while SDG&E cannot), both will participate in the wider Western US gas and power markets and, therefore, will be subject to the same underlying market forces. To decouple these assumptions, simply escalating SDG&E rates while deriving the CCA rates using a bottoms-up approach, will result in erroneous results. Second, all elements of the analysis feed into the economic and jobs assessment. Using a dynamic model such as Regional Economic Models, Inc (the REMI model) is the only way to account for the contributions of all of the pieces.

In addition, the amount of local renewable energy development incorporated in the energy supply portfolios (how much renewable energy can be developed at what cost) will also impact the jobs and economic analysis. The MRW Team's prior work with California municipalities has shown that jobs are created not only by local projects but as a by-product of offering lower rates. Having a clear and accurate understanding of the costs of local renewables allows us to better show what macroeconomic tradeoffs occur when locally-sourced, but higher cost, renewables are used to serve the CCA.

Lastly, forming an independent CCA for the Partners is not the only option. As the RFP noted, the Partners may have the option to join existing CCAs. In order to make a fully-informed decision, city decision-makers must know the trade-offs so that they can chart a path forward that best meets their communities needs and values.

B. The Team

MRW & Associates LLC (MRW) has brought together a uniquely qualified team to prepare a comprehensive, in-depth CCA feasibility study for the Partners. MRW brings a deep understanding of wholesale power markets in California, ratemaking at the California Public Utilities Commission (CPUC), and CCA formation. Two of the MRW Team members, MRW and EDR Group, have completed CCA Feasibility Studies for Alameda and Contra Costa Counties, with the third, Sage Energy Consulting, contributing to the Contra Costa Study.

MRW project lead Mark Fulmer has also led the development of CCA business plan developments, peer reviews and risk assessments for numerous counties, cities and towns as they considering CCA formation. These include the City of San Diego (2017-current), the City of Long Beach (2018-current), CleanPowerSF (2017), San Mateo County (2016), Santa Cruz County (2016), Sonoma County (2013), and numerous cities and towns considering joining Marin Clean Energy. Furthermore, numerous active CCAs in the state, including Marin Clean Energy, Sonoma Clean Power, Lancaster Energy Choice CleanPowerSF, Redwood Cost Energy Authority, as well as the state-wide CCA trade group, CalCCA, have been MRW clients and continue to rely on MRW for rate forecasts and regulatory advice and insight. In addition, MRW is also intimately familiar with the calculation and key sensitives of the exit fee ("PCIA"), as it has been a key player in exit fee formation and policy since its inception in 2004. MRW is actively involved in the current Rulemaking at the California Public Utilities Commission in which the revisions to the PCIA—or the establishment of a successor fee—is being considered.

Joining MRW are two subcontractors: Sage Energy Consulting (Sage) and the Economic Development Research Group (EDR Group).

Sage Energy Consulting, an independent energy consulting and project management firm located in San Rafael, California, was established as a California S-corporation in 2009 and is a certified Small Business Enterprise (SBE). Throughout its 10-year history of growth, Sage's core business function has been to serve as Owner's Representative or Owner's Engineer for public agencies that are pursuing energy-related projects. In this role, Sage provides fiscally realistic and objective assessments of energy projects and project management services. Sage is currently supporting several active CCAs in California in developing and managing forward-thinking programs. Furthermore, since 2009, Sage has performed more than 85 project feasibility studies; 59 of these have been completed in the past five years. Sage's approach to feasibility review begins with clearly understanding a client's needs, future goals, project constraints, and financial interests. Sage relies on deep market knowledge, technical expertise, and practical implementation experience to inform project development issues as well as to anticipate upcoming changes in energy technologies, regulatory trends, and financial incentives that will impact project performance during its operational life. Sage has consulted on energy projects and energy efficiency projects with over 100 public agencies, over 80 school districts, and several commercial and industrial clients.

EDR Group brings proven skills in applying state-of-the-art tools and techniques for evaluation of the economic impacts and opportunities associated with energy programs and projects. At the heart of the EDR Group's assessment is the application of economic impact models including the nation's leading systems, REMI and IMPLAN. EDR Group adapts and enhances elements of these systems to provide dynamic analysis of shifts over time in local and state economies, with a high level of the detail. EDR Group has earned a strong reputation for its economic impact studies including work with MRW for the Long Beach, Alameda County, and Contra Costa County CCA feasibility studies. Other relevant work by EDR Group includes economic impact studies for the California Energy Commission, South Coast Air

ATTACHMENT 1

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Quality Management District, analyses of California's net energy metering policy opportunities and resilience analysis for California Dept. of Transportation.

Why the MRW Team?

- MRW is uniquely experienced in both the California energy and the CPUC regulation spheres.
- MRW has prepared CCA Feasibility Studies and related pro-forma models such as the one requested here, assessed renewable markets, and worked with—and continue work with many of the existing CCAs.
- Sage brings proven technical and economic expertise with clean energy project development. Sage is also scrupulously independent, and known for delivering results with the Client's objectives, success, risk management and sustainable viability at top of mind.
- EDR Group provides an unparalleled asset to the MRW Team. Their approach to macroeconomic employment assessment is state-of-the-art. It goes well beyond traditional inputoutput models to capture the full potential macro-economic and employment impacts that a
 CCA can potentially bring to the region. It is doubtful that any other team can offer this level of
 economic impact analysis.

The Partners are well positioned to move forward with CCA. However, they need more than just a superficial assessment before diving into such an ambitious endeavor. The MRW Team is exceptionally qualified to provide the Partners that deep assessment of what CCA formation means—risks as well as benefits—which decision-makers will need to have before jumping in.

2. Project Specifications

The project laid out in the RFP is ambitious and complex. Understanding the interrelationships of all the tasks and using consistent and coherent assumptions throughout are critical to delivering a quality work product. Figure 1 shows the tasks and major assumptions and how they relate to each other. As the figure illustrates, there are numerous integrations between the tasks. For example, the load forecast is a function of not only the load analysis, but also of projections of economic activity in Long Beach and outcomes of the energy efficiency analysis.

Another critical component is that the wholesale power market and price assumptions are consistent between the CCA and SDG&E. While there are reasons that one might have lower or higher costs than the other for a particular product (e.g., CCAs can use tax-free debt to finance generation projects while the utilities cannot), both will participate in the wider western US gas and power markets and therefore will be subject to the same underlying market forces. To decouple these assumptions, such as simply escalating utility rates while deriving the CCA rates using a bottoms-up approach, will result in erroneous results.

Beyond the core load and SDG&E rate analysis, there are other significant factors to consider as well. The parameters that constrain the CCA's supply portfolio (e.g. specific renewable technology preferences or preferences to exclude unbundled renewable energy credits (unbundled RECs)) will in turn impact the CCA's energy supply costs. Additional factors such as staffing size, CCA bond requirements, and SDG&E surcharges (e.g. the Power Charge Indifference Adjustment (PCIA)) all impact the CCA program's costs. A litany of market and policy related risks must also be weighed to access the lasting feasibility of the potential CCA program.

Finally, virtually all elements of the analysis feed into the economic and jobs assessment. As described in detail elsewhere in this proposal, participation in the CCA will have potential implications for local economic development and fiscal activities. We will consult with the Partners staff, and, based on the data inputs and outputs required for the project, the chosen economic model will be used.

The remainder of this section describes the MRW Team's understanding of the requested tasks as well as its approach in accomplishing them.

GHG Wholesale SDG&E Regional Econ. **Analysis Assumptions Assumptions Assumptions Utility Load Data** SDG&E Rates & **Supply Costs** & Options Bills **CCA** Competitiveness **Customer & Pro Forma CCA Rates &** Load **Analysis Load Forecast Analysis** Bills CCA **Assumptions** Regional **Economic & Jobs Economic Analysis Benefits Energy Efficiency Analysis**

Figure 1. Task Map

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The RFP has laid out eight specific technical tasks on which the feasibility study should focus. These tasks encompass load analysis, rate forecasting, energy supply scenario analysis, pro-forma financial analysis, sensitivity analysis of variables, regulatory and risk analysis, governance, management and funding model analysis, and analysis of economic impacts.

A. Task 1: Load Analysis

The load analysis feeds into the rest of the project in two ways: first, it provides the customer base over which all the CCA's costs must be collected. That is, one needs to know the sales estimates in order to develop a CCA rate. Second, the load analysis is the foundation upon which the supply scenarios are built. It specifies when power will be needed so that the unique output characteristics of renewable generating supplies—and other supplies—can be best used to meet the CCA's load.

The first step is acquiring, vetting, and manipulating the load data that is to be provided by SDG&E. As discussed in the RFP, the MRW Team will assist the Partners in acquiring two years of aggregated load data for customers from SDG&E. This requires the Mayor or City Manager of each city to formally request the data. SDG&E may take several weeks to respond. Therefore, MRW recommends that this request be made as soon as possible, before the City retains a consult, so that MRW or the selected consultant can begin work upon execution of the contract. MRW can assist, if needed, with drafting the data request, pro bono.

The MRW Team will determine the loads by rate class, and market segment, which will be critical in developing the load forecast. The load study will also include translating the retail loads into an aggregate load profile for the CCA which the supply portfolio must serve.

Second, the MRW Team will develop a load forecast based on electricity load data. After receiving and processing the data by customer class from the SDG&E, the MRW Team will forecast growth rates by sector and planning area provided in publicly vetted load forecasts. Specifically, the MRW Team will look to the forecast on which SDG&E's electric planning is based, the California Energy Commission's annual electric demand forecast. Additionally, the MRW Team will coordinate with the appropriate planning departments to acquire any community- or city-specific growth projections or economic activity forecasts that might exist.

The MRW Team's load forecast will account for growth in distributed generation, energy efficiency, and demand response. If desired, scenarios will be developed and used to adjust the baseline scenario to forecast incremental levels of energy efficiency (EE) and demand response (DR) capacity that could be added through various CCA activities. This effort will include high and low scenarios based on the inputs defined by the market profile, literature review, and stakeholder interviews. Sage will add to the MRW Team's load forecasting effort by incorporating considerations for in-territory distributed generation (DG) resources that can be supported through procurement programs and enabling policies. Similarly, the proliferation of electric vehicles (EVs) will be considered from a load growth and management point of view, and it has been proven that CCAs can play an essential role in deploying and managing programs to facilitate uptake and harness the benefits from the perspective of local emissions reductions and future opportunities as distributed energy resources (DERs). The MRW Team is, for example, familiar with both local distributed generation and electric vehicle deployment initiatives from prior work with Vista regarding a solar schools program and North County Transit District on zero emission bus planning.

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The MRW Team will also account for loads associated with direct access customers, as well as include an input to explore the changes in load with differing CCA opt-out percentages. Initially, the MRW Team will assume that 5% of customers in the region will opt out of participating in the CCA and will instead choose to remain on SDG&E or direct access service. This opt-out rate is consistent with what has been observed by recently-formed CCAs. Consistent with the RFP, MRW will assess the maximum opt-out percentage under which the CCA would still be viable (i.e. the percentage of customers in each customer class that would need to participate).

B. Task 2: SDG&E Rate Analysis and Comparison

The CCA and SDG&E rate forecasts are critical in assessing the CCA's financial feasibility. MRW has significant expertise in rate forecasting and will build on previously developed in-house rate models to forecast in detail rates for the CCA and comparable SDG&E rates in five- and ten-year timeframes.

The MRW Team will forecast SDG&E's rates in a bottoms-up fashion, using assumptions consistent with those used to derive the CCA rates. Beyond the common assumptions including historic and current SDG&E rates, MRW will consider other key drivers of retail rates, including transmission and distribution investment, hydroelectric and nuclear power costs and outputs, escalation of utility O&M and other costs, and public purpose program costs.

The MRW Team will start with the rate model it developed for its earlier CCA feasibility studies described in the References detailed in elsewhere in this proposal, with modifications to reflect SDG&E's and the Partners' CCA's load and supply preferences. The rate model provides year-by-year rate changes for up to 30 years, reflecting changes in wholesale power markets, changes in renewable power costs, and SDG&E's supply portfolio. We account for SDG&E's actual power supply portfolio, explicitly modeling the utility's portfolio of renewable, gas-fired, and nuclear resources.

Various scenarios with differing cost elements will be considered including high gas, low gas and rate restructuring. Using the past decade's worth of SDG&E tariffs, the MRW Team will assess the Partners' viability to withstand longer term economic downturns. In addition, should the Partners plan to deploy distributed generation or demand management policies that are substantially different from comparable SDG&E policies, MRW will account for potential cost differences that could impact the rate comparison. One example would be offering solar Net Energy Metering (NEM) compensation rates that are substantially different (higher or lower) from those offered by SDG&E.

A particularly challenging element to forecast is the Power Charge Indifference Amount (PCIA or "exit fee") that SDG&E charges to all CCA and direct access customers. The PCIA value changes from year to year and can vary from nil to over 2 cents per kilowatt-hour. This volatility can have major impacts on the competitiveness of the rates the CCA can offer and can create cash flow or constituent relations problems (or both). If the CCA rate plus the PCIA would be greater than the SDG&E rate, the CCA must borrow, dip into reserves, or charge rates that are in total greater than those offered by SDG&E.

Mr. Fulmer, who will head the MRW Team, is one of California's primary experts on these matters and has been involved with the development of exit fees since their inception in 2002. In addition, Ms. Casas at MRW regularly provides PCIA forecasts to clients.

C. Task 3: Energy Supply Scenario Analysis

The Partners have requested that multiple energy procurement scenarios be analyzed. The RFP states that the consultant shall develop multiple energy supply scenarios corresponding to different renewable energy procurement percentages. The MRW Team proposes to develop the following four energy supply scenarios and to coordinate with the Partners to develop any additional scenarios that are necessary to reflect each Partner's greenhouse gas emissions goals:

- Option 1: Consistent with SDG&E's current RPS.
- Option 2: Baseline, minimum 37% California qualified renewable energy, linearly increasing from 33% in 2020 to 60% in 2030.
- Option 3: Start with 50% renewable and build up to 100% of the CCA's total load being met by California eligible renewables by 2030.
- Option 4: Option 2 with greater amounts of locally-sited renewable energy projects.

In no cases will the MRW Team assume the use of unbundled RECs. At the Partners' option, the analysis will incorporate an assumption that consumers would be able to opt in for a 100% renewable option.

We note that with the passage of Senate Bill 100, there may be no appreciable difference between Options 1 and 2. SDG&E, as well as all other retail energy providers including CCAs, will have to meet the 60% RPS requirement in 2030. As such, analyzing both options may not result in any new insight. The MRW Team will work with the Partners to determine the most meaningful options to investigate, so as to provide the decision makers and community the fullest understanding of the implications of different resource scenarios. In addition, the MRW Team will work with the Partners to identify the specific resources mixes to model in each energy supply scenario so as to capture any specific preferences on the part of each Partner.

The MRW Team will include in its analysis an assessment of CCA rates under each supply option as well as a comparison of those rates to the utility's default rates and an optional 100% renewable, i.e., "Green Option" tariff. In addition, the MRW Team will examine the impact of including varying levels of local renewable generation in each supply portfolio.

The foundation of the supply scenarios is the output of the load analysis and forecast: what power load must the CCA meet? Once that load is determined, the MRW Team will develop a suite of options that can be used to meet the CCA load as well as the renewable goals set out in each option. The suite of options will likely include market energy and resource adequacy purchases, short-term conventional power purchases, short-term renewable purchases, long-term power purchase agreements (PPAs) with renewable developers, both local and not, and CCA-developed and owned renewable projects. Again, our team appreciates the position and opportunity CCAs hold to facilitate local economic development through local distributed energy deployment. The MRW Team will leverage our past experience working with other established CCAs, municipalities and utilities, including lessons learned, to advise a risk managed but forward-thinking approach to supplies.

This last option—the CCA developing and owning its own utility-scale renewable projects—offers the greatest cost savings but at the greatest financial risk. Because the CCA would be a nonprofit governmental entity, it would not have to account for shareholder profits that privately developed projects incur and can use less costly tax-free debt.

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The MRW Team will estimate the financial and environmental implications of each of these scenarios and perform a sensitivity analysis on each supply scenario. Included in these sensitivity analyses will be the following cost variables:

- Natural gas prices. Gas prices are currently very low and are projected to remain low for the
 next few years. Low gas prices depress power market prices and make it more difficult for
 renewable projects to compete on price.
- Changing costs of renewable technologies over time. Renewable technologies are maturing quickly. For example, in many locations, wind power is price competitive with gas-fired generation. Solar PV prices have plunged. Other technologies, such as biomass, face increasing environmental restrictions that can hinder their development.
- SDG&E Generation Rates. The evolution and forecast of SDG&E's generation rates and
 additional surcharges will play a key role in MRW's supply analysis. MRW will use its in-house
 forecasting tools to best understand how SDG&E's evolving costs will impact and compare to the
 CCA's costs. MRW will also take into consideration the RPS increasing to 60% by 2030 under SB
 100.
- Opt Out Rates. MRW will consider the impact of customer opt out rates, especially as the
 popularity of CCAs continues to grow and SDG&E (and other Investor Owned Utilities) in
 California continue to adapt to this changing electricity landscape.
- Changing policy. Changes in state or federal policies can impact the costs of generation. For example, federal tax policy concerning renewables can have a profound effect on the financial viability of solar PV, both on rooftops and in central generating stations.
- Other. Beyond the cost to generate the power, other incidental costs will be incurred, including costs for transmission scheduling, congestion, and ancillary services.

MRW will assess the CCA's cost of power, analyzing the cost, capacity, and viability of electric service providers in San Diego County and how they might serve a CCA operated by the Partners. Included in this analysis will be projections of CAISO and administration costs incurred by the CCA. The MRW Team will present a cost comparison of these scenarios to the Partners' staff members.

D. Task 4: Cost of Service Pro Forma Analysis

The pro forma model is the heart of the financial analysis. It uses the costs from the supply and analyses and CCA operational assumptions to derive the annual cash flow, from which the CCA rates are derived. MRW will use its in-house pro forma model, which has been most recently used to develop the City of San Diego's business plan and the ongoing technical study for the City of Long Beach. Beyond the power costs, the MRW CCA pro forma model includes:

- Cost to comply with the state's Resource Adequacy requirements.
- Startup-costs, including paying back any loans made to the CCA by city agencies
- Cost of Capital
- Operating and maintenance costs including administrative, staffing, legal, customer, data management and scheduling costs
- Costs associated with uncollected accounts
- Setting and building up cash reserves
- Regularly intervention and compliance costs, including CCA bonding and re-entry fees
- SDG&E surcharges and recovery cost mechanisms (including exit fees)

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- Power project development, including net metering programs and a CCA feed-in tariff
- Loss of franchise fee revenue under current agreements with IOU

Of interest to the Partners is information regarding alternative CCA organization and structure. Per the RFP, MRW will provide information regarding:

- CCAs operated by one or more individual jurisdictions
- CCAs operated by independent regions
- CCAs operated collectively
- CCAs operated by a third-party administrator

Over 20 CCAs have been formed in California. Their formation provides much greater certainty regarding the costs and organizational structure to operate the CCA. MRW has worked with many of these CCAs and will review their start-up and ongoing costs so as to make the best estimate possible for the Partners.

MRW will use its pro forma model to analyze the economic feasibility of a CCA for the Partners. The pro forma will show year-by-year (over the course of five- and twenty-year terms) estimated cash flow under each of the sensitivity and supply scenarios. The model shows expenses to the CCA (broken down by cost category) and total average cost per kilowatt-hour provided. MRW will use known and predictable cost of service variables and examine the impacts of customer phase-in over time.

E. Task 5: Sensitivities

The MRW pro forma model is built to allow for analysis of the financial feasibility subject to a series of sensitivity analyses. The MRW pro forma model includes the following key variables in its sensitivity analysis:

- Phase-in options
- Partner Participation,
- Market prices for conventional (nonrenewable) energy;
- Market prices for renewable energy based on preferred technologies;
- Compliance costs associated with California regulation and legislation;
- Cost for CCA start-up and administration;
- Changes in SDG&E generation rates, exit fees, and customer surcharges;
- Changes in policies affecting local renewables development, including the possible net metering
 policy changes, possible reduction or elimination of the federal solar tax credit and production
 tax credit for wind power, and project labor agreements;
- Rate sensitivity to local renewable generation, energy efficiency, and demand reduction programs;
- Rate sensitivity to customer opt-out percentage;
- Regional parties' (including individual Partners') choices to opt into the CCA upon startup—or not; and
- Impacts and potential costs should any city opt out of the CCA after its establishment.

MRW will examine these and other key sensitivities to develop several possible cases that demonstrate the range of likely results of the analysis.

F. Task 6: Regulatory and Risk Analysis

The creation of a CCA can place risks on the counties, its member cities, and its residents and businesses. Some of these risks are significant, while others are less important. The types of risks fall into several broad categories, as outlined in the RFP:

- a) Financial Risks: Relate to the risk the CCA is unable to meet demand obligations
- b) **Procurement risks:** Relate to the ability of the CCA to procure power at reasonable costs, to avoid significant under- or over-procurement, and the future success of the CCA at entering into the necessary power supply agreements, particularly with respect to local renewables.
- c) **Opt Out Risks**: Relate to the risk to the city or CCA should a significant number of customers opt out of CCA service and revert back to SDG&E.
- d) **CCA Failures:** To date, there have been no CCA failures in California. The MRW Team will review CCAs in other states and identify ones that have failed, why they failed, and if the underlying causes are applicable to a California CCA.
- e) Regulatory and legislative risks: Consist of uncertainty in regulatory decisions by the California Public Utilities Commission or laws passed in Sacramento that could adversely affect the costs that customers have to pay to take service from the CCA. These risks can include changes to the exit fees (PCIA charges) paid by customers, changes to the bonding requirements for the CCA, and changes in the CPUC's regulatory authority over CCAs (e.g., the CCA must submit and have approved long-term procurement plans), to name a few.
- f) Renewable power procurement risks: The MRW Team will review the responses to RFPs issued by other California CCAs, municipal utilities, and investor-owned utilities (like SDG&E) and to the extent allowed by appropriate confidentiality rules, assess whether sufficient renewables are under development to allow the CCA to successfully meet its renewable goals.
- g) Customer cost risks: Consist of the uncertainty in exit fees, whether the CCA can "meet or beat" and SDG&E's costs of service, how the CCA will handle adding different tranches of customers in the future, and the uncertainty in costs that are passed directly from the CCA's power supplier to customers. This category also includes the risk that the CCA may not be willing, or able, to provide low-income customers rates that will be no higher than SDG&E's and potential impacts on customers in the event of program failure or loss.
- h) **Economic Impact:** Relate to the costs and benefits of the Partners in forming a CCA, not limited to the economic impacts facilitated by local jobs, local renewable energy projects and other energy innovations that may come about due to the CCA.
- i) **Grid Stability:** Relates to the risk that grid instability results from CCA procurement policies, increasing the likelihood of power shut-offs as compared to IOU electric procurement policies.

To assess the financial risks of forming a CCA, the MRW Team will use the pro forma analysis, load forecasts, SDG&E rate forecast, and supply and sensitivity scenarios to determine the financial risks to the Partners of the CCA. The MRW Team will also review risks related to uncertainty in regulatory decisions by the CPUC or the State of California that could adversely affect the costs that customers must pay to take service from a CCA or the ability of a CCA to provide service. The MRW Team will explore risks associated with market volatility and additional city-specific risks concerning supplier guarantees, new generation guarantees, and financial liability in the event of CCA failure. The MRW Team will incorporate analysis and discussion of additional risk factors identified by the Partners as areas of concern.

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Finally, the MRW Team will also identify and qualitatively discuss other risks that are not easily quantified or cannot be quantified. These risks include public perception and political risk if the CCA underperforms, as well as community objection to local renewable projects.

G. Task 7: Governance, Management, and Funding Models

This review addresses the institutional issues that may arise when assessing program and service delivery alternatives. The review is accomplished in two ways. First, a framework is suggested for use in assessing alternative institutional arrangements. Criteria for assessing alternative institutional arrangements include funding, representation, management structure, and adaptability. A CCA program operated through a regional Joint Powers Authority (JPA) or through individual cities and counties will be determined based on the criteria assessment, with additional considerations to be made. A JPA structure provides an independent regional body comprising member local jurisdictions to address the common issues of delivering energy while providing a forum for equal representation. The ability for local governments to form a JPA is enabled under existing state law, while any need for special authority not currently granted by law can be achieved through local action to create new state enabling legislation.

As part of this review, the MRW Team will specifically address the potential for partnering with the City of San Diego or San Diego County in their planned CCA programs.

In contrast to a JPA structure, city management structures provide more individualized local control and enable each jurisdiction to establish the CCA program to fit individual jurisdictional needs. This includes establishing a new enterprise fund within the jurisdiction's budget to manage and account for program activities. This model is a widely used method for utilities where it is expected that user type revenues will pay for the costs with minimal government subsidies. In this case, this model could be employed through a consortium where each Partner operates an independent CCA, but where the Partners share certain administrative and other functions to achieve cost efficiencies while maintaining decision-making discretion over their power supply and policy options.

The MRW Team will evaluate each governance method through an opportunities and constraints assessment for achieving program objectives, management efficiency and effectiveness, risk to participating communities, financial impacts, and decision-making autonomy and discretion. Use and management of third-party vendors for part or full program implementation will also be evaluated in relation to each governance model.

The MRW Team will present the results of this analysis and cost comparison to the Partners' staff and present the pros and cons of each option available.

As requested in the RFP, the MRW Team will prepare a conceptual program funding plan that includes analysis of common CCA program financing models and repayment scenarios for each model. The MRW Team will also address the potential local energy programs that the CCA may implement, such as energy efficiency and conservation programs, local renewable energy development, community power system resilience, local job programs, and programs targets to low-income and disadvantaged communities, and economic and business development efforts.

H. Task 8: Economic Impacts

The RFP requests an analysis of the economic impacts of CCA formation. This analysis may be provided by subcontractor EDR Group. As outlined below, different tools can be used with varying levels of precision and sophistication: ranging from an application of the IMPLAN input-output model and time series extensions of it, to state-of-the-art analysis, providing full macroeconomic and detailed employment implications using the REMI dynamic model.¹

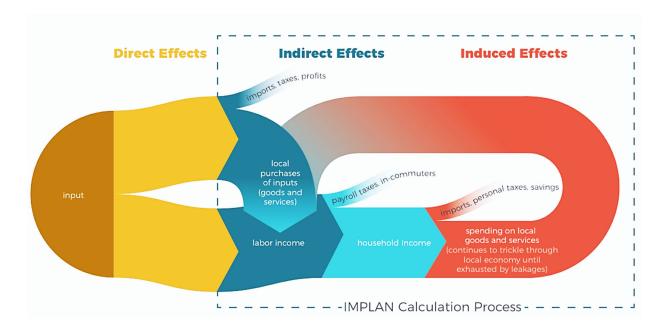
The most straightforward form of economic analysis is to utilize an "input-output" model, which portrays the mix of economic activity in the study area(s) and how various types of business buy from and sell to each other. This modeling makes it possible to trace how changes in energy-related spending and procurement (as would occur under CCA scenarios) lead to complex yet measurable changes in local jobs, supplier sales and household income which may also evolve over time.

The pattern of spending differs depending on the mix of solar, wind, natural gas or other forms of generation to be purchased, or types of generation facilities to be constructed or expanded. EDR Group has extended the IMPLAN model to estimate of the number of direct construction, engineering, operating personnel jobs and income that would be used by each type of generation facility (covering wind, solar, hydro and geothermal). This analysis extends and updates analysis templates formerly provided by the NREL JEDI (Jobs and Economic Development Impact) model. EDR Group has the expertise to adjust renewable technology profiles using IMPLAN to match the profile of expected generation sources applicable for The Partners' CCA.

Calculating Secondary and Broader Effects. The core approach of EDR Group builds on a detailed local economic model including IMPLAN which is the nation's most widely used economic model. EDR Group is highly experienced in use of this model, including its use in studies for the City of Long Beach, Southern California Association of Governments (SCAG), the Port of Long Beach and the California Department of Transportation. EDR Group will build upon IMPLAN's unparalleled level of industry detail (536 sectors) and its multi-regional form that can work at the municipal level to trace the interdependence of the Partners' economies with that of economic activities located elsewhere in San Diego County. This approach will make it possible to trace how changes in energy related spending leads to shifts in local purchasing, spending, jobs and income levels. The outcome of this modeling process will be calculated effects on business sales, employment and wages, by detailed industry and occupation over time.

1	Each	option	is	priced	separatel	v.

household income

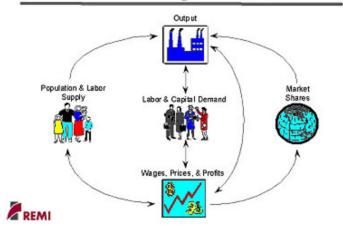


The IMPLAN model can also be used to calculate wider impacts of CCA administration and operation, as well as effects of rate changes on the composition of expenditures by residential and municipal ratepayers. (Note that direct employment effects of the CCA may be accompanied by an estimate of job losses for the Partners' current energy providers. While the number would likely be small, it is important that the net direct employment change be used to accurately represent the CCA economic effect.)

Calculating Rate and Broader Economic and Employment Effects. The one type of impact that cannot be directly assessed by the IMPLAN framework is the effect of electricity rate reductions on the profitability and competitiveness of operating a business in Long Beach, which can trigger additional business expansion. EDR Group has extensive experience in calculating how rate changes affect disposable income for households and economic competitiveness for various business classes. We anticipate estimating the effects of expected energy market price changes by drawing on MRW's past CCA experience in California to assess the investment and expansion response of business ratepayers to delivered price changes that the CCA might produce. Effects on local taxes can also be estimated.

As an option, EDR Group can apply the REMI model to more precisely calculate the effect of rate changes on local business investment and expansion over time. The REMI model is a dynamic simulation model that considers the equilibrium of supply, demand and prices for labor and materials under alternative scenarios, and their effects on business location and expansion (for various industries). It is the premier model for analysis or rate and cost impacts at the state and metropolitan level and it can also be adapted at higher cost for local areas. EDR Group has used it for past energy and environmental impact policy

Simplified Economic Structure of the Key Interactions in Regional Economies



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studies in California, including work for the California Energy Commission, California Public Utilities Commission, Southern California Associations of Governments (SCAG) and the Southern California Air Quality Management district (SCAQMD). EDR Group has some of the nation's leading experts on REMI use, and EDR Group can use that expertise to provide more precise and detailed estimates of how rate shift impacts interact with spending impacts to affect long-term business investment and growth (and associated jobs and income) in the Partner cities and in San Diego County. There is an added cost to using REMI, and the added value of this approach will depend on whether the expected magnitude of CCA effects on electricity rates as well as the need for precision in calculating its impact.

The outcome of this task will be a chapter discussing the impact of alternative CCA scenarios on local jobs, household income and business sales and profitability. The results will be estimated in terms of effects over time, and they will be disaggregated by industry and occupation. Local tax revenue effects will also be noted. The potential for local policies and programs to enhance or diminish the economic impacts will also be assessed.

I. Task 9: Deliverables and Reports

1. Project Management

The MRW Team is committed to providing the Partners with independent, impartial analysis. MRW has not performed business for any Investor Owned Utility in the last 15 years. MRW has conducted no business on behalf of the IOUs since the inception of CCA within California.

Mr. Fulmer will be the overall project manager and primary point of contact of the Partners. From MRW, Mr. Howarth will lead the power portfolio scenario construction and assessment and Ms. Casas will lead the rate and pro forma modeling. Mr. Weisbrod will lead the EDR Group's economic modeling tasks. Figure 2 below outlines the organization of the MRW Team.

MRW envisions an initial kick-off meeting with the Partners' Staff and any designated stakeholders. At that meeting, MRW will present its anticipated schedule, data needs, and communication paths. Based on the outcome of that meeting, MRW will prepare a detailed schedule of intermediate deliverables culminating in the Final Report.

MRW also recommends weekly or biweekly status calls or webinars between Mr. Fulmer, the Partners' designated project managers, and other MRW Team staff, as needed, to keep the Partners abreast of the project's progress as well as respond to any questions that may arise. Even outside of these structured calls, MRW Team members will be available to respond to questions via telephone, email or if needed, in person.

Mark Fulmer
Project Manager

Anna Casas
Load, Rate and Pro
Forma Modeling

MRW

Sage

EDR Group

Figure 2: MRW Team Organizational Chart

2. Description of Deliverables

As discussed earlier, the MRW Team recommends that the Partners prepare their initial data request to SDG&E for load data as soon as possible. The MRW Team is willing to assist the Partners in finalizing this data request if necessary while the Partners consider all RFP responses.

Prior to completing its technical study, the MRW Team will review, verify, and finalize SDG&E load data and address any data discrepancies. The MRW Team will also work with the Partners to finalize the study scope, analytical assumptions, and energy supply scenarios.

Per the RFP, the MRW Team will prepare a draft technical study report detailing the results of the technical study. The report will include but is not limited to:

- Recommendations for CCA organization and implementation
- Assessment of the overall cost-benefit potential to support a threshold decision to move forward with CCA
- Program development and implementation costs
- Net ratepayer costs over the forecast period
- Estimated cost of the CPUC-required CCA Implementation Plan, identified separately for each of the three agencies

Other information that will be included in the Technical Study results:

- Scope of Work specific to the needs and requirements for a CCA in the Partners and a detailed, sequential description of how and who is best suited to complete and enact the requirements in the Technical Study:
- A project schedule, estimating when each of these requirements and activities would need to be completed
- Net GHG reductions
- Net changes in renewable energy use
- Local economic development
- Financial exposure to market power prices

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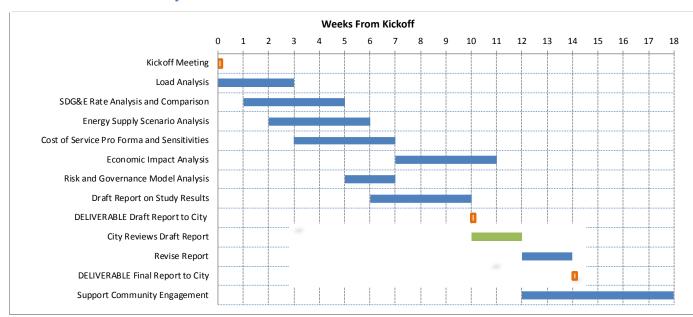
- Pro forma analyses detailing:
 - costs and projected benefits under three electric supply scenario assumptions
 - o costs and projected benefits under sensitivity case assumptions
 - costs and projected benefits of phasing in customer load over time

The MRW Team will first prepare a draft report for the Partners' staff review and approval. The MRW Team will also provide a draft pro-forma model in Microsoft Excel Staff will return written comments writing on the draft report within two weeks. The MRW Team will respond to the comments and submit a final report within one week of receiving the staff comments along with a final pro-forma model which can be used by the Partner(s) staff or designee. Should the Partners wish to request a third-party review of the draft feasibility study prior to the MRW Team delivering a final report, the MRW Team will respond to comments or questions received as a result of that review and address any additional feedback from the Partners.

As mentioned, the MRW Team will develop presentation materials and deliver a presentation regarding the feasibility report and related recommendations to the public. The budget assumes six presentations per the RFP. The MRW Team will be available to deliver additional presentations on a time-and-materials basis.

The RFP specifically requested support with outreach to the public to support the study using a variety of media for each of the six public meetings. The MRW Team will work with the Partners to provide the requested support, however due to the multiple media forms and potentially broad scope of support requested, the team proposes to undertake this work either on a time-and-materials basis or under a budget agreed upon in consultation with the Partners.

3. Project Timeline



3. Project Staffing and Management

Below is a brief description of the key members of the MRW, Sage and EDG Group teams. Résumés for all personnel likely to work on this project are attached as Appendix D.

A. MRW

Mark Fulmer is a Principal and partner at MRW with over 25 years of experience in the energy industry. Much of this work has been in the regulatory arena, advising customers, trade groups, municipalities, utilities, and state public utility commissions on resource planning, energy efficiency, and rate matters. He has submitted testimony before the Federal Energy Regulatory Commission and utility commissions in Arizona, California, Hawaii, Pennsylvania, Rhode Island, and Washington, as well as supporting testimony in ten other states and Canadian provinces.

With respect to CCA matters, Mr. Fulmer was the lead author of the CCA feasibility assessment in San Diego Gas & Electric Southern service area and contributed to the peer reviews of the CCA feasibility studies for Marin, Berkeley, Oakland, Emeryville, and the Kings River Conservation District. Mr. Fulmer was also the principal investigator for risk assessments performed by MRW on behalf of several cities considering participation in the Marin Clean Energy CCA program. He also served as an expert witness before the CPUC on behalf of the City and County of San Francisco on CCA matters, including the rules under which CCAs would operate, and the fees that IOUs would be allowed to charge CCAs for the various services the utility would have to provide. Mr. Fulmer was also one of three witnesses sponsored jointly by the MEA, the City and County of San Francisco, and the DA parties in the CPUC proceeding addressing the correct calculation of the Cost Responsibility Surcharge for departing load (CCA and DA) customers. Most recently, Mr. Fulmer sponsored testimony on behalf of the City of Lancaster concerning the fees that Southern California Edison proposes to charge CCAs for the various services the utility would have to provide.

Mr. Fulmer holds a master's degree in engineering from Princeton University, where he conducted graduate research at the Center for Energy and Environmental Studies, and a bachelor's degree in engineering from the University of California, Irvine.

David Howarth is a Principal and partner at MRW with 25 years of experience in the energy industry. Mr. Howarth specializes in quantitative and qualitative analysis of energy economics, policy, and technology issues. Clients include energy project developers, owners, lenders, public agencies, and endusers. His current focus is on utility procurement issues and energy project development. He is an expert on renewable energy policy and has worked with a number of renewable energy project developers in the western states and Hawaii, providing analytical support to their development efforts. Activities have included construction of pro forma financial models, bid support for utility Request for Offers, and analysis of qualifying facilities energy pricing for existing projects. He has also worked with customers and distributed generation suppliers to analyze supply options and utility bill impacts.

Mr. Howarth holds a master's degree in energy and resources from the University of California, Berkeley, and a bachelor's degree in economics and biology from Wesleyan University.

Anna Casas Llopart is a Senior Consultant at MRW. Ms. Casas Llopart provides modeling support for MRW's team. Her work focuses on researching and analyzing energy data and related policy, with an emphasis on California electricity markets. She develops MRW's forecasts and analyses pertaining to

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electricity rates, rate design, and other energy matters. She also develops expert testimony for regulatory proceedings and litigation. Prior to her work at MRW, Ms. Casas Llopart worked for Nexus Energia, an Electricity Service Provider (ESP) based in Spain. There she created analytical models to forecast production for renewable technologies, customer energy demand, and spot market prices, modeled cost of electricity procurement and generation, managed scheduling and settlements, and developed and implemented new technology to optimize billing operations.

Carlo Bencomo-Jasso is a Senior Associate at MRW. Mr. Bencomo-Jasso work focuses on data analysis and policy research. Prior to joining MRW, Mr. Bencomo-Jasso worked for consulting firms specializing in energy and economics. His previous work experiences include load forecasting, capacity market modeling, cost-benefit analysis and econometric modeling. Mr. Bencomo-Jasso holds a master's degree in energy and environment from Boston University, a master's degree in environmental science and management from the University of California, Santa Barbara, and a bachelor's degree in history from Princeton University.

B. Sage

Dustin Jolley, P.E., LEED AP, CEA recently joined Sage as a full-time employee, after having been affiliated with Sage as an independent contractor for several years as well as running OurEnergy, his own private energy consultancy and project development company in Santa Cruz. Mr. Jolley has over 15 years of experience as a Civil/Environmental Engineer and has dedicated his career to the advancement of renewable energy and sustainable development. He has held positions in academic R&D, public service, and the private sector. He is an experienced engineer, business developer, and strategist, and is also a certified project/program manager. He is accomplished in organizations from start-ups to large corporations and has held leading technical and managerial roles implementing over a gigawatt of renewable power generation. This work has employed technologies including solar PV and thermal, biomass, wind, hydro, fuel cells, storage technologies, and hybrids. Some of his most recent work includes advanced microgrids and distributed energy resources (DERs) in domestic, overseas, and emerging markets. He has overseen all aspects of project development from concept to commissioning and asset management. Mr. Jolley's work has spanned the spectrum from personally designing and installing the smallest stand-alone remote hybrid power and water projects to holding key roles in some of the largest utility projects and programs ever built. His civil engineering and sustainable systems experience includes major civil projects such as green buildings and facilities, and water and utility infrastructure including transmission, pipelines, pump stations, tunnels, dams/reservoirs, and hydroelectric projects. He has been honored to be the recipient of several awards and recognitions including from the U.S. Congress, the U.S. EPA, the U.S. DOE, private industry, and NGOs for contribution to our energy future.

Brent Johnson, PE, LEED AP is a founder and principal of Sage and has managed or supported most of Sage's projects to date. Mr. Johnson has 22 years of experience as a Civil-Environmental Engineer, with 10 years in the renewable energy sector. During his time at Sage, he has developed custom financial and energy modeling tools and managed all aspects of renewable generation and storage projects including feasibility studies, system design, project bids and construction, commissioning, asset management, and environmental credits management. Mr. Johnson has worked on over 75 renewable energy projects totaling over 250 MW, most of them for public agencies. His projects have encompassed a number of technologies such as solar PV, battery storage, solar thermal, EV charging, wind, hydropower, and vehicle fleet electrification. Mr. Johnson has been instrumental in developing Sage's construction

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management and commissioning procedures and templates, and he regularly manages these phases of projects. Mr. Johnson also currently serves as a director for his local water and fire district.

Tom Williard is one of Sage's founders, whose work focuses on the development of technical and financial feasibility models for solar PV, BESS, and microgrid evaluations. Mr. Williard has more than 15 years of experience as an energy consultant and has a background in hardware and software engineering. He has developed most of Sage's in-house financial feasibility models.

C. EDR Group

Michael Sherman is EDR Group's Principal Consultant for energy efficiency, policy, planning and evaluation. He has more than 30 years' experience in a broad range of energy roles in the public and private sectors, including policy and legislation, regulation, program planning and evaluation. Mr. Sherman is currently managing EDR Group's evaluation of community-oriented clean energy programs in eastern Massachusetts. He served for five years as Director of Energy Efficiency Programs in the Massachusetts Dept. of Energy Resources, where he planned and executed policy and programs aimed at achieving cost-effective energy efficiency savings and reducing Greenhouse Gas emissions. Earlier, he directed policy and planning for the MA low income Weatherization Assistance Program. He has spent over 15 years evaluating energy efficiency programs for Xenergy, Inc., Navigant Consulting, and Sherman Energy Solutions. He holds an MA in Planning from Boston College and BA from Brooklyn College.

Glen Weisbrod is President of EDR Group and the firm's Principal Economist on issues of public policy and program analysis. He brings over 30 years of research experience evaluating impacts and benefits of public and private programs spanning energy, economic development and infrastructure assessment applications. In the past, he led analyses of economic studies of energy efficiency programs for PG&E and Southern California Edison. He also directed studies of economic development impacts of energy grant programs for several utilities including Niagara Mohawk and Entergy, and worked with the State of Wisconsin evaluating the economic impacts of their Renewable Energy grant programs. He has also worked on analysis of community choice aggregation for various clients including most recently the City of Long Beach. He is currently working on completion of a study of our nation's energy investment needs and the economic consequences of failure to invest in them as part of a study for the American Society of Civil Engineers. He holds an MCP (City Planning) and MS (Civil Engineering) from MIT, and a BA in Economics from Brandeis University.

Adam Blair is an Economist and Senior Analyst with EDR Group. He brings extensive research experience with industry and regional economic impact studies. His recent work includes estimating analysis of the economic impacts of offshore wind in Maryland, community energy aggregation in California and currently including the City of Long Beach and national studies of the battery industry and recycling, as well as evaluations of state energy programs for the US Dept of Energy. He has also worked on freight and economic supply chains in the Illinois economy and incentive grant programs in Minnesota and Maine. Prior to joining EDR Group, Mr. Blair was a researcher at the Community and Regional Development Institute at Cornell University. Adam has also served as an adjunct instructor at DePaul University in Chicago and at Tennessee State University.

4. Company Background

The Prime contractor for this bid is MRW & Associates.

The MRW Team possesses the depth and breadth of experience and skills required to assist the Partners with the technical feasibility of community choice aggregation. At MRW, each member of our team has extensive knowledge of CCA, electric power procurement, electric rate design, electricity load analyses, renewable energy and distributed energy, pro forma modeling, and California's energy policies and regulations. Subcontractor Sage Energy Consulting is adept at technical and economic modeling, program design & implementation support, project management, procurement support, and broadly in the role of Owner's Engineer. Subcontractor EDR Group has significant experience analyzing the economic impact of CCAs with its suite of advanced modeling tools.

References for the MRW Team can be found in Appendix A.

A. MRW & Associates

MRW is organized as a Limited Liability Corporation. MRW's business address is

1736 Franklin Street, Suite 700 Oakland, CA 94612

Telephone: (510) 834-1999 Facsimile: (510) 834-0918

Primary Contact Person: Mark Fulmer

Email: mef@mrwassoc.com

MRW has two LLC Members (Principals): Mark Fulmer (President) and David Howarth (Chief Financial Officer). Either Mr. Fulmer or Mr. Howarth may sign contracts on behalf of the LLC. Currently, no MRW employees reside in any of the Partner cities. There are 10 employees at MRW. Upon request, MRW will provide audited financial statements.

Having been founded in 1986, MRW has been in existence for 32 years. MRW is internationally recognized for its broad expertise in electric power and fuel markets. We combine an in-depth knowledge of these markets with rigorous economic and technical analysis to help our clients assess market opportunities, develop business strategies, and address regulatory issues.

MRW offers its clients a comprehensive portfolio of consulting services in the areas of power market analysis, regulatory and litigation support, natural gas market analysis, and retail market support. Because we maintain a singular focus on the energy industry, our industry expertise is both deeper and broader than many other consulting firms. We understand the strategic implications of evolving regulatory models, emerging technologies, and changing market dynamics and we put this knowledge to use to serve our clients' interests. Practical research, qualitative and quantitative analysis, and industry expertise underpin all of MRW's work and ensure that our client recommendations are sound.

Established in Oakland, California, in 1986, MRW has built a solid reputation for delivering local insights on power and fuel markets in the western United States and successful intervention in legislative and

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regulatory proceedings on clients' behalf. MRW continues to deliver high-quality market insights, analysis, and client support on a national and international level. The company has undertaken engagements in more than 20 different states, including nearly every state in the western United States. The company maintains a strong focus on California markets and regulatory structures. The location of the company office in Oakland, California, facilitates our active participation in proceedings at the CPUC, the California Energy Commission (CEC), and the California Independent System Operator (CAISO).

MRW's client base includes municipalities, consumer advocates, major financial institutions, private power developers, power marketers, Fortune 500 industrial companies, commercial end-users, natural gas pipelines and storage service providers, regulatory agencies, and other strategic players in the energy sector. MRW's team of professionals includes specialists in renewable energy, power market modeling, financial analysis, regulatory processes, utility rate design, legislative analysis, commodity procurement, energy use analysis, contract negotiations, transmission planning and pricing, and strategic planning.

As discussed in greater detail below, MRW has been deeply involved in the development of CCEs in California. Table 1, below, shows the cities and counties MRW has advised on joining or forming a CCA. The table highlights MRW's, primarily Mr. Fulmer's, experience presenting results and options to local decision makers and the impacted communities.

Table 1. MRW CCA Formation Experience

			Presentations	
			to Decision	Presentations to
Client	CCA	Products	makers	Community
City of Long Beach	TBD	Feasibility Risk Analysis		
City of San Diego	SDRCCEA	Implementation Plan Business Plan Peer Review		
City of Corona	TBD	Feasibility Risk Analysis		
City of Palmdale	CCEA	Org. Options Risk Analysis		
Contra Costa Co.	MCE	Feasibility Org. Options Risk Analysis		☑
Alameda County	EBCE	Feasibility Org. Options Risk Analysis	Ø	☑
Santa Barbara County	Multiple and ongoing	Peer Review Risk Analysis		
CleanPowerSF	CleanPowerSF	Business Plan		
Santa Clara County	SVCE	Peer Review Risk Analysis		
San Mateo County	PCE	Peer Review Risk Analysis		
Santa Cruz County	MBCE	Peer Review Risk Analysis		
Sonoma County	SCP	Peer Review Risk Analysis		
City of Benicia	MCE	Peer Review Risk Analysis		
City of Richmond	MCE	Peer Review Risk Analysis	Ø	
Marin County Cities of: Novato, San Rafael, Ross Sausalito, Larkspur, San Anselmo	MCE	Peer review Risk Analysis	Ø	✓

1. MRW Knows CCA Issues

MRW has been working on CCA issues since they were authorized by the California State Legislature in 2002. MRW staff, including Mr. Fulmer, were key witnesses at the CPUC regarding the rules of conduct that govern the relationships between the CCA, the host utility and the CPUC.

MRW has two ongoing CCE-related projects in Southern California. The first is with MRW's long-term client, the City of San Diego. For San Diego, MRW drafted a CCA Business Plan. For the newly-formed San Diego Regional Community Choice Energy Authority (SDRCCEA), MRW is providing input into the selection of key vendors such as the recently-released RFP for financial services; is monitoring and advising on CCA-related activities at the CPUC (including SDG&E's General Rate Case and the ongoing PCIA Rulemaking); and is on the team drafting SDRCCEA's Implementation Plan.

MRW is also currently working with the City of Long Beach on its CCE feasibility study. This work addresses Long Beach's unique customer mix (significantly more large industrial customers than the typical CCA), assess the scope of possible in-city solar development, quantities the economic and employment implications of CCA, and lays out in greater detail than has been seen in other feasibility plans the risks that the City might face with CCE formation, along with ways that those risks can be addressed.

Going back to the beginning, in late 2008, MRW conducted an independent review of the reports and documents associated with Marin County's CCA efforts. This review focused on the 2008 "Marin CCA Business Plan," an expert's professional peer review of the plan, PG&E's comments on the plan, and responses to the peer review and comments. MRW's analysis and review concentrated on two main areas: the critical factors that would lead to a financially viable CCA program, and the major risk factors that would affect potential participants in the CCA.

In late 2009, Marin County and city/town managers again retained MRW to review the draft service agreements that MEA was proposing to enter into with Shell Energy North America. This review concentrated on identifying the risks to MEA, the cities, the towns, and the County that were not sufficiently addressed in the MEA-Shell agreement. MRW provided suggested changes and amendments to the agreements to mitigate those risks. Many of MRW's suggestions were subsequently incorporated into the final contract.

In 2011, MRW worked with Sonoma County Water Agency as it assessed the feasibility of forming a CCA. MRW's role was to provide a due diligence review of the financial, rate and power procurement assumptions and analysis of their draft feasibility study. MRW found that the general approach used to examine the feasibility of a CCA was sound and all major cost components were addressed. However, MRW found that the manner in which the results were presented, while not unreasonable, tended to be more favorable toward CCA formation and the risks and downsides of CCA formation were not highlighted. MRW also found that some of the results were presented in a way so as to minimize the appearance of cost differences between the CCA and PG&E.

In 2015 and 2016 MRW drafted CCA Technical Studies for Alameda and Contra Costa Counties. These studies answered the same fundamental questions being asked by the Partners: what are the costs, benefits, and risks of CCA formation? MRW responded to questions and comments from numerous stakeholders, as well as city councils in the two counties as well as both Boards of Supervisors.

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From 2014 through 2017, MRW has continued to provide professional peer reviews and advice to cities and counties considering CCA formation. These include the counties of San Mateo, Santa Cruz, Santa Clara, San Luis Obispo, Santa Barbara, Ventura and the City of San Diego.

MRW also continues to be active advocating for CCA positions at the CPUC. Mr. Fulmer provided expert testimony on behalf of the CCA trade association, CalCCA regarding the level of financial security requirements that CCA's should have to provide to the host utility (2017) and is actively participating the in the current CPUC proceeding addressing exit fee reform.

2. MRW Knows Renewable Energy

Even beyond the analysis and research into renewable power costs and output profiles needed to support the CCA feasibility studies discussed above, MRW regularly works in other the renewable energy space. For a large private landholder, MRW examined the solar resource and performance of different solar PV plant configurations (fixed or tracking, flat or tilted). MRW also developed pro forma financial models to provide the client with an indication of potential costs and returns associated with a solar PV project located on its land. MRW also worked with the landholder's attorney to identify key potential fatal flaws in the project. Finally, MRW identified several potential development partners for the landholder.

For an Independent Power Producer looking to develop one or more solar PV projects at different locations in California's Central Valley, MRW developed estimates of the solar resource and plant performance for different plant configurations using simulation modeling tools developed by the National Renewable Energy Laboratory. MRW also assisted the developer with translation of generation estimates into revenue estimates.

For a large agricultural interest in California's Central Valley, MRW performed a fatal flaw assessment of a potential 1 MW "behind the meter" solar PV project. MRW also identified and helped the client to quantify key project risks. MRW helped the client with identification of experienced project developers/installers in order to minimize construction risk and warranty performance.

3. MRW Understands Resource Planning and Energy Procurement

Utility resource planning entails acquiring the right power resources to meet the current and future needs of a utility—or a CCA—in a least-cost fashion, subject to certain constraints. These constraints include limiting rate volatility, meeting state and/or federal requirements, and in the case of CCAs, reflecting the local values of residents and businesses in the CCA area; these values could include increased renewable energy and decreased greenhouse gas (GHG) emissions.

MRW has seen resource planning from both sides. As part of CCA contract reviewers for Marin Clean Energy and Sonoma Clean Power, we know the unique positions that new CCAs face when setting resource portfolios for immediate as well as future service. As part of the Alameda CCA Study as well as its ongoing work with the South San Joaquin Irrigation District, MRW is currently crafting resource portfolios for analysis and review. Furthermore, MRW Team members have also served clients by reviewing and critiquing California investor-owned utility short- and long-term resource plans, including those of Southern California Edison.

4. MRW Understands Utility Rates and What Drives Them

MRW regularly provides clients with short-, medium-, and long-term forecasts of SDG&E retail rates. These forecasts are performed on a bottoms-up basis and incorporate wholesale gas, power, and GHG emissions coefficients based on power content, SDG&E rate cases, resource plans, and other regulatory filings so as to best reflect future rates. As such, we are well positioned to accurately forecast SDG&E rates as well as ensure that the CCA costs are prepared on a consistent basis (i.e., same underlying wholesale market conditions).

A particularly challenging element to forecast is the Power Charge Indifference Amount (PCIA or "exit fee") that SDG&E charges to all CCA and direct access customers. The PCIA value changes from year to year and can vary from nil to over 2 cents per kilowatt-hour (kWh). Mr. Fulmer, who will head MRW's team, is one of California's primary experts on these matters and has been involved with the development of exit fees since their inception in 2002. In addition, Ms. Casas at MRW regularly provides PCIA forecasts to clients.

B. Sage

Sage Energy Consulting, an independent energy consulting and project management firm located in San Rafael, California, was established as a California S-corporation in 2009 and is a certified Small Business Enterprise (SBE).

Sage's business address is:

1719 Fifth Avenue San Rafael, CA 94901 Telephone: (415) 663-9914

Primary Contact: Dustin Jolley Email: dustin@sagerenew.com

Throughout its 10-year history of growth, Sage's core business function has been to serve as Owner's Representative or Owner's Engineer for public agencies that are pursuing energy-related projects. In this role, Sage provides fiscally realistic and objective assessments of energy projects and project management services. Project management services typically include feasibility review and investment-grade feasibility studies, RFQ/P preparation, vendor selection, contracting assistance, and construction management, commissioning, and project closeout support. Today, Sage's staff of 13 employees consists of its three founding principals, an operations manager, six veteran project managers and energy analysts, one construction manager, and two administrators.

Since 2009, Sage has performed more than 85 project feasibility studies; 59 of these have been completed in the past five years. Sage's approach to feasibility review begins with clearly understanding a client's needs, future goals, project constraints, and financial interests. We use our deep market knowledge, technical expertise, and practical implementation experience to inform project development issues as well as to anticipate upcoming changes to energy technologies and regulatory trends/incentives that will impact project performance during its operational life.

Sage has consulted on energy projects and energy efficiency projects with over 100 public agencies, over 80 school districts, and several commercial and industrial clients. Collectively, these projects represent more than 350 MW of renewable energy generation and storage. Sage has led design review and written

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procurement specifications on 53 large-scale projects since 2009 and 41 in the past five years. Sage has led development of more than 35 commercial-scale renewable energy projects, with 26 of those projects developed in the past five years. These projects include developing feasibility studies and providing subsequent design, procurement, and project management services to large campus and portfolio clients, such as the installation of 24.5 MW of solar PV electricity generation at 27 sites in the Kern High School District. In particular, Sage has previously worked with Vista in deploying a solar schools program and with the North County Transit District on zero emission bus planning.

Sage works with a wide variety of market-ready energy technologies, including solar PV, solar thermal, fuel cells, wind energy systems, and energy system-supporting technologies such as energy storage and microgrids. On behalf of our clients, we have worked directly with Tesla and many other battery energy storage systems (BESS) and PV+BESS companies to understand and refine their value accounting and pricing, and to integrate these technologies with LEED, Living Building Challenge, and California's upcoming Title 24 requirements. Sage is actively helping public agencies plan for electric vehicle infrastructure upgrades and fleet transitions. Our deep understanding of the market is used to determine if BESS or other new technology investment is appropriate, what assumptions have the greatest market impact, and anticipated investment risk.

C. Economic Development Research Group, Inc.

EDR Group is a consulting firm formed specifically to advance state-of-the-art tools and techniques for evaluating economic impacts and opportunities associated with public investments, programs, and policies. EDR Group's business address is:

155 Federal St., Suite 600 Boston, MA 02110

Telephone: (617) 338 6775 Primary Contact: Glen Weisbrod Email: gweisbrod@edrgroup.com

Currently no EDR Group employees reside in the Partner cities. The firm was started in 1996 by a core group of economists and planners who are specialists in evaluating the economic impacts and benefits of energy, environment and transportation programs and policies. From its headquarters in Boston, the firm's 22 professionals provide research and evaluation for agencies around the US. In 2016 EDR Group became an affiliate of EBP — an international group spanning Europe, South America and Asia — that provides interdisciplinary collaboration and innovation to enable more effective planning and analysis, with a goal of balancing economic, social and environmental sustainability.

The hallmark of EDR Group is a solid focus on state-of-the-art evaluation processes, conducting interviews, surveys and focus groups, and applying advanced economic analysis methods to assess wider benefits and outcomes of public programs, policies, and investments. EDR Group perform its analyses with advanced economic modeling tools. EDR Group's client range spans federal agencies (e.g., Departments of Energy, Transportation, and Treasury), organizations (e.g., US Conference of Mayors, American Society of Civil Engineers), state agencies (e.g., California, Oregon), regional agencies (e.g., SCAG, ABAG), counties (e.g., Alameda, Contra Costa), cities (e.g., Long Beach, San Francisco), business organizations (e.g., Oregon Business Council, Vancouver Gateway Council), Regional Planning Organizations (Metropolitan (Boston) Area Planning Council) and utilities (e.g., PG&E, National Grid).

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EDR Group's energy-related studies encompass market/feasibility, economic impact, social benefit/cost and tax revenue analysis pertaining to:

- Energy efficiency technologies and support programs,
- Community programs (for energy efficiency and aggregation of power purchasing)
- Renewable energy systems (including wind & solar generation),
- Resilience of critical energy generation, transmission and distribution infrastructure,
- Energy and environmental policies, and clean technology product development and adoption.

EDR Group has significant experience in community-level energy programs and policies and clean energy solutions. Examples of this experience are as follows.

Examples of EDR Group's Experience in Community-Level Energy Programs and Policies

Long Beach CCA (Community Choice Aggregation). For the City of Long Beach, California, EDR Group is part of the team with MRW that has been assessing the feasibility of a Community Choice Aggregation (CCA) program. The role of EDR Group has been to identify local economic benefits -- including job creation, increased local energy investment, and reduced energy imports -- that would occur with the further development of a CCA, energy bill reductions and additional local solar generation.

Additional Community Choice Energy (CCE) Programs. EDR Group (under subcontract to MRW) assessed economic impacts related to Community Choice Energy Aggregation programs in California. These programs allow a County to purchase or self-generate lower carbon emitting energy, invest in their own renewable generation, and deploy additional energy-efficiency. The studies for Alameda County and Contra Costa County assessed job impacts resulting from electricity rate changes, and the shift from existing generation and distribution systems to lower carbon technologies.

Evaluation of Community-Based Energy Efficiency Program in Low Income Communities. EDR Group developed an evaluation methodology for a pilot anti-poverty energy program operated by our partner, EBP, for the town of Renca, located outside of Santiago, Chile. The first of its kind program in Chile, this program provides installation of energy efficiency measures, education on best practices, and behavioral changes promoting energy efficient lifestyle in a low-income population.

Evaluation of Clean Energy Community Programs. EDR evaluated the Boston Area Metropolitan Area Planning Council's portfolio of community-oriented energy programs. They range from technical assessments of community energy needs, to integrating with the Massachusetts *Green Communities Program*, as well as technical assistance to municipalities developing *Community Choice Aggregation* and local energy efficiency initiatives.

Examples of EDR Group's Experience in Clean Energy Solutions

Comprehensive Renewable Energy Strategies. EDR Group works alongside EBP partners in Europe on energy studies. EBP has been working across Switzerland as and in Germany, Brazil, Chile and Vietnam, developing market analysis and implementation strategies for renewable generation technologies including via photovoltaic, biomass, wind and geothermal power.

Wind Farms and Supporting Infrastructure in Rural Regions. Nicolas Rockler of EDR Group conducted analysis of the regional economic (industry job and income) impacts of proposed wind farms in rural areas. He also assessed the economic impacts of proposed transmission lines to serve renewable

Proposal for Community Choice Aggregation Study

generation sources, that involved location through environmentally sensitive regions. Stephen Wahlstrom of EDR Group has also conducted analysis of the regional economic impacts of geothermal generation facilities in California.

Net Energy Metering for Distributed Generation. EDR Group (under subcontract to MRW) assessed impacts on California's economy of deploying solar distributed energy generation resources under net energy metering tariffs. EDR Group applied economic modeling to assess effects on jobs and income due to changes in ratepayer costs, utility avoided costs, and customer investments. Our EBP partners also evaluated the efficiency and effectiveness of Switzerland's policy for renewable feed-in tariffs.

Photovoltaic Generation. EDR Group (under subcontract to Sustainable Energy Advantage) evaluated impacts on the NY State economy from increasing photovoltaic (PV) electricity generation. EDR Group used economic models to assess impacts from of scenarios including small residential, commercial and industrial sector adoption of small-scale PV, as well as mega-watt scale installations. Steve Wahlstrom of EDR Group also conducted an economic benefit study for a proposed photovoltaic farm in California.

Advanced Biofuels. EDR Group assisted the Massachusetts Advanced Biofuels Task Force to define the potential economic opportunities of developing an advanced biofuels sector in the state. EDR Group evaluated economic incentives for production of biomass fuels and the benefits for the state's economy. This work contributed to the funding a new state biofuels program.

Clean Energy Benefits. For the Connecticut Clean Energy Fund, EDR Group (under sub-contract to KEMA/DNVGL) conducted economic impact analysis (EIA) and benefit-cost analyses (BCA) for on-site distributed generation investments and residential small solar installations.

Geotargeting Evaluation. For Vermont Department of Public Service, Mike Sherman of EDR Group led the process evaluation of an innovative set of geographically targeted energy efficiency improvements in local areas to delay or avoid expensive transmission & distribution investments in constrained areas.

Community Energy Efficiency Initiative. Mike Sherman of EDR Group conducted a "Lessons Learned" study for the Cambridge Energy Alliance, a consortium of foundations that funded a pioneering municipal-based initiative to seek broad energy savings and Greenhouse Gas emissions reductions. He assessed factors affecting outcomes of the five-year Community Energy Efficiency initiative and lessons learned from comparable efforts in other cities.

Monitoring, Reporting & Verification for Energy Cities in Chile. Our affiliate EBP is developing a Monitoring, Reporting and Verification (MRV) System to enable Chile's Energy Cities program to quantify their achieved emissions reductions. Chile's program is based on the Swiss Energy Cities Label and the European Energy Award (EEA), and was established largely through the work of EBP. Currently, more than 20 cities are participating, implementing a variety of renewable and energy efficiency measures.

5. Fee Information

A. Price Quote

The MRW Team will compete the tasks listed in the RFP and presented here, excluding the requested economic impact analysis, for fees and expenses not to exceed \$103,000, to be billed on a time-and-materials basis. The MRW Team proposes to provide monthly detailed invoices.

For the economic impact analysis requested in the RFP, EDR Group offers the following two options, which are discussed in detail in Section 2 and Appendix B. *These are incremental to the \$103,000 quote above*. The MRW Team also proposes to bill these services on a time-and-materials basis subject to the not-to-exceed budgets below, to be invoiced monthly with all other work.

Option 1: IMPLAN-based modeling: \$22,000Option 2: REMI-based modeling: \$40,000

B. Billing Rates for All Personnel

The following hourly billing rates will apply.

1. MRW

Consultant	Level	Rate, \$/Hour			
Key Personnel					
Fulmer	Principal	\$330			
Howarth	Principal	\$330			
Casas	Senior Consultant	\$230			
Bencomo-Jasso	Senior Associate	\$224			
Additional Personnel who may contribute					
Neal	Senior Project Manager	\$299			
Charles	Senior Project Manager	\$252			
	Associate	\$167			

2. Sage

Level	2019-2020 Rate, \$/Hour	2021 Rate, \$/Hour
Managing Principal	\$250	\$265
Principal	\$235	\$250
Associate Principal	\$225	\$235
Subject Matter Expert	\$320	\$335
Senior Project Manager	\$220	\$230
Project Manager	\$195	\$205
Senior Engineer	\$195	\$205
Engineer	\$165	\$175
Senior Data Scientist	\$195	\$205

Level	2019-2020 Rate, \$/Hour	2021 Rate, \$/Hour
Data Scientist	\$165	\$175
Construction Manager	\$180	\$190
Senior Analyst/Technician	\$170	\$180
Analyst/Technician	\$140	\$145
Program Support Specialist	\$100	\$105
Project Administrator	\$80	\$85
Energy Intern	\$105	\$110

3. EDR Group

Consultant	Level	Rate, \$/Hour
Key Personnel		
Weisbrod	President	\$274
Sherman	Principal Consultant	\$233
Blair	Energy Economist	\$157
to be named	Energy Analyst	\$130

Appendix A: References

A. For MRW

Client Name: City of San Diego

Contact Person: Cody Hooven, Director/Chief Sustainability Officer

(619) 236-6563

chooven@sandiego.gov

Services Provided: Peer Review of CCA Feasibility Plan

Business Plan for Community Choice Aggregation

CCA Implementation Plan

Dates: November 2017-Present

In late 2016, the City of San Diego commissioned a study to understand the feasibility of using a CCA program to assist in meeting its goal of achieving 100% renewable energy city-wide by 2035. In April 2017, the City requested MRW to provide a professional peer review of the Study. MRW found that the Study was detailed and comprehensive but that there were a few reasons for concern with the results of the initial study:

- The assumptions for the forecast of SDG&E rates were inconsistent with those used in the forecast of CCA rates because the SDG&E rate forecast was simply an extrapolation of current rates, while the forecast of CCA rates was based on market and operational assumptions;
- The initial study did not clearly differentiate between generation rates and delivery rates when comparing SDG&E rates and CCA rates; and
- The initial study made overly conservative assumptions about contributions to reserve funds.

In 2018, MRW supported the City in its review of SDG&E's proposal to supply the City with a 100% renewable energy option for the residents and businesses in the City.

Also in 2018, MRW prepared the Draft CCA Business Plan for the City of San Diego. This Business Plan provided a framework to the City for moving forward with CCA formation.

The Peer Review of the CCA Feasibility Study can be found at:

https://www.sandiego.gov/sites/default/files/final cca feasibility study peer review 040617 pub fe b_22_2018.pdf

The Peer Review of the SDG&E Proposal can be found at:

https://www.sandiego.gov/sites/default/files/final review of sdge proposal 2018-03-15 0.pdf

The CCA Business Plan can be found at:

https://www.sandiego.gov/sites/default/files/draft final cca business plan city of san diego octobe r 2018.pdf

Proposal for Community Choice Aggregation Study

Client Name: City of Long Beach

Contact Person: Tony Foster, Business Operations Manager

(562) 570-2015

tony.foster@longbeach.gov

Services Provided: CCA Technical Study
Dates: 2019 (ongoing)

MRW, is nearing the end of the preparing a feasibility study for the formation of a CCA in the City of Long Beach. MRW considered such factors as the feasibility and extent of possible local renewable development, multiple generation portfolios, economic and employment impacts, and strategic phase-in of CCA accounts. MRW is scheduled to present the results to the County Board of Supervisors and numerous City Councils.

B. For Sage

Client Name: CleanPowerSF and San Francisco Public Utilities Commission (SFPUC)

Contact Person: Jordan Decker, Utility Specialist, CleanPowerSF

(202) 384-2259

jdecker@sfwater.org

Mike Hyams, Director, CleanPowerSF

(415) 551-4598

mhyams@sfwater.org

Erin Mulberg, Origination & Power Supply, Power Enterprise

(415) 551-4598

emulberg@sfwater.org

Jamie Seidel, Manager, Distributed Energy Resources and Projects,

Power Enterprise (415) 554-1537 JSeidel@sfwater.org

Services Provided: Project and Program Support and 2020 Integrated Resource Plan (IRP),

Supporting Analysis

Dates: 2019 (ongoing under 5-year contract through 2023)

Sage and its subcontractor, PFM, are delivering consulting services to CleanPowerSF through an as-needed, contract with the SFPUC. Sage and PFM are assessing candidate energy projects to facilitate the CPSF's strategic decision-making in relation to CPSF's renewable goals and 2020 IRP. Sage is estimating and comparing project costs and cost recovery options; and is characterizing projects' development risk, markets and technologies, existing and projected resource availability, and shape of energy deliveries. In addition, Sage and PFM are estimating and comparing secondary project impacts, such as job creation, avoided greenhouse gas emissions, and CalEnviroScreen factors.

In addition, Sage is providing as-needed support for matters related to the procurement, implementation, and construction management of energy projects. Sage is providing construction management and consulting services concerning utility-scale projects currently under

Proposal for Community Choice Aggregation Study

development; evaluating proposals for utility-scale projects; and supporting related contract negotiations.

Client Name: Marin Clean Energy

Contact Person: David Potovsky, Power Supply Contracts Manager

(415) 464-6652

dpotovsky@mcecleanenergy.org

Services Provided: Solar One Owner's Engineer Services; Solar PV/BESS/EV Charging

Modeling and Optimization

Dates: 2016-2018

Sage Renewable Energy Consulting (Sage) was retained by MCE as Owner's Engineer (OE) for the 10.4 MW Solar One project in Richmond, CA. As OE, Sage provided design submittal review and oversight to ensure the project met local code requirements, considerable site restrictions, interconnection requirements, design criteria, and MCE labor requirements. Sage reviewed all design submittals, provided comments, and met repeatedly with the design and financing teams. During construction, Sage provided OE oversight of the construction management, attending weekly meetings and conducting regular site walks to ensure the project was on track and being built to design and industry standards. Sage conducted a thorough commissioning verification (CxV) to ensure that the project was built and operating to contract and design, that punch list items were addressed, and that complete project closeout documentation was provided by the developer. Sage provided a CxV report to MCE.

Sage also provided technical modeling of the solar PV, BESS, and EV charging project at MCE's headquarters to estimate project costs and returns, and to optimize meter configuration and tariffs.

In May 2019, Sage gave a Power Hour presentation about commercial-scale BESS to MCE commercial customers.

C. For EDR Group

Client Name: Alameda County

Contact Person: Bruce Jensen, Alameda County Planning Department

224 West Winton Avenue, Room 111

Hayward, CA 94544 (510) 670-5400

Services Provided: Technical Study for Community Choice Aggregation

Dates: 2015-2016

EDR Group (under subcontract to MRW) assessed the jobs and income impact for the proposed implementation of a Community Choice Energy program for municipalities in Alameda County, CaliforniaEDRG used an economic model to assess impacts on the county economy due to electric rate changes under the CCE, and from changes in investment related to local (in-county) renewables and

Proposal for Community Choice Aggregation Study

energy efficiency. It also assessed the potential displacement of jobs related to existing electricity generating units and transmission/distribution infrastructure.

Client Name: Metropolitan Area Planning Council (MAPC)

Contact Person: Cameron Peterson, Director, Clean Energy Department

60 Temple Place Boston MA 02108 (617) 933-0791

Services Provided: Evaluation Clean Energy Programs

Dates: 2018-2019

EDR Group performed an extensive evaluation of the impacts and effectiveness of a range of clean energy programs, advocacy, technical assistance and resource development provided to 101 communities in the metropolitan Boston Area, focused on energy efficiency, decarbonization and increasing municipal capabilities to address a variety of clean energy needs. A particular focus was MAPC technical assistance and interactions with municipalities considering and implementing Community Choice Aggregations in the state's competitive electric environment, transforming aggregation from initial emphasis on consumer cost reductions to transition to increasing renewable energy supply and stimulating in-state and regional renewable energy generation.

Appendix B: Resumes

A. For MRW

MARK E. FULMER

PROFESSIONAL EXPERIENCE

Principal

MRW & Associates, LLC

(1999 - Present)

Conduct economic and technical studies in support of clients involved in regulatory and legislative proceedings and power project development. Advise clients on the economic issues associated with taking electricity service from non-utility sources or self-generating power. Work includes expert testimony on rate matters; economic analysis of end-use energy-efficiency projects, retail rate and wholesale price forecasting, and pro forma analysis of cogeneration and distributed generation facilities.

Project Engineer Daniel, Mann, Johnson & Mendenhall (1996 - 1999)

Acted as project manager and technical advisor on energy efficiency projects. Work included management of PG&E program to promote innovative energy efficient technologies for large electricity users. Coordinated the implementation of an intranet-based energy efficiency library. Directed technical and market analyses of small commercial and residential emerging technologies.

Associate Tellus Institute (1990-1996)

Advised public utility commissions in five states on electric and gas industry deregulation issues. Submitted testimony on the rate design of a natural gas utility to the Pennsylvania Public Utilities Commission. Testified before the Hawaii PUC on behalf of a gas distribution utility concerning a competing electric utility's demand-side management plan. Analyzed national energy policies for a set of non-governmental agencies, including critiquing the DOE's national energy forecasting model. Developed model to track transportation energy use and emissions and used the model to evaluate state-level transportation policies. Developed model to track greenhouse gas emission reductions resulting from state-level carbon taxes.

Research Assistant

Center for Energy and Environmental Studies, Princeton University (1988-1990)

Researched the technical and economic viability of gas turbine cogeneration using biomass in the cane sugar and alcohol industries. First researcher to apply "pinch" analysis and a mixed-integer linear programming model to minimize energy use in cane sugar refineries and alcohol distilleries.

EDUCATION

M.S.E., Mechanical and Aerospace Engineering, Princeton University, 1991 B.S., Mechanical Engineering, University of California, Long Beach, 1986

DAVID N. HOWARTH

PROFESSIONAL EXPERIENCE

Principal

MRW & Associates, LLC

(9/96 - Present)

Specializes in quantitative and qualitative analysis of energy economics, policy and technology issues. Clients include energy project developers, owners, lenders, public agencies, and end users. His current focus is on utility procurement issues and energy project development. He is an expert on renewable energy policy and has worked with a number of renewable energy project developers in the western states and Hawaii, providing analytical support to their development efforts. Activities have included construction of pro forma financial models, bid support for utility RFOs and analysis of QF energy pricing for existing projects. He has also worked with customers and distributed generation suppliers to analyze supply options and utility bill impacts. He has participated in policy studies on the need to replace aging generation infrastructure in California and on the status of nuclear generation and waste storage facilities. Other work has included litigation support, market due diligence, and contract negotiation support.

Associate

RDC, Inc.

(9/93 - 9/94) Independent Consultant (9/94 - 9/96)

Provided management consulting services, including strategic business planning and subcontractor management, to developer of a flywheel energy storage system for transportation and stationary applications. Performed market study for manufacturer of small, advanced gas turbines. Researched electric utility, oil and gas, and manufacturing industries to identify technical and market opportunities for small gas turbines. Completed assessment of emerging market for fiber optic communications installed along electric utility rights-of-way. Identified and characterized industrial processes for which electricity-to-gas energy substitution opportunities exist to support utility demand-side management efforts.

Analyst

Global Change Unit, ICF Incorporated (9/89 - 7/93)

Performed quantitative analyses and wrote reports and briefings for large consulting firm providing environmental and economic services to governmental and private-sector clients. Co-authored EPA study of the potential for renewable sources of electricity to reduce air pollution. Developed models to analyze the long-term impacts of U.S. government programs to increase carbon storage in forests and to reduce greenhouse gas emissions from agricultural sources. Participated in a variety of regulatory studies of selected toxic substances for USEPA. Analyzed the operations and financial performance of multinational corporations to determine profit levels consistent with a fair treatment of transfers with their foreign subsidiaries.

EDUCATION

M.A., Energy and Resources Group, University of California, Berkeley, 1996 B.A., Economics and high honors in Biology, Wesleyan University, 1989

ANNA CASAS

PROFESSIONAL EXPERIENCE

Senior Associate

MRW & Associates, LLC

(2015-present)

Research and analyze energy data and related policy, with an emphasis on California electricity markets. Develop forecasts and analyses pertaining to electricity rates, rate design, and other energy matters and develop expert testimony for regulatory proceedings and litigation. Monitor and analyze regulatory and policy developments affecting the California energy markets.

Engineering Consultant (2013-2015)

Designed engineering solutions for commercial and residential buildings, including in the areas of energy efficiency, electrical systems, fire protection, and environmental systems.

Portfolio Manager Nexus Energia (2009-2013)

Created analytical models to forecast production for renewable technologies, customer energy demand, and spot market prices. Modeled cost of electricity procurement and generation and managed scheduling and settlements. Developed and implemented new technology to optimize billing operations for a Spanish Energy Services Provider.

Engineering Consultant Crisergas

(2008-2009)

Designed liquefied natural gas satellite plants, liquefied petroleum gas storage facilities, control stations, and receiving facilities.

EDUCATION

M.S. in Engineering and Management of Renewable Energy IL3 University Barcelona, 2009

B.S./M.S. in Industrial Engineering, Polytechnic University of Catalonia, 2006

CARLO A. BENCOMO-JASSO

PROFESSIONAL EXPERIENCE

Senior Associate

MRW & Associates, LLC

Provide research and data analytics pertaining to electric-utility planning, regulation, and economics.

Senior Associate Resource Insight, Inc (2019)

Created energy price estimates and evaluated bids for power procurements. Assessed renewable resource build-outs for Integrated Resource Plans. Reviewed econometric models employed in utility load forecasts. Evaluated the economics of coal plant retirements.

Analyst

Daymark Energy Advisors (2017-2019)

Performed data collection and statistical analysis of energy commodity pricing and power data. Developed data analytics reports, regulatory testimony, and other supporting analysis and documents. Performed load forecasting and capacity market modeling. Conducted economic impact and cost-benefit analyses for energy development projects.

Teaching Fellow

Department of Earth and Environment, Boston University (2013-2016)

Taught weekly undergraduate discussion sections on international economics, environmental science, and energy. Assisted students with class material and graded class assignments and exams.

Solar Rooftop Analyst Southern California Edison (2010)

Aided in development of leasing agreements with commercial property owners for the installation of solar arrays 1 MW and larger in size. Maintained program databases. Created presentations and weekly status reports on site acquisitions and leasing agreements for senior management. Supported development of marketing materials for program outreach.

EDUCATION

M.A., Environment and Energy, Boston University, 2016

M.S., Environmental Science and Management, UC Santa Barbara, 2012

A.B., History, Princeton University, 2009

MARY NEAL

PROFESSIONAL EXPERIENCE

Senior Project Manager MRW & Associates, LLC (2018)

Conduct technical analysis of electric and gas utility rate cases and other regulatory filings and serve as expert witness in regulatory proceedings. Construct and critique models for utility cost allocation, rate design, retail rate forecasts, and benefits of distributed generation facilities. Evaluate energy procurement options and provide analytical and strategic support for business decisions and litigation on electric and gas issues.

Senior Consultant Daymark Energy Advisors, Inc. (2009-2017)

Advised electric and gas industry clients on resource planning, utility rates, and market design issues. Testified before multiple state and Canadian provincial regulatory agencies on issues related to electric market modeling, fuel cost forecasting, cost allocation, rate design, and electric utility capital planning. Prepared and critiqued numerous electric and gas utility allocated cost of service, revenue requirement and rate design models. Led modeling team for Daymark Energy Advisors' AURORAxmp Northeast electric market model.

Engineer Solar Turbines, Inc. (2005-2008)

Designed dry low-emission combustion systems for Mars SoLoNOx gas turbines. Led development of fuel injectors for landfill gas and aftermarket retrofit applications.

EDUCATION

M.A., Energy and Environmental Analysis, Boston University, 2010 B.S. Mechanical Engineering, University of California, Davis, 2005

BRANDON J. CHARLES

PROFESSIONAL EXPERIENCE

Senior Project Manager MRW & Associates, LLC

(September 2008 – May 2013, March 2016 - present)

Analyze electricity and natural gas market data with a focus on markets in the western U.S. Evaluate utility ratemaking issues, including cost of service, revenue allocation, and rate design. Develop and sponsor expert testimony on utility ratemaking, budget, and various policy and technical issues. Develop models forecasting retail and wholesale electricity prices. Research and interpret policy decisions and proposals affecting the energy market. Develop reports on energy policy and market issues, including the impact of policy changes on new project development.

Senior Market Analyst Bloom Energy (June 2013 – March 2016)

Analyzed electricity and natural gas market prices and trends, regulatory policies impacting distributed generation markets, new market opportunities, stationary fuel cell addressable market size, and the economics of potential product offerings. Developed cash flow models and assumptions for distributed generation project economics for Fortune 500 customers and state policymakers.

Coordinator, Economic and International Policy Biotechnology Industry Organization (BIO) (September 2006 – August 2008)

Analyzed industry trends, legislative and regulatory policy developments, and economic issues in support of industry policy positions and related studies.

Legal Assistant White & Case, LLP (July 2005 – June 2006)

Managed U.S. litigation and international arbitration cases, including the arbitration of an international power plant development contract.

EDUCATION

A.B., Economics, Dartmouth College, 2005

B. For Sage



Dustin Jolley PE, LEED AP

Mr. Jolley has over 15 years of experience as a Civil/Environmental Engineer and

has dedicated his career to the advancement of renewable energy and sustainable development. He has held positions in academic R&D, Public Service, and the Private

sector. He is an experienced engineer, business developer, strategist, and project/

program manager. He is accomplished in organizations from start-ups to large corporations and has held leading technical and managerial roles implementing over

a gigawatt of renewable power generation. This work has employed technologies including solar PV & thermal, biomass, wind, hydro, fuel cells, storage technologies

and hybrids. He has overseen all aspects of project development from concept to

commissioning and asset management. His civil engineering and sustainable systems

experience also includes major civil projects such as green buildings & facilities, water & utility infrastructure including transmission, pipelines, pump stations, tunnels,

His work has spanned the spectrum from personally designing and installing the

smallest stand-alone remote hybrid power and water projects to key roles in some of the largest utility projects and programs ever built. He has been honored to be

the recipient of several awards and recognitions including from the US Congress &

Senate, USEPA, USDOE, private industry, and NGOs for contribution to our energy

Associate Principal

PROFESSIONAL HISTORY

- 18 Years Renewable Energy
- 25 Years Construction Industry

WORK EXPERIENCE



Sage Renewables Associate Principal 2019 — Present

OurEnergy Principal

2015 — Present

URS / AECOM

Renewable Energy Practice Leader 2007 - 2015

Yurok Tribe Tribal Engineer

2005 - 2007

Schatz Energy Research Center Research Engineer

2004 - 2005

Humboldt State University Campus Center for Appropriate Technology Project Engineer

2001 - 2004

Freelance Renewable Energy

Designer / Installer 2001 - 2007

Humboldt Co. Dept. of Public Works **Engineering Technician**

2002

CERTIFICATIONS

future.

Licensed Professional Engineer (PE / Civil) Certified Project Manager LEED AP (GBCI LEED BD&C) Certified Energy Auditor (CEA) Confined Space Entry and Rescue **Red Cross NIMS HAZMAT First Responder**

dams/reservoirs and hydroelectric projects.

Compressed Gas Safety Certified

REPRESENTATIVE PROJECT EXPERIENCE

Maywood 8MW Solar PV

Indianapolis, IN · 2013

Provided detailed engineering and design for an 8MW fixed tilt solar PV project in the Indianapolis Power & Light service territory. The project is located on 46 acres of an EPA superfund site, which



required a unique design approach that minimized soil disturbance. Services included permitting, geotechnical, structural, and electrical engineering. In addition to project design, the team provided equipment procurement and construction management services. The project was awarded the Renew Award by the USEPA and was the largest utility-scale PV project ever developed on a former superfund site at the time of completion.

AFFILIATIONS

Solar Electric Power Association (SEPA) American Society of Civil Engineers (ASCE) **Engineers Without Borders (EWB)**





Brent Johnson PE, LEED AP

Principal

PROFESSIONAL HISTORY

- 7 Years Renewable Energy
- 15 Years Civil Environmental Engineering



Sage Renewables Founder 2009 — Present

EDUCATION

M.S. Civil Environmental Engineering University of California, Berkeley

B.S. Civil Environmental
Engineering
Worcester Polytechnic Institute (WPI)

REGISTRATIONS

Professional Engineer (PE)Civil Engineering, CA Reg. No. C62137

LEED APU.S. Green Building Council

AFFILIATIONS

California Solar Energy Industries Association (CalSEIA) Solar Energy Industries Association (SEIA) UC Berkeley, Guest Lecturer Mr. Johnson has 15 years of experience as a Civil-Environmental Engineer, with 7 years in the renewable energy sector. During his time at Sage, he has developed custom financial and energy modeling tools and managed all aspects of renewable generation projects including feasibility studies, system design, project bids and construction, commissioning, and environmental credits management. Brent has worked on over 100MW of renewable projects encompassing a number of technologies such as solar PV, storage, solar thermal, wind, and hydropower.

His previous experience in the US and overseas has included design of large municipal facilities, computer modeling, construction management, operational support, and CEQA permitting. He has overseen all aspects of project development from concept to commissioned facilities, including serving as a construction manager on a complex, \$170M multi-year linear project. Brent holds an M.S. in Civil-Environmental Engineering from UC Berkeley, is a registered Professional Engineer (PE) in California and has his LEED certification from the US Green Building Council. He also currently serves as a director for his local water and fire district.

AREAS OF EXPERTISE

Renewable Energy Feasibility Studies for Solar PV, Solar Thermal, Storage and Efficiency Energy Usage and Generation Modeling Financial and Tariff Modeling Renewable Energy Incentives Management Conceptual Through Detailed Design of Large Municipal Facilities and Linear Projects Construction Management Environmental Permitting

REPRESENTATIVE PROJECT EXPERIENCE

Sacramento Regional County Sanitation District

Elk Grove, CA • 2015 - Present

- 3.9 MW Solar PV Single-Axis Tracker Ground Mount System
- Power Purchase Agreement (PPA)
- CEQA Review

To offset energy consumption from a large, multi-year, multi-phase expansion of its Wastewater Treatment Facility, Regional San turned to Sage to competitively procure a solar PV project that would meet CEQA mitigaton targets and minimize footprint and impacts to surrounding open space.







Tom Williard

Principal & CEO

PROFESSIONAL HISTORY

- 15 Years Renewable Energy
- 8 Years Engineering Management
- · 20 Years Electrical Engineering

WORK EXPERIENCE



Sage Renewables Founder, CEO 2009 — Present

SolEd Benefit CorporationFounder, COO/CTO
2013 — 2014

Sustainergy Systems Renewable Energy Consultancy Principal 2005 — 2009

System Design

Renewable Energy Consultancy Founder and Principal 2001 — 2004

Engineering Management Consultant

1996 — 2001

Ascend Communications
Hayes Microcomputer / Softcom
Digital Microsystems
Dunn Instruments
Senior Hardware and Software
Electrical Engineer, Senior
Technologist, Project Manager
1980 — 1996

Mr. Williard has more than 15 years of experience as a professional energy consultant, with a focus on the development of technical and financial models that are now widely used to assess renewable energy systems and to predict potential energy generation and financial performance, serving as CEO since Sage's inception. In 2013, Mr. Williard cofounded SolEd Benefit Corporation and wrote the project financial models used to structure PPA and lease financings that reduced the cost of renewable energy projects for public schools. In 2005, he cofounded Solmetric, a company that developed the SunEye, a high-precision instrument now widely used in the solar industry to measure shade characteristics. In 2001 he cofounded System Design, a renewable energy system design and due diligence company.

Prior to 2001, Mr. Williard worked in electronics engineering in senior hardware and software engineering positions and in engineering management. Mr. Williard served for seven years as an elected public school trustee in Marin County. As a Sage Principal, he provides financial, policy, and technical oversight for all company projects, and provides expert testimony for clients and industry groups.

AREAS OF EXPERTISE

Modeling Tool Development for Solar PV, Wind & Biogas Financial Modeling & System Finance Engineering & Business Development Renewable Energy Resource Assessments & Feasibility Studies Renewable Energy Systems Commissioning Certification & Support Renewable Energy Policy Support and Expert Testimony

REPRESENTATIVE PROJECT EXPERIENCE

County of Santa Clara

San Jose, CA • 2010-2017

- · Zero Net Energy (ZNE) Study
- 2.4 MWp Fuel Cells
- 11.4 MWp Solar PV PPA RES-BCT
- CPUC Policy Guidance

As a leader in implementing ZNE and renewable energy policies, the County's work with Sage included a 400,000 sq.ft. government building retrofit. Over 7 years, Tom led a team providing planning, analysis and advisory support for the County's successful projects.





C. For EDR Group

Mike Sherman



EDR Group, an EBP Company | Principal Consultant, Energy

155 Federal Street, Suite 600, Boston, MA 02110

1.617.338.6775, x258 | msherman@edrgroup.com | Mobile: 1.617.335.1142



Professional Background

Mike Sherman is a nationally recognized Principal Consultant at EDR Group, focusing on public and social policy development and targeted evaluation across a broad range of concerns, including energy policy, housing, sustainability, community,

Education

Masters Social Planning, Boston College 1974 BA, History, Brooklyn College, 1968

Years of Experience

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and societal resilience. His work ranges from economic and equity concerns for low income people, to impacts of energy policy and programs on commercial and institutional establishments and industrial concerns. He combines his broad policy experience with on-the-ground understanding of what it takes to move from policies to real impacts in the public and private sectors.

Selected Experience

Community-Based Energy Programs and Policies

Long Beach Community Choice Aggregation. In partnership with MRW currently leading the economic impacts of the developing Long Beach CA CCA, serving as project manager and guiding the economic analysis of direct, indirect and induced economic effects in the city and immediate surrounding counties. This analysis considers the impacts of increasing renewable generation (solar) to capture the changes of renewables in a more distributed energy market, where consumers stand to experience significant rate reductions and be impacted by more local and regional generation.

MAPC Clean Energy Programs. Just completed a two-year study of the effectiveness of the Metropolitan (Boston) Area Planning Council's broad range of clean energy programs, policies and advocacies for 101-member communities, including some statewide procurement programs of efficient street lighting, education and procurement of efficient vehicles, technical assistance to more than 15 communities developing Community Choice Aggregations.

Cambridge Energy Alliance. Evaluated the factors leading to successes and failures in a pioneering five-year initiative to substantially reduce energy and water consumption through coordinated efforts of city government, educational institutions, all sizes of commercial and industrial businesses, utilities and energy efficiency contractors.

Incremental Cost Study, Northeast Energy Efficiency Partnerships Regional Evaluation, Measurement, and Verification Forum, Rounds 1-4. Led a five-year study of costs of a variety of the incremental costs of more than 50 energy-efficient measures across nine Northeastern states and six markets with varying labor and equipment costs. This study enabled energy efficiency sponsors to update cost effectiveness planning, the first such formal and wide-ranging study in the region in more than a decade.

ISO New England - Forecasting for Demand Response. Led a New England-wide effort to persuade ISO NE to revise and refine ISO New England load forecasting to better represent increasing energy

Proposal for Community Choice Aggregation Study

efficiency and demand impacts, particularly on summer and winter peak loads. Negotiated key evaluative criteria for the Forward Capacity Market.

Energy Policy

Massachusetts Department of Energy Resources. Led energy efficiency policy and planning centered on dramatic ramp up of utility energy efficiency programs, Green Communities, 'Stretch' Energy Efficiency building code. Represented DOER in state development of energy efficiency goals and strategies for reducing Greenhouse Gas emissions under the MA Global Warming Solutions Act.

Massachusetts Office of Energy Conservation. Led policy and planning for MA administration of the federal Weatherization Assistance Program for Low Income people. Devised a system to train semi-skilled workers and a pathway to move them into contracting businesses that worked with the program and with private sector clients. Led a national coalition of low income advocates and program administrators that shaped the program into a more viable and effective model. Worked closely with landlords and tenants to assure a balance of costs and benefits in rental housing, including specific tenant protections, landlord contributions, etc.

National Commission on Energy Policy, Washington DC, Represented Massachusetts Department of Energy Resources in a roundtable on institutional, legal, regulatory, and market barriers to energy efficiency with emphasis on practical federal solutions.

Evaluation

Led process and impact evaluations of many utility energy efficiency programs over 15 years, including residential, commercial, industrial and community-based programs for all customer sectors.

Low Income. Led Utility low income weatherization program evaluations in PA, NY, MI, NC.

National Grid Smart Grid Opt Out Pilot. Led the process evaluation of an Opt-out smart grid pilot in an economically and ethnically diverse Massachusetts city. Conducted interviews, devised and supervised surveys, developed and moderated focus groups for low income program participants.

Geotargeting Impact and Process Evaluation. For Vermont Department of Public Service, led the process evaluation of an innovative effort designed to delay or defer transmission and substation improvements through the deployment of targeted energy efficiency improvements

Selected Presentations

Leaping before Looking, an Analysis of the Cambridge Energy Alliance Success and Failures, Behavioral Energy Conservation Conference, Sacramento, CA.

Smart Homes and Smarter Consumers: How the Internet and Home Area Networks Can Enable Energy Efficient Behavior, Stuart Schare and Mike Sherman, presented at "Energy Efficiency in Residences and Lighting (EEDAL)" conference, Lausanne, Switzerland.

Ecology of Energy Efficiency, Behavioral Energy Efficiency Conference, Berkeley, CA, November 2008, regulatory perspective in multidisciplinary panel for behavioral scientists.

Glen Weisbrod



EDR Group, an EBP Company | Chair, Board of Directors 155 Federal Street, Suite 600, Boston, MA 02110

1.617.338.6775, x 202 | GWeisbrod@edrgroup.com | Fax: 1.617.338.1174



Professional Background

Glen Weisbrod has 38 years of research experience on the relationship of infrastructure investment and economic impacts. He is widely recognized for his expertise in economic evaluation methods,

including benefit-cost, economic impact, social return on investment and prioritization processes. This is demonstrated by the wide range of national reports, guides, state and regional studies that he has authored.

Education

MCP, Urban Studies and Planning, Massachusetts Institute of Technology, 1978

MS, Civil Engineering (Transportation), Massachusetts Institute of Technology, 1978

BA, Economics, Brandeis University, 1975

Years of Experience

38

Mr. Weisbrod has assisted 35 states across the U.S., eight Canadian provinces, as well as regions in Europe, Asia and Australia with methods for evaluating and prioritizing programs and projects. Mr. Weisbrod also has served on the Board of Directors of the National Council for Urban Economic Development (now the International Economic Development Council) and is an active member of the National Association for Business Economics. Prior to establishing EDR Group. Mr. Weisbrod served Director of the Boston office of Hagler Bailly, and was Senior Vice President of Cambridge Systematics.

Selected Experience

Energy Program Design and Evaluation

- City of Long Beach CA –Community Choice Aggregation, local and regional economic impact study
- American Society of Civil Engineers economic implications of failure to invest in addressing future energy infrastructure needs
- Economic impacts of rates and utility merger, for California Public Utilities Commission
- Evaluation of industrial and commercial energy services for Ahmedabad Electric, India and US Agency for International Development
- Assessment of S. Africa energy efficiency for US Initiative on Joint Implementation
- System for Evaluating Electric Utility Economic Development Programs for EPRI
- Design of Financing Programs for Geothermal Heat Pump Consortium
- Energy Program Design Strategy for Rochester Gas and Electric
- Net-to-gross impact evaluation for commercial and industrial rebate program, for PG&E

Energy Program Evaluation (ex post analysis)

- Evaluation of Statewide Energy Conservation Programs for Massachusetts and Rhode Island
- Evaluation of residential energy efficiency programs for Bay State Gas (Columbia Gas)
- Evaluation of residential energy efficiency programs for New England Power (National Grid)
- Evaluation of commercial lighting, heating and cooling for Rochester Gas and Electric
- Evaluation of low-income appliance program for Pacific Gas and Electric
- Commercial energy services program evaluation for Puget Sound Energy
- Economic impact of energy efficiency alternatives for San Antonio City Public Service
- Economic impact of statewide energy efficiency programs for Wisconsin Focus on Energy
- Economic impact of renewable energy program for Wisconsin Focus on Energy
- Economic impact of rates, DSM, and renewable energy programs for State of Iowa

Energy and Industrial Development

- Study of Electricity Pricing Options for Electric Power Research Institute
- Study of Competitive bidding and PURPA for Edison Electric Institute
- Energy policy: alternative power technologies, pricing and economic impacts for Iowa
- Evaluation of economic development and customer recruitment programs for Entergy
- Real Time Pricing evaluation for Long Island
- Study of economic development rates for Edison Electric Institute
- · Impact evaluation of industrial subscription pricing option for Niagara Mohawk/National Grid
- Retreat on roles of utilities in economic development for Edison Electric Institute

Energy Customer Behavior and Evaluation Methods

- Market players and market measurement—spillover impacts of commercial and industrial DSM programs, for New England Electric Utilities Consortium
- Market transformation study for Orange and Rockland Utilities
- Residential baseline research for Delmarva Power
- Free ridership measurement study for consortium of eight New York State utilities
- Spillover measurement study for Southern California Edison
- Study of consumer value and energy use impacts of bill disaggregation for EPRI

Adam Blair



EDR Group, an EBP Company | Senior Analyst

438 Houston Street, Suite 263, Nashville, TN 37203 1.617.338.6775, x 259 | ablair@edrgroup.com | Fax: 1.617.338.1174



Professional Background

Adam Blair is a senior analyst with EDR Group. He is an expert in economic development and economic impact analysis. Adam Blair is an Economist and

Senior Analyst with EDR Group. He brings extensive research experience with industry and regional economic impact studies, particularly as they relate to energy programs.

Education

MRP, City and Regional Planning, Cornell University, 2012 BA, Environmental Design, State University of New York at Buffalo, 2010

Years of Experience

His recent work includes estimating analysis of the economic

impacts of offshore wind in Maryland, community energy aggregation in California and national studies of the battery industry and recycling, as well as evaluations of state energy programs for the US Dept of Energy. He has also worked on freight and economic supply chains in the Illinois economy and incentive grant programs in Minnesota and Maine.

Prior to joining EDR Group, Mr. Blair was a researcher at the Community and Regional Development Institute at Cornell University. Adam has also served as an adjunct instructor at DePaul University in Chicago and at Tennessee State University.

Selected Experience

Energy Programs and Investments

- · Offshore Wind Generation in Maryland
- · Battery Industry and Battery Recycling
- · Community Energy Aggregation in California
- Energy Infrastructure Investment Gap for ASCE
- · National Evaluation of the U.S. Dept. of Energy State Energy Program
- · National Evaluation of the U.S. Dept. of Energy Efficiency Community Block Grant Program

Industry and Economic Studies

- · Fort Drum, NY, Regional Economic and Fiscal Impact Model
- Economic Impact of Uber
- National Study of Cell Tower Industry
- Nantucket Cultural Tourism and Workforce Needs studies
- · FHWA Emerging Technologies for Rural Mobility & Safety
- Nashville Smart Mobility
- Greater Boston Chamber Economic Strategies
- Economic Impact of Museum of Fine Arts

Proposal for Community Choice Aggregation Study

Scenario Analysis and Forecast Development

- Analysis of Business 40 Alternatives Winston-Salem Chamber of Commerce
- New York Metropolitan Transportation Council 2050 Employment Forecasts
- · Chicago Metropolitan Agency for Planning 2050 Employment Forecasts
- · Chicago Metropolitan Agency for Planning 2050 Subregional Forecast Allocation Solution
- · Economic Impact of Completing the Appalachian Development Highway System
- · American Society of Civil Engineers Failure to Act Study

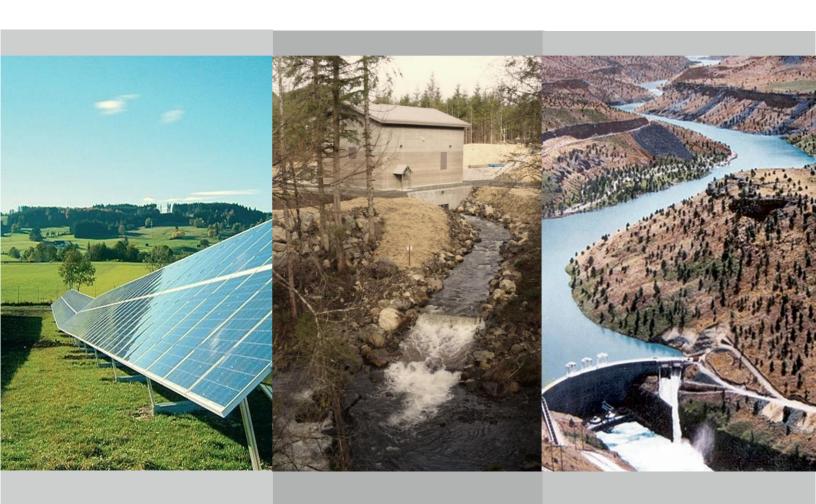
Program Evaluation and Performance Measurement

- · Evaluation of Appalachian Regional Commission Public Works Programs and Projects
- Proof-of-concept for benchmarking employment outcomes of U.S. Treasury Department
 Community Development Financial Institutions Fund Programs
- · Evaluation of Minnesota Angel Tax Credit Program
- · Evaluation of Maine Business Tax Incentive Programs
- · North Carolina State University Economic Impact Performance Measures

City of Vista

Community Choice Aggregation Technical Feasibility Study Services

September 2019





A registered professional engineering and management consulting firm with offices in Kirkland, WA; Portland OR; Spokane, WA and La Quinta, CA

570 Kirkland Way, Suite 100 Kirkland, Washington 98033

Telephone: (425) 889-2700

www.eesconsulting.com



September 19, 2019

Mr. John Conley Community Development Director City of Vista 200 Civic Center Drive Vista, CA 92084

SUBJECT: Community Choice Aggregation Technical Feasibility Study Services

Dear Mr. Conley:

EES Consulting, Inc. (EES) is pleased to submit this proposal to prepare a Community Choice Aggregation (CCA) Technical Feasibility Study (Study) to the City, on behalf of the cities of Vista, San Marcos, and Escondido (Partners).

EES has previously prepared CCA Feasibility Analyses, Business Plans, and Implementation Plans for the Counties of Butte, San Diego, Los Angeles, Alameda, and Ventura, the San Bernardino Associated Governments, the Coachella Valley Association of Governments, Western Riverside Council of Governments, City of San José, cities of Encinitas, Carlsbad, Del Mar and Oceanside, cities of Chula Vista, La Mesa Santee, and the City of Irvine. EES has also provided CCA Feasibility Peer Review services for the City of Solana Beach, City of San Diego, and King City. In addition, EES has recently been hired by Sustain Southern California to perform a CCA feasibility study for Orange County local governments. Finally, EES is an ongoing participant in numerous CCA-related regulatory proceedings at the California Public Utility Commission (CPUC), including the recently concluded Power Charge Indifference Adjustment (PCIA) and Resource Adequacy (RA) proceedings.

EES personnel have expertise in all areas of electric utility operations, which has developed over our 40 years of working as a full-service engineering, financial, and regulatory consulting firm for the electric utility industry. EES professional staff members have backgrounds in engineering, economics, finance, financial analysis, resource development, distributed energy resources (DER), wholesale power and gas markets, public administration, and overall utility management. Prior to consulting, many of our principals have worked for a utility or regulatory agency. This

understanding of the day-to-day workings of a typical utility is invaluable in working with clients and managing projects in an efficient and cost-effective manner. In addition, the senior staff at EES have professional licenses and/or one or more graduate degrees to supplement their practical experience.

Our broad base of clients includes utilities and industrial companies located throughout North America, with a focus on municipalities, cooperatives, CCAs, and public power utilities. EES has a track record of success in arenas where the results of the evaluation or analysis may have far reaching effects on the viability of an organization and the local community. Because of the size of our firm and our highly qualified staff, we can deliver results in less time and with less expense to our clients. The success of our approach has resulted in the large volume of repeat business that EES enjoys.

EES has also partnered with Ryan Baron at Best, Best & Krieger (BB&K) to provide legal and regulatory support throughout the feasibility process. Ryan represents CCAs and municipalities exploring CCAs. He has an extensive energy regulatory and transactional practice with a focus on public agencies, and regularly negotiates issues with investor owned utilities like SDG&E. Ryan is currently working with EES to provide regulatory support to Western Community Energy, and has supported other CCAs including Desert Community Energy, and the Clean Power Alliance of Southern California.

This proposal will remain valid, including all pricing proposals, through the duration of the project.

We look forward to working with the Partners on this interesting project and hope to hear back from you soon. In the meantime, feel free to call me with any questions.

Very truly yours,

Long S. Solle

Gary Saleba

President/CEO

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Consultant Experience

Introduction

EES Consulting, Inc. (EES) is a C-corporation with offices in Kirkland, WA; Portland, OR; Spokane, WA, and La Quinta, CA. Our contact person, corporate address and phone number are noted below:

Company/Website: EES Consulting, Inc., http://www.eesconsulting.com/

President/CEO: Gary S. Saleba

Company Address: 570 Kirkland Way, #100, Kirkland, WA 98033

Phone/Fax: 425-889-2700 / 425-889-2725 Email: saleba@eesconsulting.com

Legal Status: C corporation registered State of Washington

Years in Business: 1978 – Current

Officers to Bind Firm: Gary S. Saleba, President/CEO

EES is a registered professional engineering and management consulting firm established in 1978 that provides a variety of project solutions to clients involved with electric, natural gas, telecommunications, water, wastewater, and other energy and natural resource related businesses. Our professional staff members have backgrounds in the areas of engineering, economics, finance, public administration, operations, research, and general management.

The following organizational chart outlines EES's management consulting team:



Similar Projects/References

EES has previously prepared CCA Feasibility Analyses and CCA Business Plans for the County of Los Angeles, the San Bernardino Associated Governments, the Coachella Valley Association of Governments, Western Riverside Council of Governments, and the City of San José, and is currently preparing a CCE feasibility study for Butte County. EES has also provided CCA Feasibility Peer Review services for Alameda County, the City of Solana Beach, and is currently peer reviewing CCA feasibility studies for the cities of San Diego and King City. In addition, EES Consulting is currently serving as the implementation technical consultant for Los Angeles Community Choice Energy, East Bay Community Energy, and San Jose Clean Energy. EES is an ongoing participant in numerous CCA-related regulatory proceedings at the California Public Utility Commission (CPUC), including the current Power Charge Indifference Adjustment (PCIA) review proceeding (R.17-06-026).

Previous CCA feasibility study projects are explained in greater detail below and reference contacts for each project are provided:

1. Northern San Diego County Cities Feasibility Study (Carlsbad, Encinitas, Del Mar, and Oceanside)

Agency:	Cities of Carlsbad, Encinitas, Del Mar, and Oceanside
	1200 Carlsbad Village Drive, Carlsbad, CA 92008
Project Start/End:	3/18 - 09/19
Contact:	Jason Haber, Assistant to the City Manager (Carlsbad)
	Jason.haber@carlsbadca.gov, (760) 434-2958

Services Provided:

- Developed CCA technical business plan; electric wholesale power market forecast, Investor Owned Utility rate forecast, CCA electric power retail rate forecast, emissions cap-and-trade program impact study; costeffectiveness of co-generation plants.
- Developed SDG&E and CCA electric power retail rate forecasts.
- Governance analysis for CCA including issuing Request for Information and evaluating options.

2. County of San Diego CCA Technical Feasibility Study and Business Plan

Agency:	County of San Diego
	5560 Overland Ave, San Diego, CA 92123
Project Start/End:	4/19 – 09/19
Contact:	Charley Marchesano, Chief Energy and Sustainability Program Charles.marchesano@sdcounty.ca.gov, (858) 694-2987

Services Provided:

- Developed CCA technical business plan; electric wholesale power market forecast, Investor Owned Utility rate forecast, CCA electric power retail rate forecast, emissions cap-and-trade program impact study; costeffectiveness of co-generation plants.
- Developed SDG&E and CCA electric power retail rate forecasts.
- Public meeting presentations on CCA feasibility study.

3. Selected Other Municipal and County Clients

CCA Feasibility Study completed for the City of San Diego.

In addition to our CCA clients, EES also works with a wide range of municipal and county governments in California, as well as publicly-owned utilities, including:

- Anaheim Public Utilities, CA
- City of Corona, CA
- City of Glendale, CA
- City of Moreno Valley, CA
- City of Needles, CA
- City of Redding, CA
- City of Roseville, CA
- City of San Bernardino, CA
- City of San Marcos, CA
- City of Palo Alto, California
- County of Butte, California

- Sacramento Municipal Utility District, CA
- Los Angeles Department of Water & Power, CA
- Imperial Irrigation District, CA
- City of Pasadena, CA
- City of Burbank, CA
- City of Irvine, CA
- City of Santa Ana, CA
- Del Norte County, CA
- City of Lodi, CA

As stated above, EES has completed many CCA technical feasibility studies for several California counties and cities. The scope of this project is very similar to the scope of work we have provided for other jurisdictions including rate forecasts and comparisons, operating costs, power supply costs, governance structure evaluation, risk and uncertainty analysis, technical report development, and presentations at public workshops and to elected officials. Most recently EES has completed or is working on CCA technical feasibility studies Encinitas, Carlsbad, Chula Vista, Del Mar, La Mesa, Santee in San Diego County as well as the County of San Diego. EES is

experienced in working with SDG&E on data requirements and already has technical tools and forecasts that relate to CCAs in SDG&E's service area. Additionally, EES has peer reviewed the

EES Staffing

As noted in the previous section, EES has worked with numerous CCA clients throughout California fulfilling tasks including feasibility analysis, peer review, regulatory compliance, financing, CPUC monitoring, and CCA implementation technical consulting. The project team proposed for this project is the same team that has completed EES's previous CCA work and therefore brings substantial experience and subject-specific knowledge on CCA issues. Narrative resumes for staff members are included in Appendix A.

Name	Position	Project Role
Gary Saleba	President and CEO	Project Lead, Primary Contact
Howard Choy, M.E.	Senior Associate	Quality Assurance
Gail Tabone	Senior Associate	Quality Assurance
Steve Andersen	Manager	Power Supply
Amber Nyquist	Manager	Financial Proformas
Ted Light	Senior Project Manager	Technical Assistance
Kyle Morrill	Senior Analyst	Technical Assistance
Russ Schneider	Senior Analyst	Technical Assistance
Kimberly Gentle	Senior Associate	Technical Assistance
Connor Birkeland	Senior Analyst	Financial Proformas
Seung Kim, P.E.	Electrical Engineer	Technical Assistance
Scott Mahnken, P.E.	Civil Engineer	Technical Assistance

Gary Saleba, President/CEO

Role: Project Leader, Quality Control Years of Employment with EES: 39 years

M.B.A., Finance, Butler University, Indianapolis, IN / B.A., Economics & Mathematics, Franklin College, Franklin, IN

Gary Saleba will serve as the Project Leader and primary contact for the Partners on this project. Gary has over 30 years of experience at EES providing expertise on utility and electric power issues to communities, utilities, and governments. Gary has served as Project Leader on EES's previous CCA work, providing quality assurance and counseling advice to clients. Gary is a leader in CCA feasibility studies and is well versed in presenting technical studies to elected officials, at public workshops, and has participated in numerous conferences as both a presenter and a panelist. Gary's presentation style provides for both dynamic discussion and dissemination of technical information. As a teacher in the world of public power, Gary has the background and experience to help a range of stakeholders from elected officials and members of the public in understand the complexities associated with public power programs.

Gary is also responsible for EES's corporate management, financial, and strategic planning engagements primarily for electric, natural gas, and water utilities. He has extensive experience in the areas of utility rate design, revenue requirement analysis, cost of service, financial planning, management audits, professional development educational seminars, marketing, consumer research, forecasting, integrated resource planning, cost-benefit analyses, overall strategic planning, power procurement, and mergers and acquisitions.

Having worked as a utility employee, Gary combines an extensive background as both a utility industry expert and a management consultant. He is able to draw upon this professional and educational experience to manage projects including comprehensive utility feasibility studies, cost of service studies, strategic planning, and management critiques for clients throughout North America. His experience extends to alternative fuel cost comparisons, econometric forecasting models, resource planning, and reliability studies. Gary has participated in numerous generic utility proceedings, testified before over 200 regulatory bodies and courts of law, and coordinated over 500 utility planning and operational studies.

Gary has served on numerous energy and natural resource-related trade associations, including as Chairman of the American Water Works Association Financial Management Committee and

Management Division. He has also served on the board of directors for the Northwest Public Power Association and on the Board of Directors for ENERconnect, Inc., a bulk power aggregation and procurement entity serving the municipal utilities in the Province of Ontario.

Howard Choy, Senior Associate

Role: DER and Regulatory Compliance B.S., Mechanical Engineering, University of California at Berkeley Registered Professional Engineer and Certified Energy Manager, California

Howard Choy brings more than 30 years of diversified experience in the energy industry. Howard has spent the past 17 years managing the Los Angeles County Office of Sustainability, which manages energy and environmental programs for both municipal operations and the Los Angeles County region. Howard will head up the project team's DER evaluation and assist in regulatory compliance activities. Howard is also available for presentations to elected officials and the public workshop. Given his tenure at LA County, and his current involvement in the CCA world, Howard can answer any specific operating or logistical questions around CCA implementation. Howard understands the needs of cities, counties, and other jurisdictions when it comes to decision-making and moving forward with CCA implementation. His expertise is leveraged in EES technical feasibility studies to ensure the final deliverables are both efficient and useful to staff and elected officials.

Gail Tabone, Senior Associate

Role: Assistant Project Leader, Quality Control
Years of Employment with EES: 25 years
M.S., Agricultural and Applied Economics, University of Minnesota / B.S., Economics, University of Minnesota

Gail has over 25 years of experience in short- and long-term utility planning related to both operations and financial analysis. Gail has managed projects concerning power supply planning, load aggregation, cost of service and rate analyses, and regulatory proceedings. Her experience includes power supply management for large public utilities. These projects included load forecasting, optimization of resource and contract options, procurement and negotiations for power supply, power supply cost estimation, negotiating transmission contracts, auditing of scheduling and dispatching services, rate design, and devising customer choice programs.

Gail participated in the utility deregulation process very early on when she assisted an Alberta municipal utility through the deregulation that occurred in that Province resulting in the establishment of a power pool and a grid operating company. She was involved in strategic planning and regulatory intervention for the utility and performed an unbundled cost of service study incorporating the new power supply and transmission costs.

Gail has been actively involved in resource planning, evaluating resource proposals, and negotiating contracts for numerous utilities. She has assisted a group of public utilities with load aggregation, evaluation of power supply proposals, and negotiations for supply and transmission contracts. She has also assisted municipal utilities in California in transmission rate design and has worked for publicly-owned utilities with respect to participation in the California ISO.

Gail is skilled at determining clients' needs in the changing utility environment. She develops unique approaches to the analysis of issues facing each client. While her primary focus is economic, she also has a thorough knowledge of the technical issues related to power supply diversification.

Steven Andersen, Manager, Project Evaluations

Role: Power Supply Specialist Years of Employment with EES: 21 B.S., Electrical Engineering, University of Washington

Steve has over 20 years of experience developing wholesale power supply pricing and financial analysis for electric utilities. Steve's broad knowledge of the engineering field enables him to handle technical issues and provide economic and technical analyses for utility and industrial clients of EES. He has evaluated power supply proposals for many utilities across the U.S. His background in power engineering also allows him to assess technical barriers to savings in the changing electric industry.

Steve has been responsible for managing the interplay of multiple power supply contracts for major electric utilities. He has monitored the hourly loads and power schedules and recommended changes to economically optimize the utilities' various resources. He has also negotiated and implemented short and long-term power supply and transmission contracts on behalf of the utilities.

Steve has prepared integrated resources plans for both large and small utilities and has performed resource feasibility studies for both utility and industrial clients. He has performed cost of service analyses for many utilities. This analysis includes developing rates for residential, commercial and large industrial customer classes. He has also audited the power supply costs of large industrial corporations and suggested options for reducing their overall costs. Steve has experience monitoring gas and electric markets, and recommending purchases based on potential savings in total power supply costs. He is familiar with the functionality of hourly, daily, monthly, and long-term energy markets.

Amber Nyquist, Manager, Economic Evaluations

Role: Load Forecasting Specialist Years of Employment with EES: 11

M.A., Economics, Simon Fraser University / B.A., Economics, Western Washington University

Amber has over 10 years of experience advising electric power and Community Choice Aggregation clients. Amber provides analytical expertise for EES in support of economic and financial studies. She offers experience and knowledge to a wide range of topics related to regulated utilities. Her background includes cost of service analysis, electric rate design, wholesale rate setting, and other power supply costs or related information. She assists in Integrated Resource Planning as well as independent resource evaluation. Specific areas of expertise include demand-side and conservation resources, geothermal, wind, renewable energy credits, gas-fired, and other resources.

In addition to resource planning, Amber uses her background in econometrics and data analysis to develop load forecasts, normalize electric loads according to weather, and to develop market price forecasts. She also conducts conservation program evaluations and provides utilities with statistically significant results, which assist in utility program planning, data collection, and presentations. Amber has performed over 50 conservation potential assessment studies for electric utilities on the west coast.

Ted Light, Senior Project Manager

Role: Technical Assistance, DSM Support B.S., Aeronautical & Aerospace Engineering, Purdue University Certified Energy Manager (CEM)

Ted Light is a Senior Project Manager with a specialty in energy efficiency and demand-side management. He brings nearly nine years of experience to EES, having worked previously for the Energy Trust of Oregon, the non-profit energy efficiency and renewable energy program administrator for Oregon's investor-owned utilities. He has expertise and knowledge on a broad array of energy efficiency program management and planning topics including: conservation/DSM potential assessments, conservation program planning, program data analysis, and cost-benefit analyses. Ted is a Certified Energy Manager with the Association of Energy Engineers and holds a B.A. in Aerospace Engineering from Purdue University.

Kimberly Gentle, Senior Associate

Role: Technical Assistance

Spokane Community College, University of Reno, Nevada

Kimberly has over 20 years of experience in developing wholesale and retail power contracts, origination and risk management for electric utilities and power brokers. Ms. Gentle's knowledge of wholesale energy markets, contract design and risk management strategies strengthen the EES team and clientele. She has developed risk management policies, hedging strategies and staffing plans and has consistently identified cost saving measures throughout her career while employed with utilities, brokers and global energy trading facilities. Ms. Gentle has optimized renewables, natural gas, power, and transmission portfolios. She has negotiated retail and wholesale energy supply contracts in multiple commodities and has significant experience in contract default and bankruptcy in physical and derivative contracts.

Kyle Morrill, Senior Analyst

Role: Technical Assistance, DSM Support M.A., Economics, University of Colorado Denver B.S., Economics, University of Puget Sound

Kyle Morrill provides analytical expertise for EES in support of economic and financial studies. Mr. Morrill offers experience and knowledge to a wide range of topics related to regulated utilities. Mr. Morrill's background includes economic analysis, econometric forecasting, municipal solid waste policy, and demand-side management analysis. In addition to his background in economics, Mr. Morrill is also trained in data management and research. He has led data management and collection for research institutions and local government assisting in policy and demographic analysis.

Connor Birkeland, Senior Analyst

Role: Proforma Analysis

MPA, Evans School of Public Policy and Governance, University of Washington

B.A., Astrophysics, The Evergreen State College

Connor Birkeland is a Senior Analyst with a specialty in distributed energy resource modeling and financial analysis. He brings nearly a decade of experience within the energy sector, having most recently collaborated as Research Fellow with Seattle City Light and the Federal Department of Energy. Mr. Birkeland's background includes resource modeling, short- and long-term weather forecast modeling, and conservation potential assessments. He has experience with a broad range of sectors including renewable energy manufacturing, system design, benefit-cost analysis, and policy analysis. While working with the Department of Energy and Seattle City Light, Mr. Birkeland helped develop innovative forecasting models for short-term behind-the-meter distributed generation utilizing specialized ensemble weather modeling. This model separated behind-the-meter distributed generation from system load within Seattle City Light's service territory.

Russell Schneider, Senior Financial Analyst

Role: Technical Assistance

M.S., Engineering Technology Management, Washington State University

B.A., Economics, Reed College

Russell Schneider is a Senior Financial Analyst with expertise in financial planning, power supply, transmission, strategic planning, resource development, forecasting, risk analysis, smart grid, meter data management, and rate design. Russ brings 15 years of experience and a strong economic, engineering, and technology background. He has utility experience completing load research, rate design, cost of service, automated meter reading cost-benefit, power requirement, load forecast, conservation potential, and other financial studies. Russ regularly presented at trustee meetings on forecasting, risk, reliability, power supply and transmission issues for many years. Russ has also been actively involved in the areas of smart grid, demand response, energy efficiency, and state-level legislative issues.

Seung Kim, P.E., Senior Electrical Engineer

Role: Technical Assistance

B.S., Electrical Engineering, Seoul National University, University of Washington

M.S., Electrical Engineering, University of Washington

Seung Kim has over 35 years of broad experience in electrical design and consultation. As project manager and lead electrical engineer, he is experienced in all phases of hydroelectric and power system design and implementation. Mr. Kim has performed condition assessment, conceptual and feasibility studies, specification development, bid evaluations, and provided assistance during project construction. His areas of interest include switchgear, protective relaying and controls, transformers, SCADA systems, communications, and instrumentation systems. Mr. Kim has prepared procurement and technical specifications, one- and three-line diagrams, control schematic and wiring diagrams, and equipment layouts. He has hands-on experience in designing, assembling and testing of relay control panels and switchgear equipment. Mr. Kim is a registered electrical engineer in nine states, including California.

Scott Mahnken, P.E., Senior Civil Engineer

Role: Technical Assistance

B.S., Civil Engineering, Colorado State University

Scott Mahnken is experienced in the design of concrete structures, earthen and concrete dams, tunnels, and other structures related to hydropower projects. He has been involved in every phase of project development, from reconnaissance and planning, to final design and construction inspection. He has experience designing dams, spillways, intake structures, steel pipelines and penstocks, and powerhouses. Mr. Mahnken has served as a FERC-approved independent consultant responsible for safety reviews (Part 12 inspections) of hydroelectric projects. Mr. Mahnken has prepared contract documents, plans and specifications for construction for more than 20 projects. He has administered subcontracts to perform geotechnical and surveying work. As engineer for the owner on several projects, he has reviewed and commented on other engineer's plans and designs.

Best Best & Krieger LLP (BB&K)

Established in 1891, BB&K has provided legal services to cities, counties, special districts, redevelopment agencies, school districts, JPAs, and other public agencies for 127 years. The proposed legal consultant, Ryan Baron, currently advises cities, counties and existing CCAs on various aspects of CCA development and implementation, including feasibility studies, implementation plans, governance, economic development, contracts, power procurement, regulatory matters, utility negotiations, and legislative affairs. Mr. Baron has an extensive energy regulatory and transactional practice that specializes in all matters involving CCAs, and provides both general and special counsel services. A summary of Mr. Baron's practice can be found here. https://www.bbklaw.com/our-team/ryan-baron

Technical Approach

EES President and CEO, Gary Saleba, will serve as Project Lead and Point of Contact for the Partners on this project. Gary has lead the EES team in the development of CCA Feasibility Analyses for numerous municipal and county entities across California. Leveraging this experience, the EES team can guarantee its ability to deliver results on schedule and on budget. EES will work closely with the Partners to account for the priorities and concerns of the cities and their communities in the analysis. These priorities may include offering competitive rates, creating local economic benefits, and reducing environmental impacts from electricity generation.

In summary, EES will assist staff from the Partners in evaluating the data needs for the feasibility analysis, submitting the request for that data to San Diego Gas and Electric (SDG&E), and then verifying the satisfactory fulfillment of that data request. EES will then develop a load forecast, power supply scenarios, a comparative rates analysis, an economic impacts assessment, environmental review of possible greenhouse gas emission changes and a pro-forma analysis for the potential CCA. EES will also conduct an extensive sensitivity analysis exploring a range of possible outcomes for key variables in the analysis. This will be combined with an analysis of possible regulatory changes and risks to the CCA. Finally, EES will explore possible models for the CCA's governance and management as well as external funding options.

Throughout the study process, EES will check-in regularly with staff from the Partners to provide updates, solicit feedback, and ensure client expectations are fulfilled. EES will document all methods and assumptions used in the analysis and provide Partners' staff with its analytical modeling tools to ensure that staff are comfortable with the model inputs and results. A draft study will be provided to the Partners for review at least one month before the agreed on final study submission date. EES will then be available to present the study to staff, City Council, or community groups as needed. Each of the key major components of this project's scope of work are detailed below.

1. Load Study and Forecast

EES will provide signed nondisclosure agreements to the Partners/SDG&E as needed to receive 2 years of historic load data. EES will verify the historic load data and then develop a 10-year load forecast. Load data will be aggregated by rate schedule for monthly energy use, peak demand, and number of accounts. Customers currently receiving Direct Access (DA) service will be excluded from the analysis, as these customers, at least initially, do not typically participate in CCAs. In addition, the load forecast will take into account the potential for expansion under the new DA caps.¹ EES will draw on the customer participation rates at other CCAs across California as well as local demographic factors to estimate a base-case opt-out rate for the Partners. EES

¹ CA SB 237 increases the direct access cap by 4,000 GWh

will use energy growth rate forecasts published by the California Energy Commission to model a base-case scenario of load growth into the future. The load forecast will take into account behind the meter generation, storage, and line losses.

EES has already developed the software model to process raw SDG&E customer data and translate it into the necessary load curves such as in Figure 1 below. Having this data software and being familiar with SDG&E data processes is a big advantage for EES. EES will use this model to estimate monthly peak demand for each rate class to determine the CCA's resource adequacy requirements (RAR). SDG&E standard transmission and distribution losses will then be applied to evaluate wholesale energy purchase needs. Load reduction from energy efficiency, distributed energy resources, such as from small-scale solar or from energy storage, will be modeled separately to allow for analysis of several scenarios based on economic and technical potential.

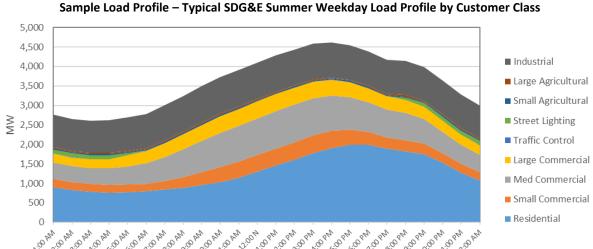


Figure 1
Sample Load Profile – Typical SDG&E Summer Weekday Load Profile by Customer Class

2. Rate Analysis and Comparison

Electricity rates for CCA customers include three components: the CCA's cost of generation, SDG&E's cost for transmission and distribution (T&D), and regulated charges such as the Power Charge Indifference Adjustment (PCIA). Based on the outputs of the load forecast and CCA power supply scenario analysis, EES will develop a rate projection for each of these components for the potential CCA, as well as the competing SDG&E rates out to 10-years. A discussion of how rate structure impacts CCA customer savings will also be included in the analysis.

The CCA generation cost is primarily determined by the cost of power procurement and scheduling, then secondarily by the cost of operating the CCA. Base case procurement cost assumptions will be informed by the power supply scenarios described in the following section. To arrive at power supply cost, EES will draw on current energy market trends, forecasts of market and renewable price projections, and the large EES data base of power cost forecasts derived from numerous other CCA feasibility studies. Both long-term (10 years or more) and short-term contracts will be considered. High- and low-price scenarios for each of these inputs will be assessed as part of the sensitivity analysis.

CCA operational costs include the cost of capital, data management, uncollected accounts, staffing, facilities, legal, and regulatory costs such as the CCA surety bond. EES will also evaluate the impacts of potential CCA customer programs such as a feed-in tariff, net energy metering, or other such programs operated by the CCA to encourage renewable energy project development within its service territory. These programs will be evaluated for potential financial and environmental benefits to the CCA and its customers.

Based on these expenses, EES will estimate the total CCA revenue requirement (budget) and resulting unit costs (rates) for 10-years of operation. Projected revenues will be compared to the annual revenue requirement to identify a rate for existing monthly rates and charges. If necessary, the Plan can be tailored to phase-in rate changes over time.

EES will also evaluate the range of possible regulated surcharge costs, such as for the PCIA. The PCIA is a charge applied by the CPUC to ensure that IOU stranded generation costs are not disproportionately passed on to SDG&E's remaining bundled customers as CCAs are formed. EES monitors all CCA-relevant CPUC proceedings very closely to ensure our regulated charge forecast accounts for the most up-to-date regulations. The sensitivity analysis will also explore a range of possible PCIA rates and scenarios.

Finally, EES will project SDG&E's power supply costs based on SDG&E's latest power supply filings, procurement strategy, projected generation costs, and RPS requirements. Time-of-Use rates and their impact on revenue will be discussed. SDG&E's T&D rates will be forecast based on distribution system investment trends, recent rate filings, and the revenue requirements stated in SDG&E's most recent CPUC filings. Additional sources of variability, such as high and low gas and hydro pricing, and larger economic trends will be explored as part of a sensitivity analysis.

3. Supply Scenario Analysis

EES will work with staff from the Partner Cities to develop multiple power supply scenarios that match the needs and priorities of the four communities. Scenarios may vary in their share of renewable energy, greenhouse-gas free energy, long-term and short-term contracts, locally generated energy, and use of specific generation technologies. All scenarios will meet or exceed projected SDG&E renewable resource mix and meet state RPS. One possible set of scenarios might include the following:

- Option 1: Match SDG&E's share of RPS-compliant and GHG-free generation.
- Option 2: Minimum 50% RPS compliant power.
- **Option 3**: Minimum 75% RPS compliant power.
- Option 4: Launch CCA operations with 50% RPS-compliant power and build to 100% RPS-compliance by 2030.

The project team will review potential electric service providers, the cost of using these power sources, and their capacity to serve the Partner Cities. The renewable analysis will exclude unbundled RECs (Category 3) except for balancing purchases where greenhouse gas free premiums will be added to unbundled REC costs. The cost of service will be quantified under each scenario, and related rate impacts and estimates of the projected costs for each supply

portfolio scenario will be provided. To evaluate local opportunities for the CCA, the project team will correspond with potential electric service providers to determine indicative pricing, as well as CAISO and administrative costs. This analysis will also estimate costs associated with scheduling and ancillary services.

The energy procurement analysis will also explore alternative supply options such as energy efficiency programs and local renewable projects (e.g., net energy metering, distributed generation, community solar, etc.). Finally, EES will calculate the GHG emissions reductions of each power supply scenario to ensure the resource portfolios meet each jurisdiction's GHG reduction goals.

4. Pro Forma Analysis

EES will prepare a pro-forma financial model that can be adjusted and re-run to evaluate CCA viability under multiple organizational and governance scenarios (i.e. each jurisdiction operating independently or both together). The pro-forma will include a cash-flow analysis with itemized annual CCA operating expenses over the 10-year analysis period. These costs will include start-up costs, CCA surety bond, cost of capital, data management, staffing, customer service, legal services, uncollected accounts, SDG&E PCIA charges, marketing, accounting, and all power procurement costs such as scheduling, transmission, and surcharges. EES will detail collection of reserves to provide emergency rate stabilization for the CCA in the future. These operating costs will be based on the operating costs of existing CCAs and scaled for the size of the program. Based on these expenses, EES will estimate the total CCA revenue requirement and resulting unit costs for 10-years of operation.

The pro-forma will evaluate CCA financial feasibility for a Partner CCA where the cities form a joint powers authority. Additional analysis will be prepared to evaluate if each Partner city could economically operate a CCA on its own. Finally, a fifth geographic area, to be determined, will be analyzed. The final financial model will be made available to the Partners for future analysis to update as key inputs or assumptions change. EES uses completely open and functional excel workbooks to prepare load forecasts, power supply cost estimates, and the financial proforma.

Possible start-up phasing options will be discussed as well as financing sources for start-up requirements. The cost to the Partners of not pursuing a CCA will be quantified as continued bundled service with SDG&E. Any changes in franchise fee collections will be discussed and incorporated into the analysis as well.

5. Sensitivity Analysis

EES will examine each portfolio option under a range of conditions to ensure that the recommended resource plan is appropriate under unexpected market and regulatory conditions. The sensitivity analysis will be performed for the following key variables, including those listed in the RFP:

- Market prices for conventional and renewable energy;
- Program phase-in at varying supply levels;

- Changes in SDG&E generation rates, exit fees, and customer surcharges, and other possible SDG&E rate changes;
- Changes in policies affecting local renewables development, including possible net metering, federal solar tax credit, and wind power production tax credit changes;
- Rate sensitivity to the inclusion of renewable energy resources at levels that exceed the state RPS;
- Rate sensitivity to the inclusion of local renewable generation, energy efficiency, demand response, and demand reduction programs;
- Extent to which rates may change depending on varying levels of participation (up to 20% opt-out for worst case);
- Viability of CCA program if not all Partners participate;
- Impact of new policies and/or regulations related to CCAs;
- Lost revenues to Partner cities (franchise fees) vs. CCA program revenue;
- Competition between CCAs and IOU for energy procurement and anticipated changes in the planning environment;
- Potential impact to Partners wishing to later withdraw from the CCA after the program is established;
- Identification of any anomalies, either challenges or opportunities, in the service area related to geographic, demographic, or economic circumstances.

6. Regulatory and Risk Analysis

EES will evaluate a range of risks and risk mitigation strategies associated with CCA formation and operation. The analysis will address challenges faced by existing CCAs, as well as those anticipated for new CCAs over the next 10 years. For each risk category identified in the RFP, the study will describe causes, effects, potential impact, likelihood of occurrence, and strategies to mitigate them. Based on the results of this analysis, risks can then be anticipated and addressed through changes in program policy, contract terms, insurance, financing, and modification of management practices. Specific risks to be analyzed include:

- Financial risks to Partner Cities' General Funds;
- Impact to customers in the event of program failure;
- Market availability of renewable power due to SB 350 and SB 100 and increasing RPS;
- Regulatory and legislative changes impacting CCA financial viability;
- CCA failure and financial risk to participating jurisdictions;
- Grid stability impacts;
- Financial risk of supply/demand mismatch and changes in market pricing.

EES is a party to key CCA-related proceedings at the California Public Utilities Commission and continuously monitors activity on key issues at the California Energy Commission and California Air Resources Board. In addition, EES monitors federal energy policies, such as the Investment Tax Credit (ITC) for solar developers and changes to the existing solar import tariff. Changes in energy regulation at the state and local level can have significant impacts on CCA resource costs. EES will evaluate these regulatory risks and provide guidance on their likelihood and potential impacts.

7. Governance, Management and Funding Models

The project team will evaluate three CCA governance structures: a CCA operated by a Joint Powers Authority (JPA) formed between the Partners, each Partner operates its own CCA, or joining an existing JPA such as the forthcoming City of San Diego. EES will discuss the pros and cons of each structure as they pertain to management efficiency and effectiveness, financial impacts, and decision-making autonomy and discretion. Strategies to customize programs within each jurisdiction will also be discussed. EES will also discuss different management and staffing strategies for the CCA, ranging from a completely internally staffed program to a maximally outsourced program. The project team examined similar scenarios for governance and operation of CCAs in Los Angeles County, San Bernardino and Riverside Counties, the City of San José and the Cities of Encinitas, Carlsbad, Del Mar, Oceanside, Chula Vista, La Mesa, Santee, and County of San Diego. The next steps for pursing these options will be provided.

8. Economic Impacts

Perhaps the greatest benefit of a CCA is to bring economic vitality to the communities it serves. The project team will use an economic input-output model to estimate the magnitude of CCE impacts on the economy. Specifically, EES will use the National Renewable Energy Laboratory's (NREL) Jobs and Economic Development Impact (JEDI) model to evaluate the impact of local projects on jobs, and increased local spending. In addition, the project team will estimate the benefit to the local economy of trickle-down effects due to any bill savings to CCA customers. These bill savings will be evaluated using MIG's IMPLAN input-output model. EES will also provide an assessment of the state of the local, distributed energy resources industry in California and its potential impact to new CCAs.

9. Deliverables and Report

EES will provide regular updates on the progress of the project. In prior engagements such as this one, EES has held weekly or bi-weekly calls with the client to provide these updates, discuss key decisions, and solicit feedback. We can work around any updated schedule requested by the Partners. As noted above, EES will involve staff from the Partners to ensure the study design, power portfolio scenarios, and other key decisions are consistent with the Partner's vision. Key decisions and discussions will be documented for reference by Partner City staff. EES will then provide a draft Technical Study in MS Word format as well as a draft pro-forma model in MS Excel for Staff review. We will also make our work available to a third-party reviewer as needed, which we've done for several previous CCA Feasibility studies.

After review is complete, EES will provide a final version of the study and the pro-forma model. EES will present the study findings to staff, City Councils, or community groups as needed. Finally, EES will support the Partners in educating local stakeholders and presenting the draft Study at up to six community events (two in each Partner City). EES members have extensive experience helping to develop web sites, providing collateral materials, and supporting public meetings and events to introduce the CCA business model. EES stands ready to provide additional services beyond the scope of this proposal to support the development of the CCA. The scope and costs

of these additional services will be negotiated separately and will not be performed until the Partners have issued the appropriate authorization. The specific deliverables provided under this contract include the following:

- Bi-weekly updates with assigned project staff;
- Coordination with Partners to finalize load data request to SDG&E;
- Finalize study scope, assumptions, and power supply scenarios;
- Summary of communications with and vetting of study assumptions and finding by SDG&E and/or Sempra Services Corporation;
- Draft Technical Study in Microsoft Word format, plus additional drafts as necessary;
- Draft pro-forma model in Microsoft Excel format, plus additional drafts as necessary;
- Responses to any reasonable third-party reviewer as directed by the Partners;
- Final Technical Study and all relevant final documents and models;
- Presentation of study findings and results to all Partner staff, Councils, advisory boards, and/or public meetings (up to six presentations);
- Outreach to the public to support the study including assistance in preparing web content, fliers, social media blasts and press releases for each of the six public meetings.

10. CCA Implementation Timeline

A timeline for CCA implementation will be provided in an appendix to the technical study. Given the start date of the feasibility study, it is anticipated that a CCA program could be launched as early as 2022. Details of the requirements for launch will be provided as well as a path forward for each governance option.

11. Project Timeline

EES will complete a draft feasibility analysis within 90 days of the release of the electricity load data from SDG&E. EES will then solicit feedback and comments from Partner City staff, implement those changes, and turn around a final report. If the Partners wish to accelerate the study, EES can request the data prior to 2020 and later bill the Partners in January. This would allow EES to more efficiently complete the feasibility study as it can take some time to receive the data from SDG&E.

Terms and Conditions

EES accepts all terms and conditions, including the insurance requirements as stated.

Price

EES's standard hourly billing rates are as follows:

President	\$250
Senior Associate	245
Manager	
Senior Project Manager	
Project Manager	
Senior Analyst/Engineer	
Analyst/Engineer	
Senior Administrative Assistant	

BB&K hourly billing rates

Counsel, Legal/Regulatory\$395

These rates will remain in effect through the duration of the contract. Based on these hourly rates, EES can perform the work proposed for this study on a budget of \$49,930. An itemized list of staff hours by task is provided on the following page. The cost for SDG&E data is not included in the budget below. All other necessary out-of-pocket expenses are included in this budget.

Task	Hours	Rate	Total Cost
1.0 SDG&E Data Request			
Amber Nyquist, Manager	2	\$240.00	\$480
Connor Birkeland, Senior Analyst	4	\$225.00	\$900
Task 1.0 Subtotal			\$1,380
2.0 Load Study and Forecast			
Amber Nyquist, Manager	2	\$240.00	\$480
Connor Birkeland, Senior Analyst	12	\$225.00	\$2,700
Task 2.0 Subtotal			\$3,180
3.0 Analysis of Energy Suppliers			
Gary Saleba, President/CEO	2	\$250.00	\$500
Steve Andersen, Manager	6	\$240.00	\$1,440
Connor Birkeland, Senior Analyst	20	\$225.00	\$4,500
Task 3.0 Subtotal			\$6,440
4.0 Rate Analysis			
Gary Saleba, President/CEO	4	\$250.00	\$1,000
Amber Nyquist, Manager	10	\$240.00	\$2,400
Connor Birkeland, Senior Analyst	10	\$225.00	\$2,250
Task 4.0 Subtotal			\$5,650

Task	Hours	Rate	Total Cost
5.0 Pro Forma Analysis			
Gary Saleba, President/CEO	2	\$250.00	\$500
Amber Nyquist, Manager	16	\$240.00	\$3,840
Connor Birkeland, Senior Analyst	20	\$225.00	\$4,500
Task 5.0 Subtotal			\$8,840
6.0 Governance Structure			
Gary Saleba, President/CEO	10	\$250.00	\$2,500
Howard Choy, Senior Associate	10	\$245.00	\$2,450
Connor Birkeland, Senior Analyst	4	\$225.00	\$900
Task 6.0 Subtotal			\$5,850
7.0 Risk Analysis			
Gary Saleba, President/CEO	2	\$250.00	\$500
Amber Nyquist, Manager	8	\$240.00	\$1,920
Connor Birkeland, Senior Analyst	40	\$225.00	\$9,000
Task 7.0 Subtotal			\$11,420
8.0 Economic Impacts			
Amber Nyquist, Manager	2	\$245.00	\$490
Connor Birkeland, Senior Analyst	6	\$225.00	\$1,350
Task 8.0 Subtotal			\$1,840
9.0 Report of Technical Study Results			
Gary Saleba, President/CEO	2	\$250.00	\$500
Amber Nyquist, Manager	6	\$245.00	\$1,470
Steve Andersen, Manager	1	\$240.00	\$240
Connor Birkeland, Senior Analyst	6	\$225.00	\$1,350
Howard Choy, Senior Associate	4	\$245.00	\$980
Ryan Baron, BB&K	2	\$395.00	\$790
Task 9.0 Subtotal			\$5,330
GRAND TOTAL	213		\$49,930

Appendix A – Resumes

GARY S. SALEBA President/CEO

Gary Saleba is a principal and president/CEO of EES Consulting, Inc. His areas of specialty include overall quality control for EES Consulting's projects as well as development of corporate management, financial and strategic planning models. Mr. Saleba has extensive experience in the areas of utility rates, financial planning, management audits, professional development educational seminars, marketing, consumer research, forecasting, integrated resource planning, cost-benefit analyses, overall strategic planning, and mergers and acquisitions.



Having worked as a utility employee, Mr. Saleba combines an extensive background as both a utility industry expert and a management consultant. He is able to draw upon this professional and educational experience to manage projects including comprehensive water, wastewater, gas and electric cost of service studies, strategic planning, and management critiques for clients throughout North America. His experience extends to alternative fuel cost comparisons, econometric forecasting models, resource planning and reliability studies. Mr. Saleba has participated in numerous generic utility proceedings, testified before over 200 regulatory bodies and courts of law and coordinated over 500 financial planning, rate study, resource acquisition, and strategic planning studies.

Mr. Saleba has also served on numerous energy and natural resource-related trade associations. He has served as Chairman of the American Water Works Association Financial Management Committee and Management Division. He has also served on the board of directors for the Northwest Public Power Association. He also served on the Board of Directors for ENERconnect, Inc., a bulk power aggregation and procurement entity serving the municipal utilities in Ontario.

Through EES Consulting and as a utility employee, Mr. Saleba has provided expert testimony in a number of subject areas including:

- Cost of Service
- Wholesale and Retail Rate Design
- Avoided Cost of Power
- General Utility Financing Guidelines
- Load Forecasting/Retail Wheeling
- Automatic Adjustment Clauses
- Supply Contracts/Negotiations

- Interclass Load Characteristics
- Resource Acquisitions
- Integrated Resource Planning
- Efficient Utility Operations
- Construction Contract Analysis
- Return on Equity
- Mergers and Acquisitions

EDUCATION

M.B.A., Finance, Butler University, Indianapolis, Indiana B.A., Economics and Mathematics, Franklin College, Franklin, Indiana

PROFESSIONAL ASSOCIATIONS

American Water Works Association, American Public Power Association Northwest Public Power Association, Canadian Energy Association, California Municipal Utilities Association

HOWARD CHOY, P.E. Senior Associate

Howard Choy has spent over 30 years in the energy industry which included: development and administration of Los Angeles County's Office of Sustainability, private sector consulting services for utilities and utility customers, and engineering and management of projects for the Los Angeles Department of Water & Power.

Howard's areas of expertise include:

- Community Choice Aggregation (CCA) program assessment, development, implementation and operations.
- Corporate and agency energy program development and administration; including –
 utilities accounting, clean energy programs, energy projects, utility partnerships, financing
 and funding, and community partnerships.
- California Public Utility Commission (CPUC), California Energy Commission (CEC) programs, and California legislature energy programs, policies, and proceedings.

Howard created the County Office of Sustainability (COS) within the Internal Services
Department and led COS' activities under a \$250 million annual budget. COS included the
County's internal Energy Management organization and the County's community-facing energy
programs. Major responsibilities included:

- Management of the County's \$200 million internal energy budget (electricity, natural gas, water and cogeneration and central heating and cooling plants).
- Implementation of hundreds of energy efficiency, renewable energy, and water efficiency projects in County facilities.
- Development of a County-wide energy management system for tracking and analyzing bills, meter data, and energy consumption patterns.
- Development of the County's CCA feasibility study and business plan; and Board authorization to proceed with a County-wide CCA program.
- Development and administration of the SoCalREN, a CPUC-funded, independently administered energy efficiency program using investor-owned utility ratepayer energy efficiency funds.
- Development and administration of the County Property Assessed Clean Energy (PACE) program which finances residential and non-residential energy upgrades; the County's PACE program exceeded \$1 billion in projects approved in one year.

EDUCATION

Bachelor of Science, Mechanical Engineering, University of California at Berkeley Registered Professional Engineer and Certified Energy Manager, California

PROFESSIONAL ASSOCIATIONS

Past Board Chair, Local Government Sustainable Energy Coalition Past Administrator, Southern California Regional Energy Network

GAIL D. TABONE Senior Associate

Ms. Tabone has managed projects concerning regulatory proceedings, mergers, new utility formation, power supply planning, load aggregation and cost of service and rate analyses.

On the regulatory front, Ms. Tabone has prepared evidence or appeared as an expert witness in several proceedings before public regulatory bodies in the U.S. and Canada. She has been active in preparing and intervening in electric and natural gas rate proceedings, wholesale transmission access and rates, as well as approval for mergers and/or new utility formation.



Ms. Tabone participated in various aspects of changing utility regulation, from early deregulation in Alberta, pooling of transmission costs in Texas, and formation of CCAs in California. She has been involved in strategic planning and regulatory intervention for existing utilities facing changes in the industry structure and reviewing the feasibility of forming new utilities under CCA regulation in California.

Ms. Tabone's experience includes power supply management and has been actively involved in resource planning, evaluating resource proposals and negotiating contracts for numerous utilities. This work involves load forecasting, optimization of resource and contract options, procurement and negotiations for power supply, power supply cost estimation, negotiating transmission contracts, auditing of scheduling and dispatching services, rate design and devising customer choice programs.

Ms. Tabone is both skilled and experienced at determining the needs of the client in the changing utility environment. She is able to develop unique approaches to the analysis of issues facing the client. While her primary focus is economic, she is capable of addressing non-economic issues along with her economic analysis. She has a thorough knowledge of the technical issues related to planning and feasibility analysis.

EDUCATION

M.S., Agricultural and Applied Economics, University of Minnesota B.S., Economics, University of Minnesota

PROFESSIONAL ASSOCIATIONS

American Water Works Association, Northwest Public Power Association, California Municipal Utilities Association

STEVEN J. ANDERSEN Manager of Project Evaluations

Steve Andersen, whose broad knowledge of the engineering field enables him to handle most technical issues, provides economic and technical analyses for utility and industrial clients of EES Consulting, Inc.

Mr. Andersen is skilled in evaluating power supply proposals and has done so for many utilities in the region. He has calculated the potential savings in total power supply costs offered by competing suppliers. With his background in power engineering, he is able to assess the technical barriers to potential savings in today's changing electric industry.



Mr. Andersen has been responsible for managing the interplay of multiple power supply contracts for a major Northwest utility. He has monitored the hourly loads and power schedules of the utility and recommended changes to optimize economically the utility's various resources. He has also negotiated and implemented short and long-term power supply and transmission contracts on behalf of the utility.

Mr. Andersen has performed integrated resources plans for both large and small utilities. He has also performed resource feasibility studies for both utility and industrial clients.

Mr. Andersen has performed cost of service analyses for many utilities. This analysis includes developing rates for residential, commercial and large industrial customer classes. He has also audited the power supply costs of large industrial corporations and suggested options for reducing their overall costs.

Mr. Andersen, has experience scheduling output from hydroelectric and thermal projects based on inflow information, flood control restrictions, maintenance outages, economic displacement and native load requirements. He has experience monitoring gas and electric markets and recommending purchases based on potential savings in total power supply costs. He is familiar with the functionality of hourly, daily, monthly and long-term energy markets.

Mr. Andersen has experience working with BPA power and transmission contracts and rates. This experience runs the gamut from participating in rate case activities to auditing power and transmission invoices.

EDUCATION

B.S., Electrical Engineering, University of Washington

AMBER NYQUIST Manager, Economic Evaluations

Amber Nyquist provides analytical expertise for EES in support of economic and financial studies. Ms. Nyquist offers experience and knowledge to a wide range of topics related to regulated utilities. Ms. Nyquist's background includes cost of service analysis, electric rate design, Bonneville Power Administration's tiered rate methodology and other power supply costs or related information. Ms. Nyquist assists in Integrated Resource Planning as well as independent resource evaluation. Specific resources include



demand-side and conservation resources, geothermal, wind, renewable energy credits, gasfired and other resources.

Besides resource planning, she uses her background in econometrics and data analysis to develop load forecasts, normalize electric loads according to weather, and to develop market price forecasts. Also using her statistics knowledge Ms. Nyquist conducts conservation program evaluations and provides utilities with statistically significant results. The results assist in utility program planning, data collection, and presentation.

Furthermore, Ms. Nyquist has specific experience with the federal standards for evaluating benefits and costs of water supply and related resources according to the *Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies* (March 10, 1983).

In addition to her background in economics, Ms. Nyquist is also trained in written communication skills. She has four years experience in teaching others to write as well as abundant experience in written and oral presentations.

EDUCATION

M.A., Economics, Simon Fraser University B.A., Economics, Western Washington University

TED LIGHT Project Manager

Ted Light is a Project Manager with a specialty in energy efficiency and demand-side management. He brings nearly nine years of experience to EES, having worked previously for the Energy Trust of Oregon, the non-profit energy efficiency and renewable energy program administrator for Oregon's investor-owned utilities. He has expertise and knowledge on a broad array of energy efficiency program management and planning topics including: conservation/DSM



potential assessments, conservation program planning, program data analysis, and cost-benefit analyses.

While working for the Energy Trust, Mr. Light managed the development of a new conservation potential assessment model that included an innovative approach to forecasting savings from emerging energy efficient technologies. That model was used to develop energy savings forecasts in over half a dozen electric and natural gas utility IRP processes.

Mr. Light also developed new tools to calculate avoided costs and benefit-cost ratios for energy efficiency programs and measures, greatly improving Energy Trust's reporting capability. Those tools incorporated new load shapes developed by the Northwest Power and Conservation Council for the 7th Power Plan and enabled the calculation of utility specific peak demand reductions for both electric and natural gas measures.

In addition to his conservation planning work, Mr. Light also managed Energy Trust's small industrial, agricultural, and industrial lighting programs. He provided technical review for Strategic Energy Management program participants in the commercial sector and advised the residential program on a behavior program. With the development of new measures that offer both efficiency and demand response capabilities, Mr. Light helped Energy Trust consider the combined benefits of these technologies. He also served on the Northwest Energy Efficiency Alliance's Cost Effectiveness Advisory Committee.

Earlier in his career, Mr. Light taught high school math and science on the Rosebud Reservation in South Dakota through Teach For America.

EDUCATION

B.S., Aeronautical & Aerospace Engineering, Purdue University

CERTIFICATIONS

Certified Energy Manager (CEM), Association of Energy Engineers (#14608)

KIMBERLY GENTLE Senior Associate

Kimberly has over 20 years of experience in developing wholesale and retail power contracts, origination and risk management for electric utilities and power brokers. Kimberly's knowledge of wholesale energy markets, contract design and risk management strategies strengthen the EES team and clientele. She has developed risk management policies, hedging strategies and staffing plans. Kimberly has consistently identified cost saving measures throughout her career while employed with utilities,



brokers and global energy trading facilities. Kimberly has optimized renewables, natural gas, power and transmission portfolios.

The foundation of Kimberly's experience is contracts and risk management and she specializes in optimizing value through policy and contracts. Kimberly has in-depth understanding of the International Swap and Derivatives (ISDA) contracts, the EEI Master Agreement, the National Energy Standards Board (NAESB) and Gas Industry Standards Board (GISB) agreements and the WSPP agreement. Kimberly regularly teaches energy contracting classes with a focus on the WSPP and ISDA agreements.

Kimberly has worked as a senior utility executive and had developed budgets, staffing plans, business strategy and policy development. Kimberly has been an industry leader in distributed generation, renewable energy strategy, block chain and cryptocurrency. She has negotiated retail and wholesale energy supply contracts in multiple commodities and has significant experience in contract default and bankruptcy in physical and derivative contracts.

Kimberly has a background in tariffs and policy and resource planning. Kimberly has a history in regulatory compliance and has acted as a subject matter expert, has developed and implemented strategic plans to save costs in regulatory oversight. She has experience with both BPA transmission and BPA power and the associated policies, business practices, rate cases and statues. Kimberly has experience in northwest natural gas and pipeline tariffs. As a utility professional, Kimberly has scheduled power, nominated natural gas, and traded both cash and forwards.

Kimberly has a background in power and natural gas settlements, after the fact check out and reporting and credit evaluation and controls. Kimberly has overseen and directly performed a variety of risk, contracts, scheduling and after the fact functions.

KYLE MORRILL Senior Analyst

Kyle Morrill provides analytical expertise for EES in support of economic and financial studies. Mr. Morrill offers experience and knowledge to a wide range of topics related to regulated utilities. Mr. Morrill's background includes economic analysis, econometric forecasting, municipal solid waste policy and demand-side management analysis.



In addition to his background in economics, Mr. Morrill is also trained in data management and research. He has lead data management and collection for research institutions and local government assisting in policy and demographic analysis.

EDUCATION

M.A., Economics, University of Colorado Denver B.S., Economics, University of Puget Sound

CONNOR BIRKELAND Senior Analyst

Connor Birkeland is a Senior Analyst with a specialty in distributed energy resource modeling and financial analysis. He brings nearly a decade of experience within the energy sector, having most recently collaborated as Research Fellow with Seattle City Light and the Federal Department of Energy. Mr. Birkeland's background includes resource modeling, short- and long-term weather forecast modeling, and conservation potential assessments. He has experience with a broad



range of sectors including renewable energy manufacturing, system design, benefit-cost analysis, and policy analysis.

While working with the Department of Energy and Seattle City Light, Mr. Birkeland helped develop innovative forecasting models for short-term behind-the-meter distributed generation utilizing an ensemble model for weather forecasting. This model separated behind-the-meter distributed generation from system load within Seattle City Light's service territory.

Mr. Birkeland also helped develop new tools for Seattle City Light to forecast load growth resulting from a range of potential electrification futures with a focus on impacts from climate change and air conditioning load growth. Those tools were incorporated into Seattle City Light's 2019 System Load Forecast.

Including his work with the City of Seattle, Mr. Birkeland has consulted on various federal contracts and clean tech startups. Most recently, he provided expertise as part of a SunShot grant to rural communities in northern Minnesota seeking to update local interconnection practices and reduce distributed generation soft-costs.

EDUCATION

MPA, Evans School of Public Policy and Governance, University of Washington B.A., Astrophysics, The Evergreen State College

RUSSELL W. SCHNEIDER Senior Financial Analyst

Mr. Schneider is a Senior Financial Analyst with expertise in financial planning, power supply, transmission, strategic planning, resource development, forecasting, risk analysis, smart grid, meter data management, and rate design. Mr. Schneider will focus on cost of service studies, rate design, integrated resource planning, resource development and assessment, power supply and transmission policy.



Mr. Schneider brings 15 years of experience and a strong economic, engineering, and technology background. Mr. Schneider has utility experience completing load research, rate design, cost of service, automated meter reading cost-benefit, power requirement, load forecast, conservation potential, and other financial studies. Mr. Schneider regularly presented at trustee meetings on forecasting, risk, reliability, power supply and transmission issues for many years.

Mr. Schneider has also been actively involved in the areas of Bonneville Power Administration rates, smart grid, demand response, energy efficiency, Columbia River power system environmental mitigation, hydropower advocacy, and state-level legislative issues. Mr. Schneider has experience within the West Coast public power community, including the Northwest Power Council advisory groups, the Pacific Northwest Coordinating Council system planning committee, Bonneville network transmission focus group and has presented at conferences such as Smart Grid Live and the Energy Efficiency Exchange.

Mr. Schneider has a track record of actively participating and working cooperatively with the Western Electric Coordinating Council, Western Renewable Generator Information System, National Electric Reliability Corporation, National Rural Electric Cooperative Association, Public Power Council, Northwest Requirements Utilities, Pacific Northwest Generating Cooperative, Pacific Northwest Utility Coordinating Council, and Northwest Council technical staff on all aspects of power supply, compliance and reliability policy issues.

Mr. Schneider also served as project manager and supervisor for utility participation in the Pacific Northwest Smart Grid Demonstration Project involving automated demand response, smart appliances and home energy networks. Mr. Schneider led efforts to automate meter data analysis and reporting functions, including developing business intelligence structured reports.

EDUCATION

Master of Engineering Technology Management, Washington State University Bachelor of Economics, Reed College, Portland, Oregon

SEUNG KIM, P.E. Senior Electrical Engineer

Seung Kim is responsible for consultation and design of electrical, power, and control projects for the Power Services Group of EES Consulting, Inc. He has extensive experience in the feasibility study, design, and construction supports of facilities for generation, transmission and distribution, supervisory control and data acquisition, and communications.



Mr. Kim's engineering skills reflect his 30 years working in design, planning, estimating, and construction management of power and control projects. His experience includes design and specification of electrical systems, shop drawing reviews, field inspections, contract administration, factory acceptance and field testing of control and substation equipment. Specific equipment experience includes: generators, power transformers, circuit breakers, protective relays, SCADA systems, motor controls, sensors and transducers, PLCs, and related control elements.

In addition to power and control system design and construction support, Mr. Kim participated as lead electrical engineer in hydroelectric facility engineering audits, inspections, and relicensing. These projects included Chelan and Rocky Reach Hydroelectric Projects, Box Canyon, and Upper American River Project. Mr. Kim has provided conceptual, alternative, and detailed design and construction supports for a large-scale juvenile fish bypass system for pump controls, power supply, instrumentation and control, and communication systems, integrating multitudes of new and existing control systems.

Mr. Kim's diverse background and experience allows him to provide wide-ranging unbiased consultation and design supports for the client's electrical and control system needs. He is a member of IEEE.

EDUCATION

BSEE – Seoul National University, University of Washington MSEE - University of Washington

PROFESSIONAL REGISTRATIONS

Professional Electrical Engineer, 1976
Washington, Alaska, North Carolina, Ohio, Oklahoma, Guam, California and British Columbia
Member of the Appraisal Institute

SCOTT E. MAHNKEN, P.E. Civil Engineering Consultant

Mr. Mahnken is a senior civil engineer. He first began working on hydroelectric projects in 1981. With 35 years of experience, he has worked on more than 40 hydroelectric projects; his involvement has included every phase of project development, from reconnaissance and planning, to final design and construction inspection. He has experience designing dams, spillways, intake structures, steel pipelines and



penstocks, and powerhouses. Mr. Mahnken manages small and large projects for his clients. His professional services typically involve engineering evaluations, site studies, geometry layout, calculations, budget estimates, plans and technical specifications preparation, and construction assistance.

Mr. Mahnken serves as a FERC-approved independent consultant responsible for safety reviews (Part 12 inspections) of hydroelectric projects. He has performed stability analyses for concrete gravity dams ranging from 16 feet to 180 feet high, and has recently evaluated seismic loading conditions for two dams using Chopra's pseudo-dynamic method as prescribed by FERC in their current guidelines (October 2002).

Mr. Mahnken's engineering experience also includes fish passage projects, access roads and bridges, tunnels, cofferdams, erosion protection, and regulatory permitting.

Some of Mr. Mahnken's major accomplishments are:

- Young's Creek Hydroelectric Project
- Calligan Creek and Hancock Creek Hydroelectric Projects
- Olokele Hydroelectric Project
- Eldorado Hydroelectric Project
- Choloma Hydroelectric Project
- Sullivan Lake Dam Rehabilitation
- King Cove Hydroelectric Project
- White River Fish Bypass Pipeline
- Pigeon Creek Fish Passage Culvert (10-ft-dia. Steel plate tunnel liner)
- Spillway Repairs for Beardsley Dam
- Power Lake Dam Raise and Spillway Modifications
- Combie Dam Erosion Protection
- Faraday Dam Structural Modifications (for stability)
- Box Canyon Spillway Repair
- Penstock Replacement for Calispell Hydroelectric Project

EDUCATION

B.S., Civil Engineering, Colorado State University, 1979

REGISTRATIONS AND PROFESSIONAL AFFILIATIONS

Professional Civil Engineer: Colorado 1984; Hawaii 1984; Washington 1986; Alaska 1995; California 1996; British Columbia 2003; Nevada 2004; Oregon 2011

American Society of Civil Engineers



Ryan Baron

Of Counsel

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At a Glance

Ryan provides strategic counsel on energy and environmental law matters.

He represents clients in front of federal and state agencies and advises on infrastructure development.

As former senior in-house counsel, Ryan understands the business of government and industry and the need to navigate clients through complex matters with revenue-focused and creative approaches.

Profile

Ryan Baron is of counsel in the firm's Environmental Law & Natural Resources practice group. He offers strategic counsel on a wide variety of utility and environmental law matters. He has significant experience in water, energy, air, solid waste, public utility regulation and infrastructure development. As former senior in-house counsel to a large metropolitan county, Ryan understands both the business of government and industry and the need to navigate clients through complex matters with revenue-focused and creative approaches.

Administrative Law & Regulatory

Ryan represents clients on administrative law and regulatory affairs matters before a number of federal and state agencies. He advocates in rulemaking and adjudicatory proceedings involving energy and gas, community choice energy, water quality and air quality permitting, total maximum daily loads, trading and offset programs, cap and trade, climate change, and solid waste disposal. He also advises on rules and tariffs that apply to regulated utilities.

Areas of Focus

Practices

Air Quality

Environmental Law & Natural Resources

Renewable Energy

Water Quality

Industries

Municipal

Special Districts

Project Development

ATTACHMENT 2

Ryan counsels clients on the development of utility and large-scale infrastructure projects with significant experience in all types of contracts and negotiation. Ryan has experience with development of alternative energy and other new technologies, such as waste-to-energy, solar, wind, natural gas and battery storage. He also has experience with the development of flood control and water facilities, transportation corridors and master planned communities. His development experience ranges from funding and finance issues to entitlements, procurement and public-private partnerships.

Government Service

Ryan is a former senior deputy county counsel to the County of Orange, one of the largest counties in the nation. He oversaw the office's public works and regulatory team and managed outside counsel. Ryan was lead counsel to the Public Works, Planning and Waste and Recycling agencies, and counsel to several joint powers agencies and County commissions and committees. In addition to his special counsel work, he advised on Brown Act, conflicts of interest, public works, real estate, land use and procurement issues. In his 12 years of government service, Ryan advised on billions of dollars in projects and development.

Prior to his municipal experience, Ryan practiced with a prominent Washington, D.C. law firm working on regulatory litigation and federal enforcement actions. During law school, Ryan was a law clerk and junior lobbyist for the global government relations office of an international telecommunications corporation and was legal intern for an FCC commissioner and in the FCC's International Bureau. Ryan was editor-in-chief of Catholic University's communications law journal and a graduate of the school's Institute for Communications Law Studies (now the Institute of Law & Technology).

Teaching

Ryan is an adjunct professor at Whittier Law School where he has taught Administrative Law and Energy Law. He guest lectured at the Chapman University School of Law and in the Advanced Power and Energy Program at the University of California, Irvine.

Ryan is licensed to practice law in the State of California.

Education

- The Catholic University of America, Columbus School of Law, J.D.
- San Diego State University, B.A. with distinction

Memberships & Community Involvement

ATTACHMENT 2

- · Sustain OC, Board of Directors; Government Affairs Committee, co-chair
- State Bar of California, Public Law Section Executive Committee, chair;
 Council of State Bar Sections
- California Stormwater Quality Association; Policy & Permitting Subcommittee, co-chair; Executive Program Committee
- · CalCCA, partner member
- Los Angeles Chamber of Commerce; Energy, Water and Environmental Sustainability Council
- Orange County Bar Association, Environmental Law Section

Representative Matters

Utility Law

- Advised public agencies on community choice aggregation implementation and legal issues, including Western Riverside Council of Governments and several Southern California cities
- Advised \$500 million municipal solid waste enterprise on alternative energy opportunities, including anaerobic digestion, biogas, CNG, solar and geothermal
- Negotiated agreements and other project documents for several landfill gas to energy facilities
- Advised on Investor Owned Utility general rates cases and tariffs
- Drafted and negotiated solar power purchase agreements and advised on renewable energy credits
- Advised on FERC regulatory issues for over-the-fence sales under Public Utility Regulatory Policy Act
- Participated in California Air Resources Board rulemakings regarding cap and trade application to cogeneration plants and landfills and advised on monetization of carbon allowances and offset programs
- Successfully negotiated \$2.4 million CARB notice of violation to no penalty
- Drafted and negotiated utility pipeline relocation settlement agreements
- Represented large county in formation of statewide joint powers agency for natural gas procurement
- Assisted with drafting grant applications to Department of Energy and California Energy Commission

Environmental Law

- Advised counties, numerous cities, councils of government and developers on Clean Water Act and Porter-Cologne Act compliance and watershed management planning
- Participated in State and Regional Water Board proceedings on stormwater permit issuance, alternative compliance, total maximum daily loads, establishment of water quality standards and beneficial uses
- Drafted Supreme Court amicus brief and filed test claims with Commission on State Mandates regarding unfunded state mandates associated with MS4 program activities

- Advised on total maximum daily load compliance issues (the property in the internative compliance) involving water quality trading, alternative compliance strategies, TMDL deadlines, basin plan amendments
- Participated in EPA rulemaking proceedings on Waters of the U.S. and agency restructuring, and negotiated with agency staff
- Successfully represented clients in Clean Water Act lawsuits, 60-day citizen suit notices and Regional Water Board enforcement actions
- Advised on air permits and variance issues associated with landfill operations, natural gas and landfill gas to energy power plants
- Advised on solid waste disposal issues including trash importation, tipping fees, California Environmental Quality Act, landfill expansion, landfill closure and conditional use permits

Project Development

- Reviewed contracts for \$165 million P3 development of government civic center
- Advised on infrastructure development agreement obligations for 6,000-acre development including transportation obligations, road fees and community facility district finance issues
- Advised on development and construction of cogeneration, solar, LFGE, biomass, fuel cell and natural gas injection facilities
- Advised on all aspects transportation corridor improvements and flood control improvements, including CEQA/NEPA, State Fish and Wildlife and Regional Water Board permits, design and construction contracts, developer and municipal cooperative agreements, real estate, and public funding issues
- Advised joint powers operation of \$200 million public safety radio communications system between county and more than 130 partner agencies, including \$150 million p25 upgrade
- Drafted and negotiated \$20 million cooperative agreements between state and local agency partners for water diversion pipelines to remove selenium, nitrogen and trash
- Led telecommunications site leasing efforts on countywide basis

Public Agency Governance

- Former lead counsel to Orange County Public Works, Planning and Waste and Recycling departments on issues involving regulatory, environmental, public works, procurement, real estate, land use, special fund use, public finance, Brown Act, CEQA, and conflicts of interest
- Counsel to JPAs and various commissions and committees, including the Orange County Planning Commission, Airport Land Use Commission, Countywide Coordinated Communications System and the County of Orange/City of Santa Ana Civic Center JPA
- Counsel on countywide regional services including water quality, energy, public works and public safety communications

LEGAL ALERTS | DEC 4, 2017

CPUC Reopens TOU Grandfathering Grace Period Eligibility

Public Agencies Must Submit Application by Dec. 31

LEGAL ALERTS | JAN 18, 2017

Waters of the U.S. Rule to Go to Supreme Court

Nation's High Court Agreed to Hear Challenges to Controversial Rule

AUTHORED ARTICLES & PUBLICATIONS | JAN 17, 2017

Is Tax Law the Most Efficient Way to Promote Sustainable Energy?

Ryan Baron, Of Counsel, Answers in Tax Notes

LEGAL ALERTS | OCT 5, 2016

Four New California Cap and Trade Bills Fund Programs

\$900 Million in Appropriations for Fiscal Year 2016-17

- "Riverside County Issues RFP for Broadband Infrastructure," BBKnowledge, April 5, 2017
- "A Critique of the International Cybercrime Treaty," The Catholic University of America Columbus School of Law, CommLaw Conspectus: Journal of Communications Law and Technology Policy, 2002

Appendix B – Client List

EES CONSULTING, INC. PARTIAL CLIENT LIST

Alameda County, California

- Community Choice Aggregation feasibility study peer review
- Power supply planning

Alaska Power & Telephone, Alaska

- Cost of service and rate design
- Expert testimony/report

Alaska Village Electric Cooperative, Alaska

- Due diligence and valuation of utility property acquisition
- Fuel transportation feasibility
- Power supply planning

University of Alberta, Canada

- Electricity and natural gas rates, generation supply options and procurement
- Expert testimony
- Cogeneration feasibility
- Water and wastewater rate analysis
- Asset sale/acquisition analysis

Association of Major Power Companies, Ontario

- Retail rate analysis
- Wheeling rate analysis
- Expert testimony

American Public Power Association (APPA)

- Instruct APPA cost of service, rate design, load forecasting and financial management seminars
- Authored APPA technical manual on cost of service

American Water Works Association (AWWA)

- Instruct AWWA cost of service, rate design, forecasting and financial management seminars
- Develop AWWA technical manuals
- Chair of Management Division, Total Water Management and Financial Management Committees

City of Anaheim, California

- Electric rate study assistance
- Advice on strategic partnering
- Stranded cost analysis
- Cogeneration analysis
- Property tax analysis

Municipality of Anchorage, Light & Power, Alaska

- Engineer of Record
- Unbundled cost of service
- Competitiveness analysis
- Strategic advice and assistance
- Deregulation consulting
- Regulatory/legal support
- Organizational audits
- Schedule/dispatch department support
- Integrated resource plans
- Generation planning study
- Property acquisition assistance
- Joint generation feasibility study
- Merger and acquisition analysis
- Load forecast
- Production costing analysis
- Prudency review
- Expert testimony

Anyox Hydroelectric Corp, Canada

- Design of 4 new hydroelectric projects
- Canadian water licensing and permits
- Power sales contract assistance
- Financing support and modeling

Avista, Washington

- Water quality program support
- Spokane River FERC relicensing analyses and negotiations/litigation
- Strategic planning

Basin City Water/Sewer District, Washington

■ Valuation study

Benton County Public Utility District, Washington

- Integrated resource plan
- Conservation potential assessment

Beartooth Electric Cooperative, Montana

- Cost of service study
- Generation option study
- Valuation study
- Strategic planning
- Merger and acquisition analysis
- Load forecast

Benton County REA, Washington

- Strategic planning retreat
- Evaluation of alternative power supply options and contract negotiations
- Wheeling rate analysis
- Asset acquisition study
- Cost allocation and retail rate design
- Permitting/feasibility for gas generation
- BPA negotiations

Big Bend Electric Cooperative, Washington

■ Electric cost of service rate study

Big Flat Electric Cooperative, Montana

- Wheeling rate development
- Natural gas pipeline feasibility study

Blachly-Lane Electric Cooperative, Oregon

- Cost of service study/rate design
- Capital credits allocation study

City of Bonners Ferry, Idaho

- Water cost of service study
- Electric cost of service study
- Large customer rate setting analysis and expert testimony
- Hydro generation feasibility study

Burbank Water & Power, California

Transformer Temperature Control Installation

Butte County, California

- Community Choice Aggregation feasibility study
- Power supply planning
- Solar project evaluation

Central Electric Cooperative, Oregon

■ Retail rate study

Central Lincoln PUD, Oregon

- Electric retail rate study
- Wheeling rate

Circle Telephone, Alaska

Appraisal/merger and acquisition support

City of Birmingham, Alabama

- Comprehensive water cost allocation and rate design study
- Litigation support/expert testimony

City of Boulder City, Nevada

Electric, water, wastewater cost of service study

City of Burien, Washington

■ Electric conversion financial analysis

British Columbia Utilities Commission, Canada

■ Evaluation of natural gas rate application

Building Owners Management Association

 Expert testimony in Puget Sound Energy rate case on interclass cost allocations

California Municipal Utilities Association

- Evaluation of joining California ISO for California municipal electric utilities
- Educational services

City of Calgary, Alberta

 Water and sewer cost of service and rate analyses

CH2M Hill, Washington

- Fish passage facility design
- Mechanical engineering/design
- Electrical engineering
- Control system design

Chelan County Public Utility District, Washington

- Conservation potential assessment
- Engineering assistance/substation design
- Implementation of time differentiated, average embedded and marginal cost of service software programs
- Load research program assistance
- Econometric demand forecasting models
- New large load analysis
- Conservation and transformer load management analysis
- Water/sewer service regulation critique and rate studies
- Diesel generation feasibility study
- DSM potential study
- Juvenile fish bypass engineering
- Fiber system benefit/cost analysis
- Load forecasting

City of Cheney, Washington

- Electric cost of service/rate design study
- Strategic options study for electric utility

Clackamas River Water District, Oregon

- Utility coordination with Damascus, Mt.
 Scott and Oak Lodge water districts
- Strategic planning
- Merger study

Clallam County Public Utility District, Washington

- Conservation potential assessment
- Water cost of service study
- Electric cost of service and rate design studies
- Review and calculation of wheeling tariffs
- Resource evaluation
- Representation in regional power planning issues
- Integrated resource plan/load forecast
- Evaluation of bulk power alternatives/BPA support

Clark Public Utilities, Washington

- Conservation potential assessment
- Hydro feasibility study
- Electric integrated resource planning study
- Engineer's letters for bond financings
- DSM evaluation/CPA evaluation
- Owner's agent for construction of 248
 MW gas turbine project
- Retail rate and wheeling analysis
- Natural gas procurement
- Customer choice program
- Assistance in construction of gas engine project
- Renewable resource evaluation
- Risk management evaluation
- Load forecasting

Clearwater Power Company, Idaho

- Line extension policy analysis
- Retail rate study

Coachella Valley Association of Governments, California

- Community Choice Aggregation (CCA) feasibility study
- Evaluation of electric utility options/new utility
- Property valuation for condemnation evaluation
- Expert testimony
- Power supply planning

Columbia River PUD, Oregon

■ Retail rate study

Columbia REA, Washington

- Electric retail rate study
- New large customer load analysis

City of Corona, California

- Strategic advice
- Valuation assessments
- Condemnation evaluation/expert testimony

Consumers Power, Inc., Oregon

■ Electric rate assistance

Costco Companies, Inc., Washington

- Power supply evaluation
- Electric deregulation strategy

Cowlitz County PUD, Washington

- Expert testimony on Wells #2 hydro failure
- Power supply evaluation
- Conservation potential assessment

Denver Water Board, Colorado

- Water rate study assistance
- Strategic planning
- Litigation support
- Expert testimony

District of Lake Country, B.C., Canada

 Turbine and generator procurement for hydroelectric project

Douglas County PUD, Washington

- Wells Dam FERC relicensing support and negotiations
- Tribal negotiation
- Negotiation of 10(e) payments
- Water quality/temperature modeling/dissolved gas investigations

Douglas Electric Cooperative, Oregon

■ Electric retail rate study

Energy Facility Site Evaluation Council (EFSEC)

 Assess financial prudency of purchasing combustion turbine project

Electricity Distributors Association, Ontario

- Retail cost of service/rate design studies
- Evaluation of load management options
- Evaluation of provincial resource acquisition study
- Expert testimony
- DSM evaluation
- Merger and acquisition analysis/support
- Power pooling acquisition study and business plan

Electricity Distributors Association (cont'd)

- Integrated resource planning study assistance
- Strategic planning
- Customer choice analysis
- Evaluation of ISO for Ontario
- Educational services
- Energy trading operations
- Unbundled cost of service model

City of Ellensburg, Washington

- Power supply/Tier 2 options
- Rate studies, financial analysis, management review, load management
- Integrated resource plan
- Gas utility acquisition analysis
- Evaluation of bulk power alternatives
- Power contract negotiations
- Litigation support/expert testimony
- Resource evaluation
- Load forecast

El Dorado Irrigation District, California

- Water and wastewater financial planning and rate studies
- Customer service manual
- Contract negotiations

Elmhurst Mutual Power and Light, Washington

- General engineering/substation design
- Distribution protection study
- Rate study

Emerald Public Utility District, Oregon

- Expert testimony for condemnation proceedings
- Power resource evaluations
- Cost of service and rate design studies
- Contract negotiations
- Asset acquisition analysis
- Conservation program review
- Strategic planning/Board retreat

ENERconnect, Inc., Ontario

- Established wholesale power trading protocol for Ontario
- Consulted on various technical and financial requirements
- Elected to Board of Directors from 1999 2001

Energy Northwest, Washington

- Packwood hydro relicensing support
- Evaluation of Columbia Generation Station
- Fisheries and water quality studies
- Instream flow determination
- Habitat enhancement and restoration
- Threatened and endangered species
- Fisheries investigations, including netting, hydroacoustics, population assessments, and entrainment and impingement
- REC analysis/forecast
- Strategic planning
- Production costing analysis
- Power resource feasibility study

Enmax, Canada

Wheeling rate regulatory support/expert testimony

Eugene Water and Electric Board, Oregon

- Evaluation of power trading floor
- Electric cost of service and rate design studies

Fall River Rural Electric Cooperative, Idaho

- Propane purchase evaluation
- Merger analysis, and operations and management review
- Asset acquisition evaluation
- Retail rate study
- Power resource evaluation model
- Gas distribution system feasibility study

City of Fargo, North Dakota

- Wastewater cost of service study
- Water cost of service study
- Long-term financial plan

Ferry County Public Utility District, Washington

- Contract negotiations
- Electric rate study

Flathead Electric Cooperative, Montana

- Merger and acquisition evaluation
- Regulatory compliance
- Unbundled cost of service
- Strategic advice
- Lead consultant for 40,000 electric meter acquisition from neighboring investorowned utility
- Due diligence on coal plant
- Load forecast

Franklin County PUD, Washington

■ Conservation potential assessment

FortisBC, Canada

- Power supply capital planning
- Rate design application for electric and gas utilities
- Main extension analysis
- Power contract negotiations
- Regulatory expert testimony
- Electric industry restructuring analysis
- Electric cost of service and rate design study
- Line extension policy
- Resource acquisition study
- Wholesale power sales contract negotiation
- Integrated resource planning study
- Power supply dispatch optimization study
- Competitiveness study
- Retail wheeling application
- Owner's regulatory expert for construction of major 230 kV transmission line
- Conservation potential analysis
- Load forecast

Garrison Diversion Conservancy District, North Dakota

- Analyze the financial/rate impacts of the proposed Red River Valley water supply/200 mile-8' water supply project
- Critique of project benefit/cost calculations
- General financial analysis support
- Load forecast

Glacier Electric Cooperative, Montana

- Standby rate analysis
- Power supply acquisition study
- Cost of service study

City of Glendale, California

■ Electric cost of service study

Golden Valley Electric Cooperative, Alaska

- Strategic planning for Board/staff
- Power supply planning advice

Grant County PUD, Washington

Conservation potential assessment

Grant County Industrial Customers, Washington

- Retail rate review
- Power contract negotiations

Grays Harbor County Public Utility District, Washington

- Conservation potential assessment
- Cost of service and retail rate study
- Bulk power sales forecast and contract negotiations
- Integrated resource plan
- Regional power issues
- Power resource evaluation
- Cogeneration feasibility
- Transmission analysis

Green Island Energy, Ltd.

Biomass power project development assistance

Hampton Affiliates, Washington

- Provided assistance in energy related matters
- Assistance in construction of wood-fired boiler and back pressure turbine projects
- Negotiation of power purchase and wheeling agreement

HDR Engineering, Washington

- Hydro feasibility and power marketing services
- Transmission line feasibility

Hermiston Energy Services, Oregon

■ Cost of service study

City of Heyburn, Idaho

- Expert testimony and litigation support
- Utility asset sale evaluation

Hidroelectrica Secacao, Guatemala

- Hydropower turbines and generators procurement
- Dam design
- Construction management
- Plant automation and controls

City of Idaho Falls, Idaho

■ Update COSA model

Imperial Irrigation District, California

- Geothermal update analysis
- Salton Sea revenue analysis

Inland Choice Power, California

- Community Choice Aggregation business plan for CVAG, SANBAG and WRCOG
- Power supply options evaluation

Industrial Customers of Idaho Power, Idaho

- Expert testimony and analysis of Idaho
 Power rate increase applications
- Customer choice negotiations

Inland Power & Light Company, Washington

- Conservation potential assessment
- Cost of service and rate design
- EPAct 2005 time of use analysis
- Integrated resource plan
- Wheeling rate analysis

International Forest Products, Washington

- Wood-fired power plant feasibility studies
- Steam cycle heat balances

Iron Mountain Quarry, Washington

Advice on new electric generation project

City of Irvine, California

- Greenfield municipalization feasibility study
- Community Choice Aggregation feasibility study

Jefferson County PUD, Washington

- Cost of service and rate design studies
- Strategic planning
- Capital plan critique
- Assistance in PUD startup

Kentucky-American Water Company, Kentucky

- Conservation evaluation and program development
- Water demand forecast
- Integrated resource planning study
- Strategic planning
- Expert testimony/regulatory assistance
- Meter cost analysis

King City, California

■ Peer review of CCA feasibility study

Kittitas County PUD #1, Washington

- General engineering
- 20-year system plan
- Irrigation and new large single load rate analysis
- Cost of service/rate design studies

Klamath Water Users Association, Oregon

- Retail rate analysis
- Strategic electric options
- Power supply planning analysis

Klickitat County Public Utility District, Washington

- Rate study
- Financial planning
- Integrated resource planning study
- Water system technical assistance/review
- Evaluation of hydro project
- IPP wheeling rate negotiations
- Pump storage project evaluation

Kootenai Electric Cooperative, Idaho

- Electric rate study
- Business acquisition analysis
- Asset acquisition support
- Merger/acquisition assistance
- Cogeneration feasibility study
- Integrated resource plan
- Large customer negotiations/litigation support

City of Lake Forest Park, Washington

- Water and sewer rate study
- Strategic planning

Lakeview Light and Power, Washington

- Cost of service and rate design
- Pole attachment rates and contracts
- Windmill power evaluation
- Engineer's letter for bond financing
- Load forecast

Lassen Municipal Utility District, California

■ Electric cost of service and rate design

Lewis County Public Utility District, Washington

- Conservation potential assessment
- Cost of service and rate design
- Fixed asset ledger development
- Power resource acquisition analysis
- Integrated resource plan
- Major hydro generation evaluation and assessment
- Regional power issues and contract negotiations
- Asset acquisition analysis

City of Lethbridge, Alberta

- Wholesale power negotiations/expert testimony
- Analysis of electric industry restructuring
- Cost of service/rate design studies
- Strategic advice on deregulation and existing retail business
- Strategic partnership advice
- Power supply option study
- Load forecast

Lincoln Electric Cooperative, Montana

Cost of service and rate design study

Lodi, City of, California

Rate study

Los Angeles County, California

- Community Choice Aggregation (CCA) formation
- Strategic advice on power supply and wheeling options for owned generation
- Rate analysis and negotiations
- Litigation support
- Franchise agreement assistance
- Cogeneration feasibility study
- Analysis of wheeling options
- ISO negotiations
- Transmission access evaluations
- Expert testimony at FERC on ISO transmission issues

Los Angeles Department of Water & Power, California

 Prepared testimony on behalf of LADWP in PG&E rate case at FERC

Lower Valley Energy, Wyoming

- Evaluation of merger options
- Natural gas pipeline and gas turbine generation financial and technical feasibility
- Integrated resource plan
- Contract negotiation
- Evaluation of LNG distribution systems
- DSM program development
- Expert testimony and regulatory support
- Fuel cell feasibility
- Load forecast

Mason County Public Utility District No. 1, Washington

- Electric rate study
- Power supply resource evaluation
- Contract negotiations
- Hydro feasibility studies

Mason County Public Utility District No. 3, Washington

- Conservation potential assessment
- New load rate analysis
- Design and implementation of continuing property records fixed asset accounting system
- Cost of service and other miscellaneous financial related analyses
- Electric demand forecast
- Resource acquisition study
- Hydro evaluation
- Bond financing
- Least cost planning study
- Contract negotiations
- DSM program development
- Cogeneration review
- Fiber optics business plan
- Engineering/contracting assistance and oversight for reciprocating engine construction

McMinnville Water & Light, Oregon

- Integrated resource plan
- Cost of service/rate study
- Conservation potential assessment

Medicine Hat, City of, Canada

- Strategic planning
- Energy consulting
- Resource evaluation/AGC study
- Production costing modeling
- Electric power project assistance
- Utility revenue requirement policies and cost of service

Microsoft, Inc., Washington

- Power supply option analysis and contract negotiations
- Strategic planning
- Expert testimony on stranded costs

Midstate Electric Cooperative, Oregon

■ Electric rate study

City of Millersburg, Oregon

■ Formation of municipal electric utility

City of Milton, Washington

- Cost of service study
- Long-term strategic plan
- Substation design

Ministry of Fisheries and Oceans, Canada

Expert testimony

Mission Valley Power, Montana

■ Electric rate study

Missoula Electric Cooperative, Montana

- Electric rate study
- Net metering analysis

Montana Associated Cooperatives, Montana— (20 cooperatives in the state)

- Lead consultant in evaluation of acquiring major IOU service territory
- Strategic advice

City of Moreno Valley, California

- Cost of service study
- Prepared RFP for bulk power supply

M-S-R Public Power Agency, California

- BPA White Book analysis
- Litigation support

City of Needles, California

- Wastewater cost of service study
- Water and electric cost of service studies
- Financial planning

Nor-Cal Electric Authority, California

- Assisted in preparing bid for purchase of investor-owned utility's facilities
- Negotiated MOU and final Purchase and Sales Agreement
- Performed engineering, environmental and financial due diligence for asset sale
- Assisted in preparation of regulatory approval materials
- Develop operating plan
- Power supply options evaluation
- Load forecast

Northern California Generation Coalition, California

 Regulatory assistance on natural gas issues

Northern Lights, Inc., Idaho

- Electric rate study
- Pole attachment rate study
- Large customer negotiations

Northern Wasco Public Utility District, Oregon

- Transmission and distribution design assistance
- Strategic planning
- Power supply resource evaluation
- Rate study
- Conservation potential study

Northwest Public Power Association (NWPPA), Washington

- Instruct technical seminars on integrated resource planning, rates, cost allocation, financial management and load forecasting
- Member of Board of Directors
- Strategic planning

Northwest Territories Power Corporation, Canada

- Regulatory filing, expert testimony
- Integrated resource planning study
- Strategic planning
- Power supply resource evaluation
- Rate study/load forecast

Northwestern Energy, Montana

- Prepared and evaluated RFP for default supply for retail load
- Expert testimony/regulatory assistance

Okanogan County Public Utility District, Washington

- Integrated resource planning study
- Cost of service study

Okanogan REA, Washington

■ Strategic planning

Ontario Energy Board, Canada

- Regulatory cost allocation
- Distributed generation and standby rate study
- Expert testimony

Ontario Hydro, Canada

- Retail and wholesale rate evaluation
- Strategic planning
- Conservation evaluation
- Rate design mediation
- Integrated resource planning assistance
- Competitiveness study

Ontario Power Authority, Canada

■ Energy conservation study

Orcas Power & Light Cooperative, Washington

- Cost of service analysis
- Resource evaluation/integrated resource plan
- Broadband study

Oregon Restaurant Association, Oregon

- Strategic advice
- Load aggregation

Pacific County Public Utility District, Washington

- Integrated resource study
- Rate studies
- Expert testimony on pole attachment rates
- Power supply resource evaluation
- Fiber optics business plan

City of Palo Alto, California

- Power supply study
- Joint action review
- Gas, electric, water and sewer cost of service studies
- Demand forecast/resource evaluation
- Least cost planning assistance
- Customer choice program

Parkland Power & Light, Washington

- Rate study
- Strategic and least cost generation planning studies
- Power supply resource evaluation

City of Pasadena, California

- Water and electric cost of service and rate design studies
- DSM program evaluation

Pend Oreille County Public Utility District, Washington

- Hydro plant options feasibilities
- Integrated resource plan
- Bond issue for new transmission line
- Expert testimony/litigation support
- FERC relicensing
- FERC Part 12 inspections
- Penstock repair
- Dam design
- Fishery behavior studies
- Total dissolved gas reduction project
- Turbine upgrade
- Renewable energy credit analysis

Peninsula Light Company, Washington

- Electric rate study
- Asset evaluation study
- Power supply resource acquisition study
- Line extension analysis
- Conservation evaluation
- Integrated resource planning study
- Resource acquisition assistance
- Water quality advice
- Financial planning analysis
- Renewable resource evaluation
- Conservation potential analysis
- Load forecast

Pierce County Cooperative Association*, Washington*

- Negotiation of power contracts, resource evaluation and integrated resource plans
- Transmission system analysis
- Resource acquisition/Rate study
- Strategic planning advice

(*Alder Mutual Light Company, Town of Eatonville, Elmhurst Mutual Power and Light Company, City of Fircrest, Lakeview Light and Power Company, City of Milton, Ohop Mutual Light Company, Parkland Light and Water Company, Town of Steilacoom)

PNGC Power, Oregon

- Conservation potential study
- Contract evaluation risk study
- Cost of service advice

Polk-Burnett Cooperative, Wisconsin

- Rate study
- DSM study
- Strategic planning

City of Portland Water Bureau, Oregon

- Internal audit and valuation study
- Wholesale contract review

Portland General Electric, Oregon

■ Hydro relicensing support

City of Port Angeles, Washington

- Resource acquisition studies
- Power supply strategic planning
- Merger study
- Conservation potential study
- Demand response strategic assistance
- Rate study
- Load forecast

Potomac Electric Power Company, Washington, D.C.

■ Assistance in preparation of energy plan

PPL Montana, Montana

- Power supply evaluation and acquisition RFP
- Litigation support/expert testimony for hydro land lease dispute

Princeton Power and Light, B.C.

- Rate study
- Regulatory filings
- Expert testimony

Puyallup Tribe of Indians, Washington

- Hydro project evaluation/cost benefit study
- Strategic advice
- Expert report on hydro feasibility

Raft River Rural Electric Coop, Idaho

Asset acquisition analysis

City of Red Deer, Canada

- Wholesale power rate negotiations
- Cost of service and rate design studies
- Expert testimony
- Strategic advice on deregulation and existing retail business

City of Redding, California

- Organization audit/strategic planning
- Competitiveness study/stranded cost review
- Citizens' Committee support
- Evaluation of power dispatch protocol

City of Reno, Nevada

- Auditing and renegotiating electric and gas franchise agreements
- Owner's agent for service territory acquisition of 75,000 customers for \$450 million

City of Richland, Washington

- Power resource plan
- Valuation study
- Strategic planning services and consulting
- Analyzed storm drainage rates
- Evaluation of BPA slice product
- Management and operations review
- Integrated resource plan
- Conservation potential assessment
- Electric rate study
- Load forecast

Riveria Water Department, Washington

Cost of service and rate design

City of Roseville, Oregon

■ Electric cost of service model evaluation

Sacramento Municipal Utility District, California

- Load research and cost of service software
- Sample selection assistance
- Rate study
- Litigation support and expert testimony
- FERC licensing compliance audit

City of St. Paul, Alaska

■ System valuation

Salem Electric, Oregon

■ Retail rate study

Salmon River Electric Coop, Idaho

Industrial rate development

City of San Bernardino, California

- Developed Community Choice Aggregation (CCA) technical business plan
- Design and construction management of cogeneration project
- Air quality permitting support

City of San Diego, California

Assistance in evaluating CCA business model

City of San Jose, California

- Developed Community Choice
 Aggregation (CCA) technical business plan
- Developed CCA electric power retail rate forecast

City of San Marcos, California

- Evaluation and due diligence for new municipal generation project
- New municipal electric utility formation options study

City of Santa Ana, California

 Developed RFP for strategic energy planning study

City of Santa Clara, California

Cost of service study

Seattle City Light, Washington

- Hydro option evaluation study
- Transmission/distribution design

Seattle Times, Washington

- Evaluation of electric power supply options
- Contract negotiations for retail electric service

Seattle Water Department, Washington

- Rate, financial management and forecasting studies
- Conservation evaluation
- Strategic planning studies
- Contract negotiations
- Least cost planning
- Load forecast

SEH America, Washington

- Strategic consulting
- Electric supply option evaluation
- Natural gas supply transportation support

Shady Cove, Oregon

■ Financing plan and prospectus development for water system purchase

City of Shoreline, Washington

- Negotiation assistance
- Strategic planning seminar
- Energy aggregation analysis
- Water service analysis
- Evaluation of strategic utility options
- Assumption negotiations of wastewater system
- Franchise fee negotiations
- Due diligence & valuation of utility system

Silicon Valley Power, California

Cost of service study

Simpson Timber Company, California

 Engineering/financial consulting for a new woodwaste boiler/condensing turbine project

Skamania County PUD, Washington

- New large load
- Wheeling rate
- Electric retail rate study
- Pole attachment study

Snohomish County Public Utility District, Washington

- Calligan & Hancock hydro project design/construction management
- Average and marginal cost of service models
- Load research program
- Elasticity study/load forecast
- Power supply resource acquisition evaluation
- Cost of service model
- Landfill gas generation study
- DSM study
- Conservation potential assessment
- Energy efficiency behavior program evaluation
- Energy efficiency department support
- Regional office evaluation
- Engineering audit for FERC relicensing support

Solano Beach, City of, California

- Community Choice Aggregation peer reviews
- Power supply planning

South San Joaquin Irrigation District, California

- Start-up assistance
- Power supply evaluation
- Expert rate setting advice

Southeast Idaho Cooperatives

Asset acquisition analysis

Springfield Utility Board, Oregon

- Cost of service programs and comprehensive rate study
- Contract negotiations
- Power supply resource evaluation and acquisition assistance
- Cogeneration feasibility study

Surprise Valley Electric, California

- QF assistance/wheeling rates
- Expert testimony

City of Tacoma, Washington

- Conservation potential assessment
- Comprehensive electric and water cost of service and rate design analyses
- Power supply option resource study
- Review of line extension policy
- Elasticity and load forecasting studies
- Review of internal departmental staffing requirements
- Conservation effectiveness evaluation
- Policy seminars
- Integrated resource planning
- Contract negotiations
- FERC hydro relicensing assistance
- Major water use contract negotiations

Terasen Gas, Canada

- Integrated resource planning study
- Optimal dispatch model
- Retail cost of service/rate design filing
- Expert testimony
- Main extension development

Texas Municipal Power Agency, Texas

- Expert testimony
- FERC wheeling rate application
- State wheeling rate application
- Antitrust litigation support

Tillamook People's Utility District, Oregon

Rate assistance

City of Toppenish, Washington

- Strategic advice
- Electric utility options study
- Valuation assessments

Truckee-Meadows Water Authority, Nevada

- Lead strategic and financial consultant in acquisition of 70,000 meter water system previously owned by Sierra Pacific in the Sparks/Reno area valued at \$400 million
- 108" pipeline replacement project
- Hydro generator repair and rewind project
- Flume repair and upgrade design

Turlock Irrigation District, California

- Cost of service review
- Seminars on utility planning and operations
- Load growth study
- Time of use rates
- Marginal cost study for electric system
- Litigation support for contract disputes
- Customer service support
- Relicensing compliance audit

Umatilla Electric Cooperative, Oregon

Cost of service study

US Ecology, Inc., Washington

- Expert testimony on cost of service and rate design issues
- Regulatory filing for Hanford nuclear waste disposal site

Vigilante Electric Cooperative, Montana

- Wheeling rate analysis
- Merger/acquisition study

Wasco Electric Cooperative, Inc. Oregon

Electric rate study

Washington PUD Association, Washington

- Feasibility analysis for power options
- Sourcebook publication input

Western Oregon Electric Cooperative, Oregon

■ Cost of service study

City of West Linn, Oregon

- Water and wastewater rate studies
- Strategic planning
- Cogeneration feasibility study

Western Montana G&T, Montana

- Integrated resource planning study
- Power contract negotiations

Western Public Agencies Group, Washington*

- Representation and expert testimony in 1982, 1983, 1985, 1987, 1991, 1993, 1995 and 1999, 2001, 2003, 2007 and 2009, 2012, 2014, 2016 and 2018 BPA wholesale power and transmission rate cases
- Renegotiation of ASC methodology
- Ongoing BPA-related activities
- Integrated resource planning and strategic resource acquisition studies and advice
- Bulk power evaluation
- Power pooling study

(*Alder Mutual Light, Benton REA Clallam County PUD, Clark Public Utilities, City of Ellensburg, Elmhurst Mutual Power & Light, Grays Harbor County PUD, Kititas County PUD, Lewis County PUD, Mason County PUD #1, Mason County PUD #3, City of Milton, Ohop Mutual Light Company, Pacific County PUD, Parkland Light & Water Company, City of Port Angeles, Skamania County PUD, Town of Eatonville

Western Riverside Council of Governments (WRCOG), California

Developed Community Council Aggregation (CCA) technical business plan

Weyerhaeuser, Inc., Washington

■ Energy pricing and sourcing advice

Whatcom County PUD, Washington

Strategic electric advice and options study

Village of Winnetka, Illinois

- Power supply resource evaluation and feasibility
- Cost of service/rate design study

City of Yakima, Washington

- Wastewater connection charge review
- Litigation support
- Expert testimony

Yellowstone Valley Electric Cooperative, Montana

- Electric cost of service and rate design study
- Wheeling rate
- Coal and gas plant acquisition due diligence

Yucaipa Valley Water District, California

- Water and wastewater financial planning and rate studies
- Hydro plant evaluation



FUTURE CITY COUNCIL AGENDA ITEMS

Updated January 16, 2020

AGENDA ITEMS AND CITY COUNCIL MEETING DATES ARE SUBJECT TO CHANGE.

CHECK WITH THE CITY CLERK'S OFFICE AT (760) 839-4617

January 29, 2020 NO MEETING (5th Wednesday)

February 5, 2020 6:00 p.m.

CONSENT CALENDAR

Approval of CalPERS Industrial Disability Retirement for Lee Anne McCollough (J. Perpetua)

Approval of CalPERS Industrial Disability Retirement for Police Officer Lee Anne McCollough.

Application for FY 2020 Bureau of Reclamation Title XVI Grant Funding for Planned Membrane Filtration / Reverse Osmosmis (MFRO) Facility (C. McKinney)

In 2019, the City of Escondido received an initial award of \$4.884 Million, out of a total estimated agreement amount of \$11.175 Million, from the Bureau of Reclamation's WaterSMART: Title XVI Water Reclamation and Reuse Projects program. The Utilities Department is submitting an application requesting the balance of that total estimated agreement. If awarded, all funding provided through a modified agreement would be used toward construction of the MFRO Facility.

Approval of Consulting Agreement with T.Y. Lin Incorporated for Construction Management of the Citracado Parkway Extension Project (J. Procopio)

This project extends Citracado Parkway from Harmony Grove Village Parkway to Andreasen Drive and widens the roadway between W. Valley Parkway and Avenida Del Diablo. Due to the size and complexity of the project, consultant services are required to manage construction. Four (4) proposals were received in response to the City's request. TY Lin was selected as the most qualified firm providing the best service value. Construction management services generally cost 7-15% of the estimated construction cost. The project is anticipated to start in mid-2020, and require approximately eighteen months to complete.

Approval of Reimbursement Agreement with Rincon Water District for Recycled Water and Potable Water Construction and Relocation as part of the Citracado Parkway Extension Project

(J. Procopio)

The Citracado Parkway Extension Project requires relocation of a portion of Rincon del Diablo Water District's water mains. Rincon desires additional relocation of the pipeline into the roadway, upsizing of one potable water main, and construction of a new recycled water main. It is most efficient to construct these pipelines during the extension of Citracado Parkway. This agreement allows Rincon to reimburse the City for the actual cost of betterments to their facilities, including a fair share of construction management, testing and inspection costs.

PUBLIC HEARINGS

Amendment to Article 34 (Communications Antennas) of the Escondido Zoning Code, Adoption of Guidelines for the Deployment of Small Wireless Facilities in the Public Right-Of-Way, and Establishment of Fees for Small Wireless Facility Permit Applications

(B. Martin)

A proposed amendment to Article 34 (Communication Antennas) of the Escondido Zoning Code to update the requirements for small wireless facilities (aka Small Cells) in the public right-of-way, and creation of guidelines to efficiently and effectively manage the deployment of such facilities. The amendment includes an update to the entitlement process to streamline the deployment of wireless networks, and simplified language to be consistent with recent Federal Communications Commission mandates. The guidelines provide specific detail regarding processing requirements and design standards for such facilities proposed to be located in the public right-of-way. Fees would also be established for the processing of applications for small wireless facility permits. No development project is proposed.

CURRENT BUSINESS

FUTURE AGENDA ITEMS

February 12, 2020 6:00 p.m.

PRESENTATIONS

A Step Beyond – Frank Foster

Certificate of Recognition – Mike Dunlap

CONSENT CALENDAR

Fourth Quarter 2019 Treasurer's Report

(D. Shultz)

In accordance with the City's Investment Policy, the City Treasurer is required to submit an investment report to the City Council for review on a quarterly basis. The report will include the type of investment, issuer, date of maturity, par value, book value, and market value for each security held by the City.

PUBLIC HEARINGS

CURRENT BUSINESS

Public Library Partnership between City and Palomar College

(J. Axelrod)

Staff will present information about a partnership between the City and Palomar College to promote and expand upon library services available to the general public at Palomar's Ernest J. Allen Library on the Escondido campus. Palomar College will make services available to the general public including library collections, borrowing privileges, staff assistance, public-use computers, and printing and Wi-Fi access.

Financial Status Report for the FY2019/20 Second Quarter Ending December 31, 2019 and Budget Adjustment

(J. Ryan)

Quarterly financial reports present written financial updates to Council concerning certain funds of the City based on the most recent financial information available. These quarterly financial reports include budgetary information along with the actual resources received to date and the use of these resources in fulfilling each fund's financial plan. The report provides information for the General Fund, Reidy Creek Golf Course Operations, and Water, and Wastewater Funds.

Review of Campaign Contribution Limits

(M. McGuinness)

Request the City Council to approve Ordinance No. 2019-22 amending the City Municipal Election Campaign Control Ordinance to lower the maximum personal contributions from \$4,300 to \$250 for city council candidates and from \$4,300 to \$800 for mayoral candidates. Council may further consider changes to the acceptance and/or disclosures of contributions from persons having business before the City. (This item was continued from the December 18, 2019 City Council Meeting)

FUTURE AGENDA ITEMS

Weekly Activity Report





January 16, 2020

Nominations Sought for City Council Awards

Each year the Escondido City Council recognizes people who have made significant contributions to improving the quality of life in Escondido through volunteer service.

If you have an individual, group, or organization in mind who has impacted the City in a positive way in 2019, please consider submitting a nomination by Monday, January 27, 2020. The form can be found here: https://www.escondido.org/council-awards.aspx

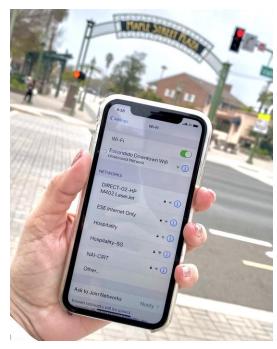
Award winners are selected by the City Council. There will be a total of four City Council awards and one Mayor's award. Awards will be presented at the State of the City Address on Wednesday, February 26, 2020.



Downtown Wi-Fi Upgrade

The City has just finished a project to upgrade the "Escondido Downtown Wi-Fi" network. The wireless network covers downtown Escondido from Juniper Street to Orange Street along Grand Avenue. It also covers the areas around City Hall, Grape Day Park and the Escondido Public Library. Over 35 wireless access points have already been upgraded from older Cisco Meraki equipment to newer Ubiquiti Unifi equipment.

These upgrades have resulted in better speed and reliability of this free public wireless network. The City has provided this free public wireless for the benefit of Downtown Escondido businesses, visitors, and residents for over 15 years, and we take pride in ensuring that it keeps up with the times. With these upgrades in place, we are ensuring that this network is ready to meet the increased data demands we expect to see as our community continues to embrace technology.



Library Survey

The Escondido Public Library is hosting a survey to gather feedback on future library services, collections, and programs. Take the survey at: www.escondidolibrary.org



Whether you are a frequent user of library services or haven't visited in a while, the Escondido Public Library is your library! We are determined to provide the best possible library services, collections, technology, and programs to meet your interests and needs, but the only way we can do that is with your input. Please take the survey linked on our homepage and thank you for your participation.



Board and Commission Recruitment

The City of Escondido is seeking volunteers to serve on various Boards and Commissions. Interested citizens who would like to apply may file an application with the City Clerk's Office no later than February 14, 2020.

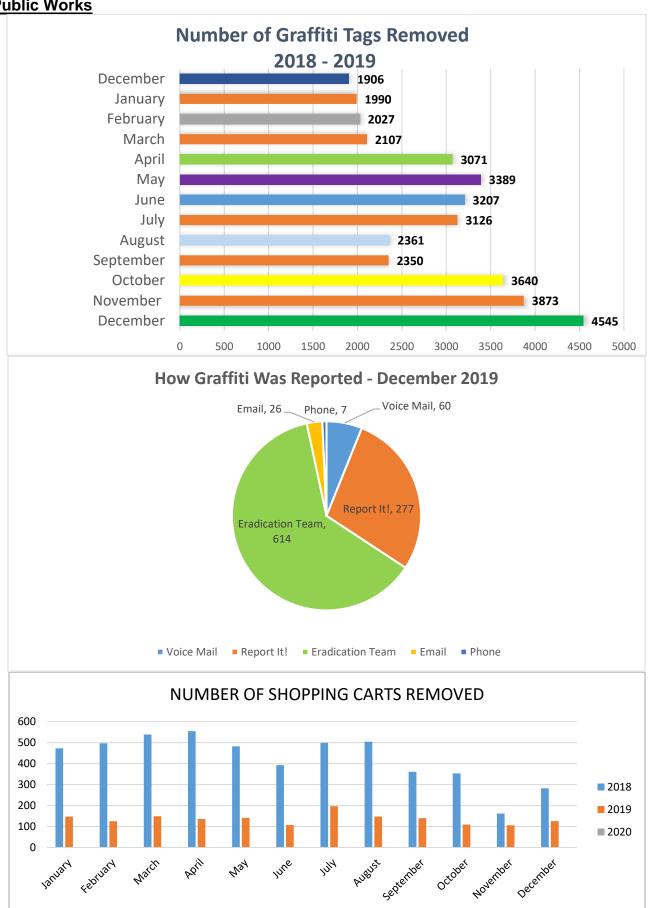
Applications are being accepted for:

- Building Advisory & Appeals Board
- Historic Preservation Commission
- Library Board of Trustees
- Planning Commission
- Public Art Commission
- Transportation & Community Safety Commission

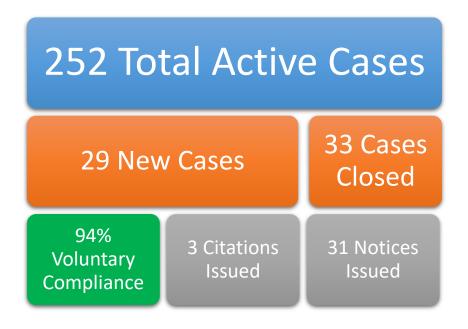
Terms of Office, meeting times and subject matters are outlined in a Handbook available at the City Clerk's Office or on the City's at: https://www.escondido.org/boards-commissions.aspx

BY THE NUMBERS

Public Works

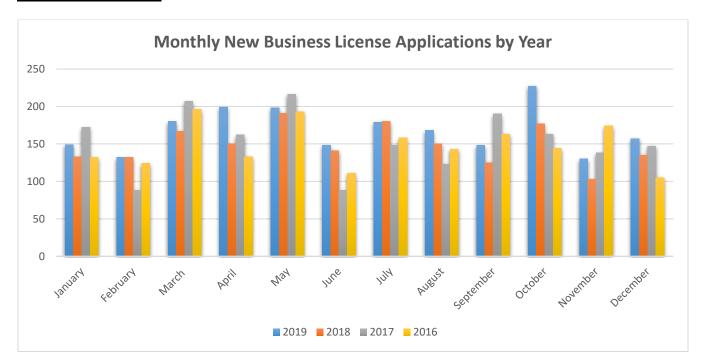


Code Enforcement



Total Code Cases (Year To Date)	42
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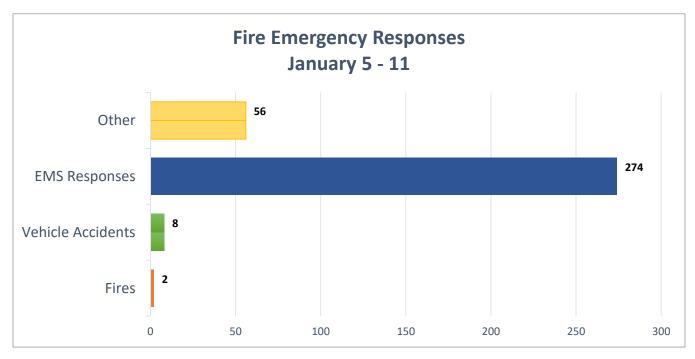
Business Licenses

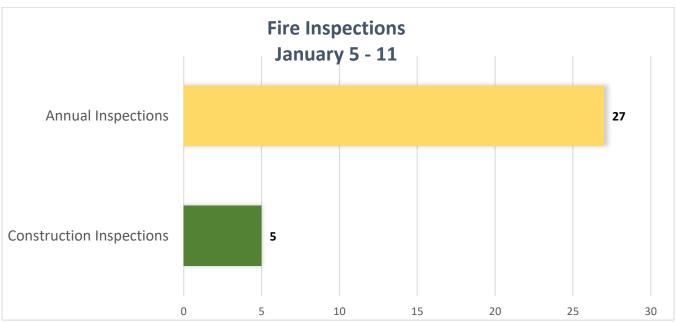


Graffiti Restitution

Collected Past Two Weeks	Collected Year to Date
\$0	\$763.25

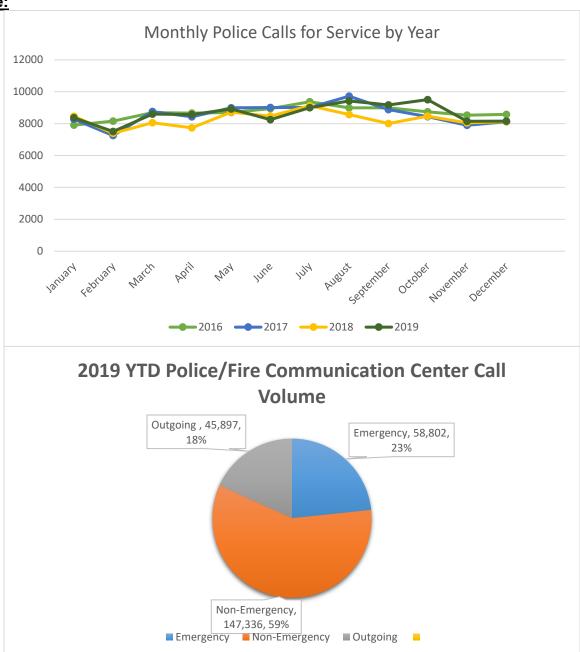
Fire:





Total Emergency Responses (Year To Date)	490

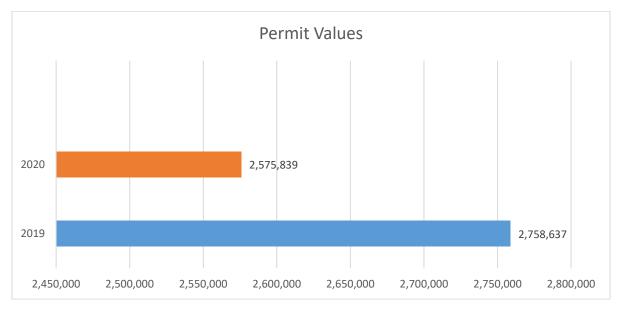
Police:

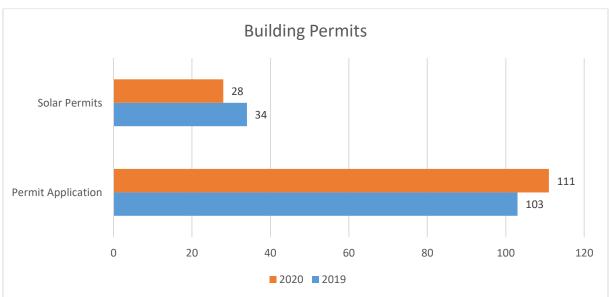






Building Division:
*Data reflects activity through January 11 of each year.





VOLUNTEER PROGRAM



Get Involved:

If you would like to get involved with future projects and volunteer in Escondido, visit: https://volunteer.escondido.org/

POLICE DEPARTMENT

Incidents:

Man Arrested for Sexually Assaulting Family Member

A 19-year-old victim reported to the police of a family member sexually assaulting her starting from the age of 14 and ending when she was 17 years old. The suspect, Adan Sanchez, a 48-year-old resident of Escondido alleged to have assaulted the victim in Mexico and Escondido. Detectives investigated the allegations and obtained corroborating evidence for the allegations.

On January 5, Sanchez crossed into the United States from Mexico and was taken into custody. Sanchez was booked on dozens of sexual assault related charges.

Homicide in the 500 block of W. 15th Avenue

On January 10 at approximately 8:34 p.m., the Escondido Communications Center received a call of a stabbing in the 500 block of W. 15th Avenue. Officers arrived on scene minutes later and located a 31-year-old male and a 25-year-old male with stab wounds. Both victims were taken to Palomar Hospital. The 31-year-old died from the stab wounds and the 25-year-old is in stable condition.

The assault began when two males in a black Toyota sedan arrived at the location. The four males began arguing and one of the suspects pulled out a knife and stabbed both victims. The two suspects fled in an unknown direction. There are no suspect descriptions being released at this time. The incident appeared to be gang related.

Cops Observe Attempted Robbery in Progress

On January 4 at 9:27 p.m., officers patrolling the area of Spruce St and 3rd Avenue saw two males in the roadway who appeared to be fighting. When the police car got closer, one of the males ran toward the police and said the suspect, later identified as 24-year-old Escondido resident Steven Javier Rodriguez, had punched him in the face several times and tried to rob him. Meanwhile, Rodriguez ran away from the cops. The officers received assistance from an EPD police K9 and helicopter and the suspect was located on a nearby rooftop. Rodriquez was

taken into custody and booked into jail for robbery, resisting arrest, a parole violation, and for promoting a criminal street gang.

COPPS:

The COPPS (Community Oriented Policing and Problem-Solving) Unit is dedicated to increasing the quality of life for the residents of Escondido through pro-active responses to crime trends, quality of life issues, and addressing crime and public nuisance in Grape Day Park and at Maple Plaza.

- 3 arrests
- 5 citations
- 29 extra patrols/calls for service

Events:

Law Enforcement Appreciation Day

January 9 was Law Enforcement Appreciation Day. Home Depot stopped by the Patrol Division with a tub full of treats and notes of appreciation. In addition to the food, they presented the PD with a customized Home Depot apron. The apron had a colorful, hand drawn picture depicting a police car in front of City Hall, which was drawn by one of their employees. We appreciate all the community support.



Tip of the Week:

911 Texting

Recently, Escondido Police and Fire Communications came online with 911 texting. Now if you have an emergency you can either call or text 911 and you will speak or text with one of our public safety dispatchers.

FIRE DEPARTMENT

News:

On January 8, Orange Glen High School held an end of the season award ceremony for its football players at La Cocina Restaurant in Escondido. The OGHS Alumni Association created the Cory Iverson Award to honor two players, Dominic Hernandez and Cael Patterson, for outstanding leadership on and off the field. Cory Iverson was a CAL FIRE firefighter who was killed in the line of duty in 2017 during the Thomas Fire in Ventura County, and he was an OGHS

graduate. One of the current coaches at OGHS actually coached Cory when he was a football player there. Cory was an outstanding firefighter, leader and was about to become a father when he died. The Escondido Firefighters Association in partnership with the Vista Firefighters Association provided the awards for the two players and donated the funds for a \$500 scholarship that was given to one of the award recipients for further education.



The Escondido Fire Department is pleased to welcome four new Paramedics who joined the department on Monday, January 6. Logan Meneley, Francis (Franky) Hunt, Andrew Bastien and Taggart (Tag) Ryan. Paramedic Bastien started his journey to become a paramedic in our Fire Explorer program.



Last week, eight Fire Department employees completed "Blue Card" Command training. The four-day course provides classroom instruction and multiple fire command simulations at our certified simulation lab located in the Emergency Operations Center. Blue Card certification is a nationally recognized program for standardized emergency scene terminology, communications and operations and it is a requirement for those working towards promoting to Fire Captain.



COMMUNITY DEVELOPMENT

Major Projects Update

The following major projects are being reviewed and coordinated by Planning, Engineering, Fire, Building and Utilities. The list of projects below encompasses recent project updates and/or milestones from last week.

Commercial / Office:

- Raising Cane's Restaurant (Developer: Ada Fermin, PM Design Group) 1280 W. Valley Parkway – Demolition of vacant, former Coco's restaurant building and construction of new 3,744 SF drive-through restaurant for Raising Cane's. A CUP application was filed on October 30, 2019. The applicant recently resubmitted plans showing additional drive-through stacking. The traffic study was submitted for review on December 18, 2019. Department comments on the traffic study were provided on January 10, 2019.
- 2. Mercedes Benz Expansion (Developer: Jody Stout, Integrity Design and Construction) 1101 W. 9th Avenue A Master and Precise Plan modification to demo the existing dealership showroom and construct a new two-story, 52,334 SF showroom, office, parts storage and service building with rooftop parking/display. The application was submitted on November 20, 2019. Staff comments were provided to the applicant the week of December 16, 2019.
- 3. <u>7-Eleven Gas and Convenience Store (Developer: Golcheh Group) 900 W. Mission Ave. A proposal to relocate a 7-Eleven from the northeastern corner of Mission/Rock Springs to the northwestern corner and add a gas station. The City Council initiated study of a General Plan Amendment (from Industrial to Commercial) for the proposal on May 15, 2019. An application for a GPA, Zone Change and CUP was filed on September 12, 2019. A comprehensive list of comments from all departments was sent to the applicant on October 11, 2019. The applicant submitted a traffic study on December 17, 2019, and revised plans are expected next week.</u>
- 4. <u>Discount Tire Expansion (Developer: Reid Kunisghe, raSmith, Inc.) 209 S. Escondido Blvd.</u> and 339 W2nd Ave. A proposal to demolish the existing Discount Tire store and an adjacent bridal shop and construct an expanded tire store with 8,192 SF of floor area. An amendment to the Downtown Specific Plan and CUP were filed on June 19, 2019. The Planning Commission recommended approval of the proposal on December 10, 2019. A City Council hearing has been scheduled for January 15, 2019.

Industrial

1. <u>Citracado Business Park (Developer: Dentt Properties) 2207 Harmony Grove Road</u> – A proposed specific plan for two industrial warehouse/office buildings (145,930 SF and 125,930 SF) with the buildings to be separated by the future extension of Citracado Parkway. The application was submitted on August 14, 2018. All departments have completed their initial review and comments were sent to the applicant on September 17, 2018. SDG&E also has provided comments regarding the high voltage power lines that traverse the site. The applicant's traffic consultant submitted revised methodology and distribution to Engineering on October 19, 2018, and a revised Traffic Impact Analysis was submitted to Engineering on August 8, 2019. The developer and consultant team met with Engineering and Planning on August 20, 2019, to discuss proposed traffic mitigation measures. Two vacant residences on the site were demolished on October 4, 2019.

City Projects

- 1. Membrane-Filtration Reverse Osmosis/ MFRO (Developer: City of Escondido Utilities Department) SE corner Ash/Washington On January 16, 2019, the City Council expressed continued support for the MFRO, but directed staff to investigate moving the facility from Ash/Washington to another location. A city-owned property located at 901 W. Washington Avenue has been selected as the new MFRO site. A Design Build Agreement was approved by the City Council on April 3, 2019. The Design Build Agreement with Filanc+BC Joint Venture provides for design and pre-construction services. The Design Build team met with Utilities and Planning on May 15, 2019 and June 5, 2019 to discuss design and timeline issues. City staff met with the Design Build team to review site plan comments on August 14, 2019, and again on September 3, 2019. A Plot Plan application was submitted for review on October 14, 2019. A comment letter was issued on November 6, 2019, and a follow-up meeting with Utilities occurred the next day. The first draft of the proposed Mitigated Negative Declaration (MND) was submitted for review on November 20, 2019, and Planning provided comments during the week following Christmas. A 60% design meeting occurred on December 9, 2019, and additional design work is on-going.
- 2. Lake Wohlford Replacement Dam (Developer: City of Escondido Utilities Department) A Draft EIR was prepared and issued for a 45-day public review period that began on October 4, 2016 and closed on November 17, 2016. A field visit with staff from the state and federal wildlife agencies took place on May 11, 2017, to review biological mitigation requirements including an agency request for full mitigation for emergent vegetation at the eastern end of the lake that came into existence since the lake level was reduced for safety reasons. Staff sent a follow-up letter to the wildlife agencies on June 29, 2017, seeking clarification on the proposed biological mitigation requirements. Additional information has been compiled and analyzed by the City's biological consultants based on recent conversations with the agencies. The biological consultant and staff met with the wildlife agencies on November 28, 2018 to discuss a modified approach to fulfilling mitigation requirements. Written information summarizing what was discussed at the meeting was transmitted to the agencies on December 4, 2018. City staff prepared a revised assessment of potential biological impacts and met with the agencies to present the findings. Additional information requested by the agencies was prepared and submitted as requested. The agencies ultimately responded they do not concur with the alternative mitigation proposal and the issue remains unresolved. Utilities is currently discussing a potential legislative solution to extend the state 1E Grant Funding. On December 18, 2019, the City Council considered a proposed amendment to the design contract to provide additional engineering services to evaluate the feasibility of rehabilitating the existing Lake Wohlford Dam and associated structures to address seismic deficiencies in lieu of building a replacement dam.

Residential

1. <u>Harvest Hills (aka Safari Highlands Ranch) (Developer: Jeb Hall, Concordia Homes) 550 lots east of Rancho San Pasqual</u> – A Notice of Availability for the Draft EIR was issued on October 16, 2017 for public review and comment. The comment period ended on January 2, 2018. Staff transmitted all the comment letters and emails to the EIR consultant for review and to prepare a response to each comment. The Draft EIR and appendices have been posted on the City's website at the following link:

https://www.escondido.org/safari-highlands-ranch-specific-plan.aspx

The responses to comments have generated related revisions to the project design. The applicant's engineer submitted a revised tentative map on October 26, 2018. Generally, the amount of grading and the area of disturbance has decreased, while the overall number of 550 residential lots has remained the same. Engineering met with the project engineer and applicant on January 31, 2019, to discuss their comments on the revised tentative map. The applicant met with Traffic Engineering during the week of February 25th to discuss off-site improvements. Staff, applicant and biological consultant met with the wildlife agencies on April 23, 2019, to discuss the revisions to the project design mentioned above. The applicant and staff met on June 20, 2019, to refine the list of outstanding issues remaining to be resolved prior to advancing to public hearings for the project. The applicant met with Traffic Engineering staff on August 15, 2019, and agreement was reached on several of the off-site mitigation locations on October 28, 2019. Additional information regarding biological resources was submitted on August 29, 2019. A revised tentative map addressing previous staff comments was submitted on November 6, 2019. The revised tentative map and exhibits have been posted on-line at the link above. A third amendment to the EIR contract for additional consultant funding was approved by the City Council on November 20, 2019. The revised specific plan was submitted on January 14, 2019.

- 2. 18 lots at 701 San Pasqual Valley Rd (Developer: Bob Stewart) A tentative map for ten single-family lots was approved by City Council on February 8, 2008. The applicant has been working to revise the map to develop more homes on the property. In response to follow-up discussions with the applicant about revising the map, comments were provided on April 29, 2019. Additional discussions between the applicant and the City to resolve project issues also occurred on June 20, 2019.
- 3. The Villages at Escondido Country Club (Builder: Lennar Homes) 380 residences The City Council voted 3-2 to approve the project on November 15, 2017. The applicant submitted rough grading plans, drainage improvement plans and utility relocation plans for all three villages on May 7, 2018. A revised Certified Tentative Map for substantial conformance review was submitted on May 23, 2019 and included a proposal to relocate approximately 10 residential lots within the development. The revised Certified Tentative Map was approved on September 3, 2019. A rough grading permit for Village 1 was issued on September 16, 2019, and grading is underway. All remaining buildings in the village center area of Village 1 have been demolished. Final engineering for Villages 2 and 3 was resubmitted to staff on October 14, 2019. This includes rough grading plans, improvement plans, and the final map. Partial staff comments were issued in mid-December for Villages 2 and 3 and the Country Club Drive improvements. Village 1 improvement plans were approved on November 8, 2019. A design review application for all residences was submitted on November 20, 2019. CC&Rs are also under review. Precise grading plans have been submitted for the model homes. Building permit applications for the model homes were submitted before the end of the year.

The approved tentative subdivision map, Final EIR and appendices, Specific Plan and other related information can be accessed on the City's website at the following link:

https://www.escondido.org/ecc.aspx

4. North Avenue Estates (Developer: Casey Johnson) 34 lots at North Ave./Conway Dr. –The City Council approved the project on January 10, 2018. LAFCO approved the annexation application on October 1, 2018, and the annexation has recorded. The new homebuilder, Taylor Morrison Homes submitted a Precise Development Plan to Planning on December 14,

- 2018. Grading plans, final map and improvement plans were submitted for review on December 7, 2018. Engineering met with the applicant's engineer on January 31, 2019 to discuss drainage issues. A revised Certified TM was approved on March 14, 2019. Final engineering plans were resubmitted on March 21, 2019. The project engineer, Engineering and County Water Authority staff met on April 2, 2019, to discuss the street and utility crossings over the CWA aqueduct. The applicant's engineer submitted a revised design to address the CWA issues the week of June 3rd. Building plans for four model homes were submitted into plan check on July 15, 2019. The most recent comments by Planning on the building plans were sent on October 24, 2019. The Precise Development Plan was approved by the Planning Commission on August 13, 2019. Revised grading and improvement plans were resubmitted on October 25, 2019. Staff comments were provided on those plans and a follow-up meeting to discuss the comments took place on December 6, 2019. The applicant is working on storm water comments and a resubmittal of plans is expected this week. The City Attorney's Office is reviewing a proposed joint-use agreement with the County Water Authority.
- 5. Sager Ranch/Daley Ranch Resort Specific Plan (Developer: J. Whalen Associates, Inc., Sager Ranch Partners) 203 housing units and 225-room resort hotel on 1,783-acres, just north and east of Daley Ranch – This proposed residential and resort hotel annexation and specific plan project was received on March 2, 2018. The project submittal has been deemed incomplete and a letter from staff requesting additional project related information was sent to the applicant on April 4, 2018. Requested information includes annexation exhibits, proposed general plan amendment text, a proposed Transfer of Development Rights Program, environmental initial study, and a fiscal impact analysis. Planning met with the applicant on May 17, 2018 to discuss items listed in the letter. A follow-up meeting to discuss engineering issues occurred on June 27, 2018. The applicant met with Escondido Fire and Valley Center Fire on August 1, 2018 to discuss fire protection issues. Significant fire-related issues to be addressed include the steepness of the project entry road, secondary emergency access and Fire Department response times. A follow-up meeting with the applicant to discuss these issues occurred on October 11, 2018. On April 5, 2019, the applicant provided a letter response with alternative compliance proposals to address some of the fire-related issues. On May 14, 2019 the applicant provided additional fire-related information requested by Fire and Planning. Fire, Planning, and Engineering staff met with the applicant team on May 29, 2019 to discuss the fire-related information. A financial feasibility study for the proposed resort was submitted on July 8, 2019.

A project webpage containing draft documents and plans has been added to the Planning Division's website at the following link:

https://www.escondido.org/daley-ranch-resort-specific-plan.aspx

6. Nutmeg Condo General Plan Amendment (Developer: Jim Simmons, CCI) 137 townhome condo units on 7.7 acres on both sides of Nutmeg between I-15 and Centre City Parkway – This proposed multi-family residential development includes a GPA from Office to Urban III (up to 18 du/acre) as well as a specific alignment plan for Nutmeg and a vacation of approximately one acre of public right-of-way for use in the project. The project application was received on June 15, 2018. Initial comments from Planning, Fire, Engineering, Utilities and Traffic Engineering were provided to the applicant on July 13, 2018. A Notice of Availability for the Draft EIR was issued May 7, 2019, announcing a 45-day public review period from May 10, 2019 to June 24, 2019. Caltrans expressed a concern for having encroachment into their right of way. As a result, project revisions are necessary for the southern portion of the property to accommodate grading and fuel modification zone planning on-site. The applicant met with

Planning and Engineering on August 14, 2019 to discuss potential changes to the project. The project applicant is splitting the project into northern and southern pieces. The GPA, Final EIR and northern piece were recommended for approval by the Planning Commission on October 22, 2019. The City Council approved the same part of the proposal on November 20, 2019. Staff is now awaiting resubmittal of the southern portion of the project.

- 7. Oak Creek (Builder: KB Homes) 65 single-family residential lots on approximately 44 acres at Felicita Road and Hamilton Lane - The Zoning Administrator approved a modification to the Precise Development Plan to revise the architecture on October 25, 2018. On-site remediation of hazardous materials has been completed and DTSC has issued a clearance letter. On-site improvement plans have been approved. The rough grading permit was issued on April 18, 2019, and grading has commenced on the site. The Precise Grading Plan for the model homes has been approved and building permits for two model homes were issued the week of July 8. A Model Home Permit was approved by Planning on July 10, 2019, for the sales office and temporary improvements. A second plan check submittal for the final map was received the week of May 13. Second plan check for the off-site improvement plans was received on June 3, 2019. Engineering comments have been returned and Engineering has approved all improvements, excepting those provided for on Felicita, which additional changes are expected. County of San Diego staff from the Parks and Public Works Divisions have met with the applicant to discuss ways to evaluate floodplain and drainage issues occurring at the Felicita Park. A follow up meeting with Engineering occurred on August 28, 2019. In response the applicant submitted a hydraulics study to DPW on September 9, 2019. The applicant is currently evaluating a drainage solution that minimizes or eliminates the need to construct drainage improvements in Felicita Park.
- 8. Villa Portofino (Developer: Chris Post, ATC Design Group) 15 apartment units in a three-story building with parking garage at 2690 S. Escondido Blvd. This 15-unit multi-family residential project on a 0.52-acre parcel between S. Escondido Blvd and Cranston Drive was submitted as a Plot Plan application on November 28, 2018. A Development Agreement will be required to reduce open space. A comment letter was issued on December 20, 2018. Planning, Fire and Engineering met with the applicant on June 10, 2019, to discuss revisions to the plans intended to address the previous comments. A revised project design was routed to all departments on August 23, 2019. Planning has notified the applicant the project design is not consistent with the South Centre City Specific Plan. Engineering and Utilities comments were provided to the applicant on October 2, 2019 and staff has engaged in several follow-up meetings with the applicant.
- 9. Palomar Heights (Developer: Ninia Hammond, Integral Communities) Demolition and redevelopment of the old Palomar Hospital site with 510 multi-family units A proposed Tentative Map, Planned Development, Specific Plan Amendment and EIR to redevelop the 13.8-acre former hospital site. Up to 5,500 square feet of recreation or commercial space could be included. A partial project application was submitted on December 24, 2018. Engineering and Planning comments on the initial project submittal were sent to the applicant on February 12, 2019. A contract for a developer-funded planning consultant to work on this project as an extension of Planning staff was approved by the City Council on February 13, 2019. Planning Engineering and Fire met with the applicant team on February 27, 2019 and again on April 24, 2019 to go through proposed revisions to the site plan and building designs. The applicant revised the plans to increase the unit count from 424 units to 510 units. A Notice of Preparation (NOP) for the Draft EIR was issued on May 3, 2019 and a public scoping meeting took place on May 20, 2019. The public comment period for the NOP closed on June 3, 2019, and approximately 28 comment letters and written forms from the scoping meeting

were received. Resubmittal of the redesign package was filed on June 25, 2019. Design and site plan information was submitted on July 1, 2019 and a screen check EIR was submitted on July 29, 2019. City comments on the design package was transmitted on August 2, 2019. Comments on the screen check EIR were issued on August 27, 2019, and a second screen check of the EIR was submitted on December 5, 2019. The third revision to project plans was submitted to Planning on September 11, 2019. A Planning Commission work session focused on project design occurred on October 8, 2019. A City comment letter, including Planning Commission feedback on design review, was transmitted to the applicant on October 21, 2019. A meeting with Fire officials to discuss access requirements and hydrant locations occurred on November 26, 2019. On January 8, 2020, the applicant met with staff from multiple departments to discuss permitting and logistics for the demolition of all existing structures on the site. City comments on the draft EIR were provided on January 10, 2019.

The development proposal and other related information can be accessed on the City's website at the following link:

https://www.escondido.org/palomarheights.aspx

- 10. Henry Ranch (Builder: Joe Martin, Trumark Homes) An approved development of 97 single-family residential homes on 74.35 acres at the eastern terminus of Lincoln Avenue The Tract 920 development proposal was originally approved in 2007 and an extension of the associated Development Agreement was approved in 2016. Final Map, grading plans and improvement plans were submitted for initial review on February 12, 2019. Architectural plans were submitted for Design Review on February 15, 2019, and comments were issued on March 14, 2019. The second submittal of final engineering was received on April 22, 2019, and several rounds of comments have been provided. Planning has provided comments on the 1st check for building plans and the model home complex. Fire met with the applicant on December 5, 2019, to discuss landscaping and fuel modification zones. The final map was resubmitted on December 6, 2019. The improvement plans were resubmitted the week of December 9, 2019. The applicant submitted a precise grading plan for the entire site on January 3, 2020.
- 11. Del Prado (Developer: Kerry Garza, Touchstone Communities) An approved 113-unit townhome-style Planned Development located at the southwestern corner of Brotherton Road and the Centre City Parkway frontage road The Del Prado project was approved by the City Council in May of 2016. The project site is separated into two parcels by an SDGE parcel. Engineering and Planning are reviewing third plan check for final map, grading and improvement plans for Del Prado South. Del Prado North is in second plan check for the same plans. No building plans have been submitted into plan check. Planning has provided comments for the North landscape plans. The applicant is attempting to resolve sewer issues with the Regional Water Quality Control Board because sewer lines are proposed to cross over water lines. Incomplete plans for North were submitted in mid-November and immediately returned to the engineer. Improvement plans for the North were resubmitted on December 27, 2019. Utilities issues remain unresolved. Planning approved the South landscape plan. Staff is aware of easement issues regarding the SDG&E access easement and are still working with the applicant on that driveway design.
- 12. <u>Hacienda De Vega Redevelopment (Developer: Tony Cassolato) A proposed residential condominium development consisting of 42 three-story attached townhomes on 1.75 acres The project would demolish the vacant restaurant building and redevelop the entire site with residential townhomes. An application for a tentative map, plot plan and condominium permit was submitted on October 8, 2019. Initial comments from all departments were provided to</u>

the applicant on November 7, 2019, and a follow-up meeting to discuss the comments occurred on November 13, 2019. Street improvement and open space issues are being addressed by the applicant and revised plans are expected next week. Planning hosted a neighborhood meeting on January 7, 2020, to discuss the project and hear neighborhood concerns. The primary concern expressed by neighbors revolved around traffic in the area.

13. <u>Accessory Dwelling Units</u> – Planning staff is currently working on eleven (10) applications for accessory dwelling units. Thirty-even (37) accessory dwelling units were approved in 2020. Twenty-four (24) accessory dwelling units were approved in 2018. Three (3) accessory dwelling units were approved in 2017.

Building Division:

- 1. The Building Division issued 69 permits (including 22 solar photovoltaic) with a total valuation of \$2,256,042, including a tenant improvement for Ross, located at 1665 E Valley Pkwy, with a value of 899,914; a tenant improvement for Toyota of Escondido, located at 990 N Broadway, with a value of \$775,446 and a tenant improvement for EDCO, located at 1044 W Washington, with a value of \$350,000.
- 2. Our building inspectors responded to 175 inspection requests. 164 customers visited the Building counter during the week.
- 3. No change from the previous. The Latitude 2 apartment project at 650 Center City Pkwy has received Building final approvals and Temporary Certificates of Occupancy for buildings 1-4. Field Engineering have released Building 6 for TCO. The Building Division has granted a Temporary Certificate of Occupancy, with minor restrictions and is awaiting a request for Final inspection of Bldg. 6. Final Inspection pending the receipt of all final reports from the contractor.
- 4. The new two story church sanctuary building at 1864 N. Broadway is progressing toward final inspection, and has received a 30-day Temporary Certificate of Occupancy.
- 5. No Change from the previous. The new 105 room hotel at 200 La Terraza is currently operating on a Temporary Certificate of Occupancy, pending Engineering final approval. Traffic signal poles have been set in place and should be fully operational by the first week of January. An additional 30-day extension of the TCO has been granted, which will expire January 18th, 2019.
- 6. The new Gateway Grand 126-unit apartment project at 700 W. Grand Ave. has roof framing work ongoing in Buildings A & B in anticipation for a soon to be requested inspection. Drywall installation on-going in Building B on the 4th floor. framing on going in Building B, Top out plumbing in Building A, 3rd & 4th floor; Garage framing approved in Building B. Building B framing has been completed and approved. Drywall installation is on-going in Building B; Building A, framing work is on-going. Partial Exterior lath installation at building A.
- 7. No change from the previous. The new apartments at 917 W Lincoln Ave, consisting of 3 buildings and 9 total units, is completed and has received final inspection approval. This project will no longer appear in the weekly report.

- 8. No change from the previous. The new 2 story 20,000 sf office building for Superior Ready Mix on 1564 W Mission is scheduled to have the inspection of interior framing today, Dec.17, 2019.
- 9. No change from the previous. KB Homes, located at the Oak Creek development on Daisy Field Glen has completed the model home construction phase of the development. Plan revisions have been submitted and are currently under review. Staff has been informed by KB's permit coordinator that requests for permit issuance of the first phase could be occurring within the next 2 to 3 weeks. The number of homes in the first phase could total between 12-16 dwellings. Construction of the Guard shack is currently underway-so far framing, roof sheathing, drywall and exterior lath have been approved. Precise Grading plans for Phases 1 & 2, totaling 12 SFD's, are currently in review.
- 10. The Starbucks "shell" building located at 350 W Valley Pkwy has received partial pre-roofing inspection to allow for shear transfer connections to be placed. Exterior shear has been approved. Rough framing, electrical, plumbing and mechanical has been approved. Drywall & Exterior Lath have been approved. Shell Building Final is currently in progress; currently awaiting the installation of exterior building finishes. Framing of the interior tenant improvements has been approved. Temporary electrical and gas meters have been released. Staff is awaiting final inspection request.
- 11. The Medical office building located at 2130 Citracado Pkwy has received partial foundation inspection and partial underground electrical conduit. Foundation work, steel reinforcement on-going in preparation for future inspections. Underground plumbing and foundation work is on-going. Partial slab construction has been approved. The slab installation work has been completed, framing should commence soon.
- 12. Building staff is currently preparing plan check fee estimates and addressing for model homes for the Villages project.

ENGINEERING DEPARTMENT

Capital Improvements:

- 1. El Norte Parkway Improvements The project includes widening of El Norte Parkway at the flood control channel by the installation of a new bridge, construction of new median islands from Valley Parkway to Washington Avenue, landscaping and a drip irrigation system, a bike/pedestrian signal at the flood control channel, along with roadway resurfacing. Bridge barrier walls and sidewalk were placed last week. Electrical conduit and signal pole foundations are currently being installed, along with the restoration of the channeling walls Forty-six (46) working days are remaining for project completion.
- 2. <u>Transit Center Pedestrian Bridge Project</u> –The contractor is continuing to build the masonry flood walls located between 2nd Avenue and Valley Parkway.
- 3. 2019 Street Rehabilitation and Maintenance Project Rebid- This year's project will resurface approximately 71-lane miles of pavement, replace 0.59- miles of sidewalk, and restripe 2.5-miles of bike lanes, install 51 pedestrian ramps, and replace 90 street trees that damaging concrete improvements. With the continued investment into our streets, the City has increased its Pavement Condition Index (PCI) from 55 to 61 points since 2013. This year's project is Maintenance Zone W, which is west of I-15 between State Route 78 and Felicita Avenue. Streets include Eucalyptus Avenue, Valley Parkway between Auto Parkway and

- 11th Avenue, Citracado Parkway East of Valley Parkway and 9th Avenue between Auto Parkway and Hale Avenue. Out of service area street is Valley Parkway between Fig Street and Grape Street. The contract has been signed and the project preconstruction meeting is scheduled for February 4, with a projected start in shortly after. More information can be found at https://www.escondido.org/city-of-escondido-street-maintenance-program.aspx
- **4.** Storm Drain Pipe Lining and Rehabilitation Project Phase1 This project has been completed. Notice of Completion to be presented to Council at January 15, 2020 meeting.

Private Development:

- Tract 932 Canyon Grove Shea Homes Community The project is currently in the punch list phase. The roadway connection between Vista Avenue and Vista Verde Way is scheduled to be opened to all traffic. This opening will connect El Norte Parkway to the South and Ash Street to the West.
- **2.** Latitude II Condominiums: Washington Avenue @ Centre City Parkway No changes from that reported last week. The project is working on punch list items.
- **3.** <u>Tract 934</u> *No change from that reported last week.* The contractor has paved the in-track street. This is a 5 lot subdivision located at 1207 Gamble Street.
- **4.** <u>1221 Gamble Street</u> The contractor has placed the curb and gutter along Gamble and Pear Blossom. This project is a 3 lot subdivision located adjacent to Tract 934.
- **5.** <u>KB Homes Oak Creek Project</u> The contractor is working on extending water service on Hamilton. The construction of on site improvements are continuing this week.
- **6.** North American Self Storage This project is in the punch list phase. The project is located at 852 Metcalf Street.
- 7. Pradera by Lennar No changes from that reported last week. The construction and installation of 779' of 12" water main along Conway Drive, between Lehner Drive and Rincon Avenue is complete. The contractor is tying the new line to the City's potable water system.
- **8.** Henry Ranch Tract 920 No changes from that reported last week. The project is located at the intersection of El Norte Parkway/Lincoln Avenue. The contractor has been issued a Grading Permit and grading has begun this past week. 433,000 cubic yards of material will be processed during the grading operation with 50,000 cubic yards of material being exported off site.
- 9. The Villages No changes from that reported last week. Village 1 grading is continuing this week. Village 1 is between Country Club Drive to the south, David Drive to the east and Golden Circle Drive to the north. A total of 111 homes are to be constructed in Village 1. "No Parking" signs are placed on Country Club Drive South of Country Club Lane. The work will be for the construction of storm drain pipe at Country Club Drive and Fairway Park. Contractor to start installation of the new sewer line.
- 10. SDG&E 16" Gas Main Replacement- No changes from that reported last week. The City has issued an Encroachment Permit for pot holing of utilities for a future gas main replacement project on Bear Valley Parkway between HWY 78/San Pasqual Valley Road interaction then South to Beethoven Drive. Information is being gathered to aid in the development of the new gas main alignment. Pot holing will begin this week. The construction phase is not expected until 2021.

11. Escondido Giving Arch- The contractor has excavated for the arch foundation and will be placing concrete within the next two weeks. When completed this arch will be 108 feet across and will span Grand Ave at Centre City Parkway. The color and design will match the Downtown architecture.

GRANT APPLICATIONS

Applications:

None this week.

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