

VALLEY CLEAN ENERGY ALLIANCE

Staff Report – Item 8

To: Valley Clean Energy Alliance Board of Directors

From: Mitch Sears, Interim General Manager, VCEA
Shawn Marshall, LEAN Energy US
Don Dame, Energy Consultant

Subject: Implementation and Operational Service Options

Date: August 31, 2017

RECOMMENDATIONS

1. Receive the attached comparative analysis report evaluating the implementation and operational service options for VCEA.
2. Based on the findings of the Implementation and Operational Service Options Report, direct Staff, working with the Board ad hoc Subcommittee, to commence contract negotiations with the Sacramento Municipal Utility District (SMUD) for technical and energy services, data management/call center services, wholesale energy services, credit support services, and up to five years of CCA business operations support.
3. Authorize the Interim General Manager to enter into a letter of intent to negotiate a services contract with SMUD.

SUMMARY

The staff report provides an introduction to the attached Implementation and Operational Service Options Assessment comparative analysis report (Report), and outlines the process used to evaluate VCEA program service options. The attached Report details the analysis and findings that serve as the basis for the staff recommendation. The VCEA Advisory Committee's RFP Subcommittee analysis and recommendations as well as the SMUD proposal are also attached and outlined in this staff report.

BACKGROUND & DISCUSSION

In December 2016, the City of Davis, on behalf of VCEA issued a multi-service RFP for program implementation services in the areas of technical and energy services, data management and call center, and marketing/community outreach. Bidders were permitted to submit proposals for one program category or all (bundled) categories. Nine qualified bids were received, all for a single program category. An RFP review team that included VCEA staff and 3 members of the VCEA advisory committee evaluated the bids and narrowed the field in each service category.

Meanwhile, in early 2017 the VCEA Board directed staff to accelerate the recruitment of an Executive Officer (EO) in order to make the hire in advance of vendor selection. The EO recruitment has not resulted in a selection at this time. During VCEA's EO recruitment process, SMUD prepared and submitted a proposal to provide implementation and CCA business operational services to VCEA. Staff believed the SMUD proposal merited evaluation by VCEA due to the unique bundled services approach, geographic proximity, and the clear Mission alignment between the two community-based public entities.

On July 25, 2017 the VCEA Board directed staff to complete an analysis of the various implementation and operational service options for VCEA. Over the past several weeks staff and VCEA's consultants have reviewed the service proposals received by VCEA, researched operational costs of existing CCA programs, and completed an analysis of the strengths and weaknesses of VCEA's service options. The attached Implementation and Operational Service Options Assessment Report (Report), details the analysis and findings leading to the staff recommendation to move forward with the SMUD bundled services option.

In summary, the Report compares two VCEA service options:

- VCEA Consultant Supported Option: Proceed with multiple service vendors and hire sufficient internal staff to support implementation and operations of an agency to be managed and operated by the VCEA Board, their employees and selected contractors; and
- SMUD Bundled-Service Option: Consider a 3-5 year "bundled service option" supported and partially staffed by SMUD that would augment a smaller VCEA staff and provide ancillary administrative and management support in a variety of functions necessary to launch and operate a CCA program. The VCEA Board and staff would remain fully responsible for CCA business and operational policies, protocols and outcomes.

The two service options analyzed in the Report each fully address the core functions that VCEA (or any other CCA program), must perform.

The body of the Report evaluates the two service options based on the criteria listed below.

- A) Alignment with VCEA Mission
- B) Technical and Organizational Experience/Capacity
- C) Implementation and Ongoing Cost Estimates
- D) Ability to Meet Timelines and Objectives
- E) Normative Risks and Benefits

In general, the Report finds that VCEA has two good options for CCA services. However, while both service options provide VCEA with the opportunity to launch and operate a successful CCA program, the SMUD bundled service option offers VCEA discernable advantages that taken

together shaped staff's recommendation. Based on the comparative analysis provided in the Report, staff have concluded that the SMUD bundled service option proposal provides the greatest overall value to VCEA through close mission alignment, cost competitiveness, and by providing the opportunity for VCEA to build internal capacity over time, retain full program control/autonomy, and maintain operational flexibility while taking advantage of SMUD's extensive energy sector experience. Importantly, the SMUD bundled service option also allows VCEA to mitigate start-up and operational risk by taking advantage of SMUD's energy sector experience, organizational capacity, and adapting its established risk management policies and procedures to serve VCEA's needs.

Identified drawbacks associated with the SMUD bundled service proposal include the possibility of being somewhat overshadowed by SMUD's sheer size and established brand and/or SMUD falling short in meeting VCEA's tight timelines and range of service needs. Staff believes these shortcomings can be effectively mitigated by establishing a separate brand and communications strategy and by thorough VCEA Board and staff involvement and monitoring to assure planned progress is attained. Under the recommended operational structure, the VCEA Board retains authority and responsibility to build and maintain a successful program and organization.

The conclusions reached in the Report show that support service offerings for emerging and operational CCA's are robust and evolving. Staff acknowledges the benefits this provides to VCEA and the broader CCA community and that the important work of each service provider should be recognized.

Service Options Assessment Report Organization

The purpose of the attached Implementation and Operational Service Options Assessment Report is to provide a comparison between the existing RFP responses and SMUD's proposal. The report includes the following sections:

- Purpose and methodology
- Overview of core CCA/VCEA functions
- Evaluation approach and criteria
- Service option assessment based on evaluation criteria
- Additional considerations
- Summary and recommendation

In addition, as noted, the report is supported by the attached summary evaluation table that highlights key comparison factors and staff findings.

VCEA Advisory Committee RFP Subcommittee

The Advisory Committee's RFP Subcommittee reviewed the service proposals submitted to VCEA and met with each potential provider. Staff shared its comparative analysis research and preliminary findings with the RFP Subcommittee. Following its own analysis, the RFP

Subcommittee submitted a summary report (Attached) which included the following recommendations for consideration by the Board:

The RFP Subcommittee recommends that the VCEA Board direct VCEA staff to:

1. Commence negotiations with SMUD for technical and energy services, data management and call center services, wholesale energy services, enterprise risk management and operational services.
2. Consult with the RFP subcommittee on an ongoing basis during the contract negotiation to obtain the subcommittee's assistance in developing contract provisions in areas that are (a) central to the original decision to implement a JPA comprised of local jurisdictions rather than join an existing CCA in another part of the state, and (b) innovative and without precedent in CCA service agreements, and therefore require the expertise the subcommittee can provide. Two examples of such areas are:
 - To provide the ability for each of the JPA member jurisdictions to develop energy programs or resources specifically tailored to the needs of energy users in their local areas; and
 - To develop a working relationship with PG&E that can enable and facilitate innovative, collaborative energy projects.

Staff supports the RFP Subcommittee's main recommendation to proceed with negotiations with SMUD and seeks Board direction to utilize the RFP Subcommittee as a resource during negotiations with any service provider(s).

SMUD Proposal Overview

As noted, the SMUD proposal is a "bundled service" option supported and partially staffed by SMUD that would augment a smaller VCEA staff and provide ancillary administrative and management support in a variety of functions necessary to launch and operate a CCA program. The bundled service proposal addresses start-up services identified in the VCEA RFP (Technical and Energy Services – Category 1; and Data Management and Call Center Services – Category 3). In addition, the proposal addresses other start-up services not included in the RFP that VCEA would need to contract for to initiate service (e.g. power procurement RFP, negotiations with power suppliers, etc.). While VCEA planned to secure these additional launch services, the SMUD bundled proposal includes them as optional service offerings.

The SMUD proposal also includes optional services related to program operations. These service offerings address VCEA's post start-up operations and generally include wholesale energy services, risk management, credit support services, and the staffing required to perform these key functions that are required to operate a CCA program.

SMUD notes in their proposal that the suite of services proposed are based on an evaluation of current market pricing for similar services performed by newly formed and established CCA programs. As detailed in the attached Service Options Assessment Report, VCEA consultants were able to verify that the SMUD proposal is cost competitive for the full range of services that VCEA would be required to contract and/or provide in-house to launch and operate the program.

Key sections of the SMUD proposal include:

- Description of proposed services called for in the VCEA RFP
 - Technical and Energy Services (RFP Category 1)
 - Data Management and Call Center Services (RFP Category 3)
- Description of optional services
 - Wholesale Energy Services
 - Enterprise Risk Management
 - Operational Services
 - Advanced Energy Solutions
- Implementation Plan and Schedule
- Budget

In addition, the proposal includes examples of current SMUD programs, services, and research areas that may help inform future VCEA activities.

The full proposal is attached.

NEXT STEPS

If the Board approves the staff recommendations, staff will begin contract negotiations with SMUD on a 5-year bundled services contract as described in the SMUD proposal. Key areas of negotiation would include but are not limited to the following:

- Finalizing costs of contracted service offerings.
- Program launch services including Technical and Energy Services (RFP Category 1) and Data/Call Center Management (RFP Category 3) as detailed in the SMUD proposal.
- Wholesale Energy Services for program launch and operations as detailed in Section 5.c of the SMUD proposal including the tasks necessary to set-up for and manage wholesale power supply for VCEA and to schedule VCEA load and power resources.
- Operational Services for staffing support as detailed in Section 5.e of the SMUD proposal. Note: this would not include outreach and customer notification services already provided to VCEA under contract by Circlepoint.
- Credit Support Service to provide VCEA with options to manage power supply credit issues faced by newly formed CCA programs (e.g. lack of credit rating).

- 5 year contract period with annual progress/budget checks and 3 year “off-ramp” for VCEA, including termination of service and power portfolio cost allocations provisions at the end of the contract term
- Contract terms that do not preclude future flexibility for alternative rate structures, implementation of advanced energy solutions, energy product offerings, or other program design modifications that will allow VCEA to more effectively achieve its Mission.

Staff will be supported in contract negotiations by VCEA consultants and Legal Counsel. As with the development of the comparative analysis leading to the staff recommendation, staff will brief and seek feedback from the Board Subcommittee (Saylor, Frerichs, Stallard), as negotiations commence and progress. In addition, staff would seek input from the Advisory Committee’s RFP Subcommittee on contracting provisions to take advantage of their areas of subject matter expertise. Staff will return for Board action on the contract with SMUD in mid-September.

Attachments:

- Comparative Analysis Summary Table
- Service Option Comparative Analysis Report
- Advisory Committee RFP Sub-committee Report
- SMUD proposal

Valley Clean Energy Alliance
Service Option Comparative Analysis Summary Table - August 2017

Criteria / Findings	VCEA Consultant Supported Option	SMUD Bundled-Service Option
<p>1. VCEA Mission Alignment</p> <p><u>Finding:</u> SMUD provides closer overall alignment with VCEA's Mission.</p>	Existing CCE programs have utilized separate private-sector vendor contractors to successfully launch and provide on-going operational support services. These vendors have shown a commitment to CCE formation and operation and have established a growing business niche for these services. Overall, generally aligned with and supportive of VCEA Mission.	SMUD shares a public sector, not for profit framework with VCEA and has a demonstrated a commitment to local control, competitive rates, environmental leadership, emerging technologies, and enterprise risk management (excerpt from SMUD Core Values). Overall, SMUD offers close alignment with VCEA Mission.
1.1 Local Control	Supportive as demonstrated by services provided to existing CCA programs.	SMUD Board adopted core value.
1.2 Not for Profit	Supportive as demonstrated by services provided to existing CCA programs.	SMUD is a not for profit organization.
1.3 Cost Competitive Clean Electricity	Able to assist VCEA with power planning and contracting and to help establish programs like Net Energy Metering (e.g. roof top solar), Feed in Tariff (e.g. direct energy purchase from larger scale renewable energy producers), and Distributed Energy Resources (e.g. energy storage).	Directly involved in power procurement process with deep experience procuring cost competitive clean electricity for its customers. Potential to offer direct procurement expertise with wholesale energy services option for launch and operational services. Able to help establish programs like Net Energy Metering (e.g. roof top solar), Feed in Tariff (e.g. direct energy purchase from larger scale renewable energy producers), and Distributed Energy Resources (e.g. energy storage). Offers guidance on the establishment of community solar programs based on its Solar Shares program. Significant investment in emerging technologies that may benefit VCEA customers.
1.4 Electricity Product Choice	Have established multi-tiered energy programs for existing CCA programs (e.g. customer choice of 75% renewable/100% renewable/ 100% local renewable options).	History of establishing energy choice programs (e.g. Solar Shares), and setting innovative rates, prepared to help VCEA establish multi-tiered energy programs. In addition, offers customer benefit analysis to guide program design and tariff specifications.
1.5 Price Stability	Able to offer guidance on advantages/disadvantages of fewer rate changes than PG&E.	Able to offer guidance on advantages/disadvantages of fewer rate changes than PG&E.
1.6 Energy Efficiency	Able to offer general guidance.	SMUD Board adopted core value and decades of experience in design and deployment of energy efficiency programs. Significant investment in research and deployment of energy efficiency programs may benefit VCEA customers.

<p>1.7 GHG Reductions</p>	<p>Have established multi-tiered energy programs and procurement strategies for existing CCA programs to significantly reduce GHG content of electricity portfolios.</p>	<p>SMUD Board adopted core value. Have established policy to provide leadership in the reduction of greenhouse gases throughout all SMUD activities and are supportive of national, State, and regional climate change policies and initiatives.</p>
<p>2. Technical and Organizational Experience/Capacity</p> <p><u>Finding:</u> Neutral. Private-sector vendor CCA experience is off-set by SMUD's technical and organizational advantages.</p>	<p>Existing CCE programs have utilized separate private-sector vendor contractors to successfully launch and provide on-going operational support services. Based on such past performance, private sector vendors are capable of supporting VCEA launch and operations. Note: The current combinations of private sector vendors under consideration would not meet VCEA's wholesale side services needs which include: schedule coordination, portfolio management, CAISO interface and settlements, credit support, and operational reporting and analysis. Attaining these services would require one or more additional RFP and/or direct negotiations with potentially interested power service counterparties.</p>	<p>SMUD has over 600,000 customer accounts, a peak load exceeding 3,000 MW, and over 2,000 employees. SMUD routinely performs business and technical functions required by a CCA, and much more. And although SMUD does not have direct CCA experience, its proposal realistically reflects technical, data management/call center, power portfolio activities, and managerial skills required to perform these activities.</p>

<p>3. Implementation and Ongoing Cost Estimates</p> <p><u>Finding – Implementation:</u> SMUD provides stronger overall value to VCEA based on cost competitiveness, fewer additional service vendors to address VCEA's wholesale side service needs, and efficiency of working with a single vendor.</p> <p><u>Finding – Operations:</u> SMUD provides a stronger overall value to VCEA based on comparisons to existing CCA program costs combined with staff capacity and the efficiency of working with a single vendor.</p> <p>Note: the VCEA RFP allowed for selection of the service vendor(s) that provided the greatest value for VCEA, not necessarily the lowest bidder.</p>	<p>Attaining quality services in a timely fashion is essential to meeting VCEA startup timelines and business success. Amongst RFP responders and including the SMUD proposal, expected cost spreads are not dramatic and fall within the expected range experienced by other existing and emerging CCAs. Generally, private sector vendors offered technical and energy services roughly 5% lower to parity with SMUD, and data/call center services roughly 10% higher. Staff does not consider these to be significant differences in the context of an estimated annual VCEA program budget of \$25M and the overall value proposition of the service options being proposed.</p> <p>Note: Some vendors did not provide service or pricing in some categories of the RFP and thus comparing "total" bids is difficult. Nonetheless, the total cost estimates give a relative indication of cost ranges to be expected. And, as with any RFP, all dollar estimates are notional until contract terms and conditions are negotiated and executed.</p>	<p>Attaining quality services in a timely fashion is essential to meeting VCEA startup timeline and business success. Amongst RFP responders and including the SMUD proposal, the cost spreads are not dramatic and fall within the expected ranges experienced by other emerging and operational CCAs.</p> <p>In addition, SMUD provided optional budget proposals for full launch and business and wholesale operations for VCEA.</p> <p>SMUD offers the general administrative efficiency of working with one service vendor for both launch services and on-going operational services.</p>
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<p>4. Ability to Meet Timelines and Objectives</p> <p><u>Finding</u> : SMUD provides greater benefit if VCEA chooses to select its Wholesale Energy Services (WES) which would reduce the time needed to procure energy supply prior to launch. Neutral if SMUD's WES option is not selected.</p>	<p>Existing CCE programs have utilized staff and separate private-sector contractors to successfully launch programs within VCEA's current approximately 10 month lead time (June 2018).</p>	<p>SMUD possesses the experience and staffing capacity to meet VCEA's launch timeline of June 2018.</p> <p>If VCEA chooses to select the optional Wholesale Energy Services (WES) offered by SMUD, this would reduce time needed to procure energy supply prior to launch. The RFP process and subsequent negotiations with potential wholesale services and energy suppliers is a significant task that would be virtually eliminated under the WES option since VCEA would "piggyback" on SMUD's procurement expertise for the purpose of launching the program. Post-launch, longer-term energy purchase decisions would be made by VCEA based on its resource planning process and the transparent utilization of SMUD's wholesale expertise.</p>
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<p>5. Normative Risks and Benefits</p> <p><u>Finding:</u> Overall, SMUD provides higher value proposition to VCEA with greater benefit and perceived lower risk</p>	<p><u>Benefits:</u></p> <ul style="list-style-type: none"> ● Greater autonomy to develop, manage and revise program over time ● Choice of vendors with demonstrated CCA experience ● Ability to build internal staff and credit capacity sooner ● Less potential for “brand confusion” ● Less potential for “getting lost” in a large organization ● Most local option <p><u>Risks:</u></p> <ul style="list-style-type: none"> ● Availability of qualified vendors/staff ● Must establish enabling agreements/credit with multiple wholesale suppliers ● Subsequent RFPs required for wholesale power services ● Limited credit capacity ● Need to develop risk management policies from the ground up ● Organizational capacity is stretched; program timing could be impacted <p>Administrative burden of coordinating multiple vendors</p>	<p><u>Benefits:</u></p> <ul style="list-style-type: none"> ● VCEA Board/General Mgr. remains “in charge” ● Requires fewer VCEA staff ● Solid financials and wholesale market credit support ● Positive public and industry reputation ● Integrated full utility operations experience ● Experience with management systems, controls and reporting ● Utilization of SMUD’s wholesale procurement arrangements ● Established and adaptable risk management policies ● Established EE programs and willingness to innovate/support tailored VCEA programs ● Flexible staffing alternatives including local presence ● Avoids additional wholesale service RFPs and negotiations ● Non-profit, public agency --culturally similar ● Supports June 2018 launch date <p><u>Risks:</u></p> <ul style="list-style-type: none"> ● Subject to successful contract negotiations; unknown contract risk ● May sidetrack current VCEA efforts and result in delays ● No direct CCA implementation or ops experience ● Could result in branding/customer confusion ● Could result in utility “push-back” or mixed press; reputational damage ● Potentially differing regulatory/ legislative positions (CCA v. POU); ● Possible dilution of local control ● Could constrain implementation of VCEA specific/tailored programs ● Potential regional proximity conflicts ● If SMUD approach reaches impasse, VCEA must revive RFP processes
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<p>Additional Considerations</p> <p>1. VCEA Autonomy</p>	<p>VCEA will maintain full control over its operations and policy matters including power supply mix/renewable energy and carbon free targets, its power portfolio, rate design and rate setting, fiscal oversight/audits, community outreach and account management, and legal services. It will also have the ability to allocate use of excess revenues toward reserves, implementation of local energy programs and investments in local power infrastructure.</p>	<p>In both service options, VCEA will maintain full control over operations and policy matters as noted in the left hand column. SMUD will provide services under contract at the discretion and under the direction of VCEA staff and leadership.</p>
<p>2. Branding/Public Interface</p>	<p>VCEA will establish its own brand, marketing and customer outreach approach. Circlepoint has been hired to assist with this effort and VCEA will hire staff to support marketing and account services.</p>	<p>To avoid potential brand or customer confusion, VCEA will establish its own brand, marketing and customer outreach approach. Circlepoint has been hired to assist with this effort and VCEA will hire staff to support marketing and account services. SMUD has indicated a willingness to help and be supportive of VCEA's marketing and outreach efforts "behind the scenes" as needed.</p>
<p>3. Staffing/HR Issues</p>	<p>VCEA will assume responsibility for hiring approx. 8-12 employees and managing outside vendors; VCEA will maintain a local office. Org chart and job classifications.</p>	<p>SMUD is offering up to 4 full time staffers "on loan" during contract period to augment a smaller VCEA staff. SMUD employees would report to VCEA GM and work in VCEA's office.</p>
<p>4. Contract Provisions</p>	<p>VCEA contracts with outside vendors likely to be shorter term (i.e. through implementation phase) and straightforward given existing CCA contracts and experience.</p>	<p>SMUD is offering both implementation services and up to five years post launch operational services. SMUD has indicated a willingness to negotiate contract terms and revisit service costs/scope before the start of the third contract year. Legal provisions re: contract termination and power supply costs at end of contract are TBD.</p>
<p>5. Reg/Leg Conflicts</p>	<p>VCEA positions are solely its own, though some service providers could take differing/opposing positions to that of VCEA. Need to establish reg/leg firewall and full disclosure requirement.</p>	<p>Slight risk that SMUD will take opposing positions in the legislature. But SMUD's involvement could also lend credibility at the legislature.</p>

Recommendations (from August 2017 VCEA Implementation and Operational Service Options Assessment Report):

- Staff and consultants recommend the Board direct staff to commence contract negotiations with SMUD for implementation services, data management/call center services, and up to five years of wholesale power services, the terms of which are to include provisions for periodic pricing and service level review and an option to terminate the contract at the end of year three.
- Pursuant to Board direction, staff will begin negotiations with SMUD and simultaneously move into next steps for a June 1, 2018 CCA program launch. Staff will provide an update at VCEA's September Board meeting with focus on securing final contract approval at the October Board meeting.

Valley Clean Energy Alliance

Implementation and Operational Service Options Assessment Report

August 2017

Prepared by:
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I. Introduction and Background

Valley Clean Energy Alliance (VCEA) is a new California joint powers agency established in December 2016 for the purpose of implementing and operating a community choice aggregation (CCA) program for the unincorporated areas of Yolo County and the cities of Davis and Woodland. VCEA is governed by elected representatives from each member jurisdiction and, on an interim basis, supported by municipal staff and consultants with experience in CCA formation. As VCEA moves toward program launch and operations, it has choices with respect to Agency structure, management, and administration of its CCA program design and operations.

During late 2016/early 2017 VCEA initiated an RFP process for CCA-related technical services, marketing/outreach, and data management/call center functions. Submitted bids were reviewed by an ad-hoc evaluation committee. A contract in the marketing and outreach category was awarded to Circlepoint in July 2017; however, support for the other service categories remains open. More recently, VCEA received a bundled/full-service proposal from the Sacramento Municipal Utility District (SMUD) that offers a range of implementation services, data management/call center functions, wholesale power procurement and CCA business operations support for up to a five-year period.

Based on Board direction provided at its July 25, 2017 meeting, staff, VCEA consultants, and the Advisory Committee's RFP Subcommittee have been evaluating and comparing the SMUD bundled service option proposal with consultant supported service option proposals received as part of the VCEA RFP process. The comparative analysis provided below forms the basis for staff's recommendation. The RFP Subcommittee has produced a companion report summarizing its recommendations to the Board which is included as an attachment to the August 31, 2017 VCEA Board staff report.

II. Report Purpose and Methodology

The purpose of this report is to provide a comparison between SMUD's proposal and RFP responses. This comparative analysis considers two service options:

- VCEA Consultant Supported Option: Proceed with multiple service vendors and hire sufficient internal staff to support implementation and operations of a fully independent Agency to be managed and operated by the VCEA Board, their employees and selected contractors; or
- SMUD Bundled-Service Option: Consider a 3-5 year “bundled service option” supported and partially staffed by SMUD that would augment a smaller VCEA staff and provide ancillary administrative and management support in a variety of functions necessary to launch and operate a CCA program. The VCEA Board and staff would remain fully responsible for CCA business and operational policies, protocols and outcomes.

The comparative analysis of the two service options is based on several evaluation criteria including: (1) alignment with the VCEA Mission, and (2) consistency with the VCEA services RFP evaluation criteria. In preparing the analysis, staff and consultants reviewed all service proposals, had several clarifying discussions with SMUD, assessed current CCA experience and expectations with respect to vendor performance and pricing, and reviewed budgets of operational CCAs including Sonoma Clean Power, Peninsula Clean Energy, and Apple Valley Choice Energy. While estimated service costs are a significant consideration, other vital factors include vendor experience, credit rating, proposed business structure, multi-vendor coordination, geographic location, likelihood of success, and ability to meet a June 1, 2018 launch date.

III. Overview of Core CCA/VCEA Functions

In considering VCEA service options, it is important to keep in mind the operational framework and core functions of a CCA program regardless of VCEA’s selected management approach. VCEA, like other CCA programs around the State, will perform these tasks with a combination of external and internal staffing resources. The two service options analyzed in this report each fully address these core functions. The below list outlines VCEA and CCA core functions:

Agency Operations

Governance, committees, strategic planning, reporting
 Administrative functions such as business office, credit and finance, accounting/budgeting, human resources, mid- and back-office, IT, etc.

Technical and Energy Services

Power procurement, schedule coordination and related energy services
 CAISO invoice validation and settlements
 Rate design/rate setting
 Integrated power resource planning
 Complementary energy programs

Energy Risk Management
Power project development and ownership (TBD)

Marketing and Public Affairs

Agency branding, website and collateral development
Public education and stakeholder engagement
Key accounts management
Customer Care

Data Management/Call Center

Customer account switching and back office support
Billing and utility settlements
Customer relationship management systems, reports and statistical data
Call center operations

Legal/Regulatory and Legislative Affairs

General and regulatory counsel services
Power contracting and special counsel
Regulatory compliance
Participation at the CA Public Utilities Commission (CPUC) and related bodies
Participation at the CA Legislature
Coordination with other CCAs

IV. Evaluation Approach/Criteria

Staff and consultants' assessment is based on the positive and normative aspects of received proposals. That is, an attempt to estimate the dollar amounts tied to discrete service functions coupled with a more subjective assessment of a particular vendor's "goodness of fit" with VCEA goals and objectives. Although the RFP allowed for bidders to submit proposals in multiple service categories, apart from SMUD, no proposer bid a full-service package; and several responders' bids offered only a subset of services within a given service category. The list of evaluative criteria used by staff and consultants was informed by the adopted VCEA Mission Statement as well as criteria articulated in its earlier RFP. Evaluative criteria include:

- A) Mission Alignment
- B) Technical and Organizational Experience/Capacity
- C) Implementation and Ongoing Cost Estimates
- D) Ability to Meet Timelines and Objectives
- E) Normative Risks and Benefits

V. Service Option Assessment

A) Mission Alignment

The Mission of VCEA is to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emission reductions to its customers.

All vendors submitting proposals to VCEA have significant consulting and service experience within the electric power industry in general, as well as capabilities to assist with VCEA's various business functions. In that respect, all are supportive of VCEA's Mission and several of the vendors have helped other CCAs "push the envelope" with regard to clean power attributes, energy innovation and development of local programs.

A key differentiator among the service vendors under consideration is corporate structure and breadth of utility-related experience. With the exception of SMUD, none of the RFP respondents are non-profit entities. SMUD is a non-profit public agency controlled by an elected board; in this regard, it is the most similar to VCEA. SMUD indicates its proposal options are motivated in part by a "desire to assist a new and adjacent fellow public entity" and its staff has been helpful and instructive to nascent CCAs over the years. Furthermore, SMUD is well-known around the State and nation for its focus on clean energy programs including energy efficiency, affordable electricity rates, and clean tech innovation. Thus, the alignment of VCEA objectives with SMUD's track record of success in areas of common interest suggests that the two organizations could effectively work together.

Mission alignment can be achieved under either service option. It is important to note that in either case, VCEA will maintain full authority with respect to governance, policy decisions, finances and overall Agency operations. This autonomy is critical to ensuring that VCEA's Mission is met in the way its leadership directs. However, given SMUD's depth of experience, public agency focus, and overlapping objectives, it is reasonable to assume that a service contract with SMUD could accelerate, and even enhance, the achievement of VCEA's Mission.

General Finding: The SMUD option provides closer overall alignment with VCEA's Mission.

B) Technical and Organizational Experience/Capacity

All service vendors, to varying degrees, have the technical capabilities to perform the functions for which they submitted bids. Some have more direct CCA experience than others (SMUD is further behind on this metric), some provided more expansive service offerings (SMUD is ahead on this metric), and some were more or less expensive (SMUD is competitive overall). As a

general positive observation, depending on final vendor selection and internal staff support, VCEA can achieve its technical and organizational goals with most, if not all, of the vendors under consideration.

When evaluating the two service options, the key difference lies in VCEA's internal capacity and the Board's preferred organizational structure. Two basic scenarios emerge:

- a) Move ahead with multiple vendor experts performing specific implementation functions while hiring a full-time staff of approximately 8-12 people to handle long-term operations similar to other CCA programs; or,
- b) Hire a smaller VCEA team and work with a single service vendor (in this case SMUD) to deliver a wider scope of services than would otherwise be covered by full-time staff and/or outside vendors.

The technical capability exists under either scenario. However, given the time delays, inability to settle on a permanent CEO, and a continued desire to launch by early next summer, VCEA organizational capacity under scenario "a" above would be stretched. In addition, it is important to note that under scenario "a", there are additional wholesale power services that would need to be attained including: energy schedule coordination, power portfolio management, CAISO interface and settlements, other front, mid and back office functions; operational reporting and analysis, and the like. Attaining these specialized services would require one or more additional RFP's and/or direct negotiations with potentially interested and capable counterparties.

SMUD, in submitting a proposal that includes longer-term wholesale power services, offers an integrated suite of power services and credit support that VCEA would otherwise need to attain at least 4-6 months prior to program launch. SMUD has over 600,000 customer accounts, a peak load exceeding 3,000 MW, and over 2,000 employees. Its size, compared to that of VCEA (approx. 64,500 customers), may raise other issues and concerns, and it is notable that SMUD has no previous experience with CCA implementation or operations. However, from a technical and organizational capacity perspective, SMUD routinely performs all business and power service functions required by a CCA, and much more. Its proposal realistically reflects technical, data management/call center, power portfolio activities, and managerial skills required to perform these activities. These skills, coupled with VCEA staff capacity and contracted expertise where needed, should compensate for any near-term gaps in direct CCA experience.

General Finding: Neutral. Private-sector vendor CCA experience is offset by SMUD's technical and organizational advantages.

C) Implementation and Ongoing Cost Estimates

Attaining quality services in a timely fashion is essential to meeting VCEA startup timelines and business success. Amongst RFP responders, cost spreads are not dramatic and fall within the range experienced by other existing and emergent CCAs as will be outlined further below.

VCEA's RFP specified 3 service categories: 1) Technical and Energy Services (non-operational); 2) Outreach / Marketing / Customer notification; and 3) Data Management and Call Center. VCEA has contracted with Circlepoint for Category 2 services which will not be further discussed in this report. An additional "Ongoing Wholesale Services" category is added below to allow the Board to review SMUD's comprehensive full services option. The full SMUD proposal, which explains this and other service offerings in great detail, is attached to this report.

Technical and Energy Services (Items 1.1 – 1.13 in VCEA's RFP)

Some vendors did not provide a particular service or pricing in some categories and thus comparing total bids could be somewhat distorting as staff did not specifically "back-fill" any omitted services or perform adjustment for potential service quality differences and/or ease of interface. Nonetheless, the total cost estimates give a relative indication of cost ranges to be expected. And, as with any RFP, all dollar estimates are notional until contract terms and conditions are negotiated and executed. The comparisons shown in Table 1 are estimated based on a 5-year contract arrangement although all vendors were amenable to a 3-year term if desired by VCEA.

Cost Estimates from RFP Respondents and SMUD	Vendor 1 (1)	Vendor 2 (2)	Vendor 3 (3)	Vendor 4 (4)	SMUD RFP (5)	SMUD WES (6)
Category 1: Technical and Energy Services (1.1 - 1.15)	n/a	n/a	5yr	5yr	5yr	5yr
Total Estimated Category 1 Costs:			\$ 225,000	\$ 204,560	\$ 322,000	\$414,000
Costs in \$/MWh:			\$ 0.28	\$ 0.25	\$ 0.39	\$ 0.51
(1) Vendor 1 did not bid Technical and Energy Services						
(2) Vendor 2 did not bid Technical and Energy Services						
(3) Vendor 3 estimated on basis of expected hours applied to indicated categories; not all services bid; Vendor 3 is not a Qualified Reporting Entity ("QRE"); no wholesale energy services are included.						
(4) Vendor 4 responses are not explicit that all services within a task category are to be performed. No wholesale energy services are included.						
(5) SMUD's Request for Proposal ("RFP") proposal includes performance of all subcategories, and relatively broad non wholesale power management assistance during start-up and outyears, addressing all effort areas specified in VCEA's RFP.						
(6) SMUD's Wholesale Energy Services ("WES") proposal adds wholesale energy services including scheduling coordination, credit support, CAISO registration and deposits, power contracting, risk management, etc.						

Estimated total pre-launch Category 1 service charges range from \$204,560 to \$414,000 for SMUD's full wholesale services offering. This is not an apples-to-apples comparison however, as each of the private sector vendor proposals, for example, exclude certain task areas and/or have task omissions. The SMUD "RFP" column addresses all RFP related areas at a proposed \$322,000 charge. The SMUD-"WES" column adds full Wholesale Energy Services (WES) including advance contracting and credit for power procurement which must be acquired by VCEA in any case prior to launch.

The private sector vendor proposals anticipate helping VCEA to attain these wholesale services but do not include the added contract costs associated with specifically obtaining such services which may help explain SMUD's somewhat higher bid. If bids were to be adjusted for service omissions and augmented services, the bids are relatively close in staff and consultants' opinion. Therefore, staff believes that selection should be based on attaining the vendor(s) most suitable and likely to meet VCEA's timelines and objectives.

General Finding: SMUD provides a stronger overall value to VCEA based on cost competitiveness, the reduced need to contract with additional vendors to address VCEA's wholesale side service needs, and the added efficiency of working with a single vendor.

Data Management and Call Center (Items 3.1 – 3.7 on VCEA's RFP)

VCEA received two private sector vendor proposals to provide Data Management and Call Center services in addition to SMUD's bundled service proposal. Based on their direct CCA or related experience, staff believes each respondent has adequate technical capability and staffing to perform to VCEA's specifications. SMUD's written proposal includes the potential for PG&E to perform certain subsets of this function at about a \$0.10 per MWh cost savings but VCEA would have to evaluate the possible trade-offs associated with continuing to utilize certain PG&E services (this option is not further discussed).

A summary of data management/ call center costs is shown in Table 2 below:

Cost Estimates from RFP Respondents and SMUD		Vendor 1	Vendor 2	Vendor 3 (1)	Vendor 4 (2)	SMUD RFP	SMUD WES (3)
Category 3: Data Management and Call Center (3.1 - 3.7)		\$/yr	\$/yr	n/a	n/a	\$/yr	\$/yr
Total Estimated Category 3 Costs:		\$ 975,000	\$ 1,046,500			\$ 850,200	\$850,200
Costs in \$/MWh:		\$ 1.19	\$ 1.28			\$ 1.04	\$ 1.04
(1) Vendor 3 did not bid Data Management and Call Center Services							
(2) Vendor 4 did not bid Data Management and Call Center Services							
(3) SMUD's Wholesale Energy Services ("WES") proposed charges for data management and call center services are the same if VCEA were to elect either RFP or WES options..							

As shown in Table 2 above, the private sector vendor proposals average \$1.24/MWh and SMUD indicated \$1.04/MWh. Again, these are not dramatic cost differentials although SMUD appears to offer a cost advantage of about \$100,000-\$200,000 per year.

General Finding: SMUD provides a stronger overall value to VCEA based on proposed cost estimates and the added efficiency of working with a single vendor.

Post Launch Full Wholesale Services (Not part of VCEA's Implementation Services RFP)

VCEA must either self-perform or contract for a host of business and wholesale side services ancillary to CCA operations. These services include: scheduling coordinator services; CAISO interface, security deposits, and settlements; power contracting; credit support; budgeting and accounting; risk management support; and the like. Table 3 below summarizes the costs for

these essential services included in the SMUD proposal. SMUD indicates it will consider either performing only those business functions contemplated within VCEA's RFP [column RFP (2)], or melding such services within its Wholesale Energy Services approach [column WES(3)], to meet VCEA's business function needs. With some potential variability in the desired and necessary intensity of SMUD's efforts, the cost adder for the WES option is about \$1.60 / MWh, which includes portfolio management, power procurement, CAISO interface and credit support. These are services that VCEA will either have to perform independently, contract with one or more additional vendors, or some combination of both.

Cost Estimates from SMUD			
		SMUD RFP (2)	SMUD WES (3)
Pro Forma Ongoing Full Wholesale Services, Vendor 5 Only		\$/yr	\$/yr
Estimated Total Ongoing Full Services Costs:		\$ 1,277,500	\$ 2,558,100
Costs in \$/MWh:		\$ 1.56	\$ 3.13
(1) SMUD presented a low/high range of costs, and the table displays the average charge.			
(2) Does not include Wholesale Energy Services ("WES").			
(3) WES indicates inclusion of full suite wholesale side service functions.			

Summary of Estimated Annual Services Costs

Cost Estimates from RFP Respondents and SMUD					
	Private Vendors (1)	SMUD RFP (2)	SMUD RFP (3)	SMUD WES (4)	
Some or All Services	\$/yr	\$/yr	\$/yr	\$/yr	
Estimated Total Ongoing Services Costs:	\$ 1,245,030	\$ 1,086,400	\$ 2,406,800	\$ 3,564,733	
Costs in \$/MWh:	\$ 1.52	\$ 1.33	\$ 2.95	\$ 4.36	
(1) Private sector vendors average cost of DM/CS and managerial consulting only (does not include additionally needed business and wholesale procurement/CAISO interface services).					
(2) SMUD Data Management / Call Center services, some consulting, less management and no Wholesale Energy Services ("WES"); most comparable to private sector bids.					
(3) Indicates Data Management / Call Center and power consulting along with added out-year business oversight support, no Wholesale Energy Services ("WES").					
(4) Wholesale Energy Services ("WES") indicates full suite of wholesale side service functions / average of low/high cost range.					

Table 4 above suggests that if only Data Management and Call Center (DM/CS) and pre-launch services are aggregated, corresponding costs range from \$1.33 to \$1.52/MWh across potential vendors; all are reasonably close (see columns 1 and 2). Column 3 is the average of SMUD's estimates of performing "Day 2" business and management assistance but not providing wholesale power supply services, and shows an incremental charge of about \$1.60/MWh versus column 2. The far right column displays SMUD's average cost for its full suite of "Day 2" services including wholesale power portfolio administration and procurement, CAISO interface, power contracting and settlements, risk management, and the like, at \$4.36/MWh (about \$1.40/MWh incremental charge versus column 3).

The combination of private sector vendor consulting/management assistance and data management/call center services are utilized by several existing CCAs, MCE for example. MCE also contracts separately for schedule coordination services and has close to 40 internal staff to support its current business structure. The private sector vendors who submitted proposals to VCEA have a history of providing utility business support consulting and Direct Access customer services including host utility data transfer and billing as well as power scheduling and other technical services. SMUD has no prior CCA experience but does have a 60-year history running an integrated public power organization, which necessarily includes those skills and services sought by VCEA. Selection of private sector vendor combinations would require attainment of additional VCEA staff and or other service providers to fill VCEA's remaining wholesale power procurement needs and CAISO interface services. SMUD's full WES service proposal would provide VCEA those needed services in an integrated manner, potentially reducing VCEA staff count and avoiding additional vendor searches.

Comparison with Existing CCA Program Budgets

As part of our comparative analysis, staff and consultants reviewed operational CCA budgets and other CCAs pursuing similar services from vendors. This research suggests that expected costs for such services, including internal CCA costs, lie generally in the \$4.00 - \$7.00/MWh range. Many factors influence such costs including CCA size and objectives, anticipated product offerings, internal/external consultant and staffing ratios, years of experience, technical services arrangements, credit support, and the like. Smaller CCAs tend to have larger unit costs due to certain fundamental and fixed-cost activities every CCA must incur such as resource planning, CAISO interface and accounting, budgeting, rate setting, office infrastructure, legislative and regulatory support et al, which costs are spread over relatively smaller sales volumes.

Based on its relatively small size, staff assumes VCEA would incur near \$6.00/MWh in combined total to obtain needed services to effectively run the Agency. Subtracting SMUD's proposed \$4.36/MWh full Wholesale Energy Services charge from Table 4, column 4, would "leave" about \$1.61/MWh or \$1,350,000 per year to allocate to internal VCEA costs for staffing and other costs. Performing a similar exercise by adding \$3.00/MWh to the private sector combinations to estimate cost adders associated with additional ongoing business and wholesale power functions VCEA would need suggests comparable total external costs in the \$4.50/MWh range, "leaving" about \$1,225,000 for VCEA's internally incurred costs. These amounts track closely with the Pro Forma study completed for VCEA in 2016, and will likely approximate what VCEA experiences as it commences operations.

Thus, from an overall cost perspective, the alternatives under consideration are not likely to differ in cost appreciably. This suggests that VCEA decision-makers should place emphasis on other important factors such as Mission alignment, service quality, meeting target objectives and timelines, overall organizational fit, etc., as it converges on vendor selection(s).

General Finding: SMUD provides overall value to VCEA based on comparisons to existing CCA program costs combined with staff capacity and the efficiency of working with a single vendor.

D) Ability to Meet Timelines and Objectives

VCEA intends to commence CCA operations on or about June 1, 2018. Meeting this target launch date becomes increasingly unlikely without expeditious vendor selections, executed contract agreements, and subsequent work efforts necessary to: complete and submit the CPUC implementation plan; establish data exchange interrelationship with PG&E; create business and credit accounts with the CAISO; establish trading arrangements with bulk power providers; develop and approve VCEA internal policies and procedures; formalize commercial banking facilities - to name just a few of a long list of necessary tasks to be completed before launch.

Although the CEO search and receipt of SMUD's proposal has interjected several months of staff and Board evaluation effort, it simultaneously provides a feasible approach to regaining momentum and achieving commercial operation by June of next year, especially given inclusion of the full suite of wholesale power operations services outlined by SMUD. Alternatively, under the private sector vendor option, VCEA must concurrently select and negotiate from existing RFP responses as well as issue additional RFPs or directly negotiate for wholesale/CAISO operations services. Acceptance of SMUD's full service approach, augmented by a small core team of VCEA staff and VCEA-hired professional services such as legal, audit and regulatory services would reduce the complexity of interacting with multiple vendors and improve the likelihood of meeting the tight timelines established for program launch.

General Finding: SMUD provides greater opportunity to meet current timelines and objectives if VCEA chooses to select the optional Wholesale Energy Services (WES) which would reduce the time needed to procure energy supply prior to launch. Neutral if SMUD's WES option is not selected.

E) Normative Risks and Benefits

Managed risk is a reality in the start-up and operation of any utility-related enterprise, and a CCA program is no exception. Robust risk management policies and risk planning for unforeseen events is a key role of VCEA staff and decision-makers. The technical study completed for VCEA identified risks associated with CCAs and provided "sensitivity scenarios" should one or more risk factors affect the Agency at the same time. The study deemed the risks to be mitigable with prudent management, preparedness, and sufficient reserves to weather shifts in market prices or other conditions that could have negative impacts on rates and/or operations.

Most business risks for CCAs fall into three general categories: 1) financial/market, 2) operational, and 3) regulatory and legislative. Tables 5, 6 and 7 below summarize these risks, potential risk levels and mitigations, and related differences between the service options.

Table 5 - Financial/Market Risks

Risk Factor: Financial/Market	Likely Risk Level/ Mitigations	VCEA Consultant Supported Option	SMUD Bundled- Service Option
Supply Imbalance; over or under	Low; mitigated with prudent hedging and power planning.	VCEA must retain expert consultants and hire experienced procurement talent.	SMUD has existing and extensive experience with portfolio planning and supply management.
Customer Opt-Outs	Low; opt-out risk is highest at program commencement; mitigate with competitive rates and effective public outreach.	VCEA is planning to manage its customer outreach and key accounts. VCEA has hired a marketing firm and will hire staff with experience in marketing/customer relations.	SMUD is not planning to be directly involved in customer outreach but can assist in this area if needed; SMUD has existing call center and customer switching/ enrollment experience.
Current Power Market	Low; Current market prices are below historic averages, including some renewables. Risk of future price increases can be mitigated through hedging and diversified supply portfolio.	VCEA must retain expert power market consultants and hire experienced power procurement and planning talent.	SMUD has extensive experience transacting in the western wholesale power markets and power forecasting.
Future Power Market	Moderate; Many factors influence such as overall economy, availability of various supply types, natural gas pricing. Customer impacts can be mitigated by measured procurement early on and accumulating healthy reserves to smooth unanticipated rate spikes.	VCEA must retain expert power market consultants and hire experienced power procurement and planning talent. It must also establish robust reserve policies to hedge against future volatility.	SMUD has extensive experience transacting in the western wholesale power markets and power forecasting. It will work with VCEA to establish market risk management policies and appropriate reserve policies.

<u>Risk Factor:</u> Financial/Market	Likely Risk Level/ Mitigations	VCEA Consultant Supported Option	SMUD Bundled- Service Option
City/County Exposure	Low; Could lose initial contribution and any used working capital or provided credit if program does not launch.	Risk is same in both scenarios; JPA provides protection for longer-term liabilities.	Risk is same in both scenarios; JPA provides protection for longer-term liabilities.
Financial/Credit	Low; Prudent planning and operations, healthy reserves, prudent use of debt, credit rating; developing CCA track record helps.	VCEA will need to solicit and secure third-party financing to provide backing for initial power contracts and early operations.	SMUD is offering financing at .80/mwh to support VCEA's initial wholesale power contracts.

Table 6 – Operations Risks

<u>Risk Factor:</u> Operations	Likely Risk Level/ Mitigations	VCEA Consultant Supported Option	SMUD Bundled-Service Option
Governance	Low; Develop productive/effective JPA governing documents and policies; select an engaged Board; leverage talents and recommendations of advisory committees.	Risk is same in either scenario since VCEA Board will remain in charge of overall direction and policy.	Risk is the same in either scenario although SMUD staff support could be helpful in educating and informing the Board as formation continues and operations commence.
Staffing and Operations	Low; Hire CEO and staff with relevant industry experience. Management team will be especially important to creditors and rating agencies. Learn from other CCAs' employment policies and benefits packages.	VCEA was unable to settle on a CEO in its first recruitment effort; will need to re-open recruitment and also hire Agency staff. Outside consultant expertise is available to support implementation and operations.	SMUD is offering to provide up to 4 f/t staff "on loan" to augment VCEA staff. Additional staff services in various functions are available on an hourly basis.

<u>Risk Factor:</u> Operations	Likely Risk Level/ Mitigations	VCEA Consultant Supported Option	SMUD Bundled-Service Option
Reputational	Low; Set positive program goals and articulate personal and community benefits to general public; maintain high degree of visibility in the community; provide value-added programming so cost is not the only metric of success.	VCEA has opportunities to establish a positive reputation in the community under either service scenario. Sound management and keen attention to customer needs/feedback will be essential.	VCEA's reputation will stand on its own branding and performance, but helpful that SMUD has a strong customer track record and positive reputation among its customers and the utility industry.

Table 7 - Regulatory and Legislative Risks

<u>Risk Factors:</u> Regulatory and Legislative	Likely Risk Level/ Mitigation	VCEA Consultant Supported Option	SMUD Bundled-Service Option
Regulatory	Moderate to High; highest risk issue is PCIA reform; work in partnership with Cal-CCA to influence outcome and discuss CCA mitigation strategies.	Risk profile is same in either scenario; VCEA will need to contract for and hire experienced regulatory affairs talent.	Risk profile is same in either scenario. SMUD may have some insights from POU perspective that are helpful in PCIA reform/mitigation and other regulatory proceedings.
Legislative	Low to Moderate; an area to be carefully monitored; work in partnership with Cal-CCA to combine strategies and influence outcomes.	Risk profile is same in either scenario; VCEA will need to contract for and/or hire experienced govt affairs staff.	Slight risk that SMUD will take opposing positions in the legislature. But SMUD's involvement could also lend credibility at the legislature.

As noted above, energy and utility-related enterprises carry risks that must be mitigated through verified risk management policies and practices, experienced staff, and robust financial reserves. In this regard, at least in its formative years, VCEA would be well served by SMUD's substantial experience in managing risks associated with the wholesale power market, power planning, and nascent business operations.

The benefits of a CCA program serving the Yolo County area have been well established and articulated by the VCEA staff, Board, and its ad hoc technical committee over the last year.

Because VCEA will retain full decision-making authority, fiduciary oversight, and policy-making control, program benefits can be accomplished in either service scenario. Table 8 below highlights some of the operational benefits and risks of each service option.

Table 8 – Service Option Operational Benefits/Risks

Service Option	Benefits	Risks
VCEA Consultant Supported Option	<ul style="list-style-type: none"> ● Greater autonomy to develop, manage and revise program over time ● Choice of vendors with demonstrated CCA experience ● Ability to build internal staff and credit capacity sooner ● Less potential for “brand confusion” ● Less potential for “getting lost” in a large organization ● Most local option 	<ul style="list-style-type: none"> ● Availability of qualified vendors/staff ● Must establish enabling agreements/credit with multiple wholesale suppliers ● Subsequent RFPs required for wholesale power services ● Limited credit capacity ● Need to develop risk management policies from the ground up ● Org capacity is stretched; program timing could be impacted ● Administrative burden of coordinating multiple vendors
SMUD Bundled-Service Option	<ul style="list-style-type: none"> ● VCEA Board/General Mgr. remains “in charge” ● Requires fewer VCEA staff ● Solid financials and wholesale market credit support ● Positive public and industry reputation ● Integrated full utility operations experience ● Experience with management systems, controls and reporting ● Utilization of SMUD’s wholesale procurement arrangements ● Established and adaptable risk management policies ● Established EE programs and willingness to innovate/support tailored VCEA programs ● Flexible staffing alternatives including local presence ● Avoids additional wholesale service RFPs and negotiations ● Non-profit, public agency --culturally similar ● Supports June 2018 launch date 	<ul style="list-style-type: none"> ● Subject to successful contract negotiations; unknown contract risk ● May sidetrack current VCEA efforts and result in delays ● No direct CCA implementation or ops experience ● Could result in branding/customer confusion ● Could result in utility “push-back” or mixed press; reputational damage ● Potentially differing regulatory/legislative positions (CCA v. POU); ● Possible dilution of local control ● Could constrain implementation of VCEA specific/tailored programs ● Potential regional proximity conflicts ● If SMUD approach reaches impasse, VCEA must revive RFP processes

VI. Additional Considerations

1. VCEA Autonomy/Local Control

A key issue in VCEA's earlier evaluation of MCE membership was that of local control and decision-making autonomy. In both service options currently under consideration, VCEA will maintain full control over operations and policy matters including power supply mix/renewable energy and carbon free targets, its power portfolio, rate design and rate setting, fiscal oversight/audits, community outreach and account management, and legal services. It will also have the ability to allocate use of excess revenues toward reserves, implementation of local energy programs and investments in local power infrastructure.

2. Branding/Public Interface

In either service option, staff and consultants recommend that VCEA establish its own distinct brand, marketing and messaging approach, and customer-account services team. VCEA recently contracted with Circlepoint to help achieve this objective. SMUD's proposal does not include marketing or account management services; however, if selected, SMUD has indicated a willingness to be supportive "behind the scenes" as needed and appropriate.

3. Staffing and HR Issues

If VCEA pursues a consultant supported option, it will assume responsibility for the hiring and management of its own staff of approximately 8-12 people and outside consultants as needed. Based on existing CCA programs, this will include a full time CEO and sufficient staff to carry out all CCA functions with some support from outside vendors.

If VCEA contracts with SMUD, it would hire a smaller staff which would be augmented by up to 4 SMUD staffers "on loan" on a full-time, fixed-cost basis for the duration of the contract. In addition to these dedicated staff resources, VCEA would have access to additional SMUD staff as needed on an hourly basis to carry out various contracted services. Although on SMUD's payroll and benefits package, these staff would report to the VCEA CEO with a dotted line back to SMUD.

Specific job titles and classifications for VCEA are yet to be determined. Pending Board direction and potential contract discussions with SMUD, staff will prepare a full organization chart showing which positions would remain with VCEA, which would be "on loan" from SMUD, and which would be provided on a shared-services basis between the two organizations.

In either case, VCEA is assumed to maintain a local office with all full-time staff working from that location. VCEA will need to establish employment and benefits policies for its employees and provide office space/equipment for all staff, under contract or otherwise. As noted, once operational annual staffing costs are generally equal under either service option. VCEA will also

retain the option to periodically review contract services and bring additional staff resources “in house” if that is more cost effective and beneficial to the Agency over time.

4. Contract Provisions

The RFP vendor proposals are based on standard contract provisions and most are limited to program implementation with the option to extend for additional operational services. Contract negotiations with these vendors are likely to be straightforward given their previous CCA experience and existing CCA contracts that are publicly available.

SMUD’s proposal would provide CCA implementation services during the first 8 months followed by a 3-5 year post launch services arrangement, with a possible option to terminate at the end of year three or extend beyond year five if desired. Specific terms have yet to be developed, but SMUD has indicated a willingness to negotiate timelines and terms supporting both parties’ goals and objectives. It has also indicated a willingness to review service costs and scope annually commencing with the start of the third contract year. Such review could adjust service levels upwards or downwards according to VCEA direction. The cost comparisons in this report suggest the service charges proposed by SMUD fall within a reasonable and expected range of outcomes. Finally, a key issue if VCEA decides to move forward with contract negotiations will be legal provisions related to termination of service and power portfolio cost allocations at the end of the contract term.

5. Regulatory/Legislative Conflicts:

If VCEA opts for the Consultant Supported Option, its efforts and positions in the regulatory and legislative arenas will be solely its own, perhaps in concert with Cal-CCA, the trade association representing CCAs statewide. It is possible, however, that some VCEA service vendors participating at the CPUC or CA Legislature could take differing/opposing positions to that of VCEA. VCEA would likely address any such situations on a case-by-case basis. Agreements with vendors, therefore, need to establish a regulatory and legislative firewall between VCEA and its service provider(s), and require full disclosure on regulatory/legislative positions that may impact current or future VCEA operations.

VII. Summary

VCEA’s vendor selection process has been in slight abeyance for several months largely due to resolving CEO staffing and to evaluate a recent proposal from SMUD outlining a more comprehensive suite of services covering implementation, data management/call center, and full business and wholesale power procurement operations support for up to five years. From a cost perspective, SMUD’s proposal tracks closely with charges incurred and budgets developed by other California CCAs as well as the bids received in VCEA’s earlier RFP. Additional advantages of pursuing arrangements with SMUD include avoiding one or more additional service RFPs; working with a regionally proximate non-profit organization; attainment of wholesale procurement and credit facilities; access to a wide range of progressive energy

efficiency programs and tariff structures; and reducing VCEA's administrative and vendor coordination burden.

Drawbacks may include the possibility of being somewhat overshadowed by SMUD's sheer size and established brand and/or SMUD falling short in meeting VCEA's tight timelines and range of service needs. These shortcomings can be mitigated by establishing a separate brand and communications strategy and by thorough VCEA Board and staff involvement and monitoring to assure planned progress is attained.

Potential benefits associated with utilizing SMUD's "service suite" include the enhanced likelihood of a timely start to VCEA's CCA program, its ability to bolster VCEA's credit capacity and wholesale power contract terms, and ability to facilitate operational consistency in the transition from VCEA implementation into the first few years of operations. And, as VCEA gains operating experience over its first few years in business, it can either extend its relationship with SMUD, choose to bring more functions "in-house," shift to other vendors or some combination thereof. In short, under the SMUD full service option, VCEA can achieve its near-term objectives, build internal capacity over time, retain full program control/autonomy, and maintain operational flexibility.

VIII. Recommendation

Staff and consultants recommend the Board direct staff to commence contract negotiations with SMUD for implementation services, data management/call center services, and up to five years of wholesale power services, the terms of which are to include provisions for periodic pricing and service level review and an option to terminate the contract at the end of year three.

Pursuant to Board direction, staff will begin negotiations with SMUD and simultaneously move into next steps for a June 1, 2018 CCA program launch. Staff will provide an update at VCEA's September Board meeting with focus on securing final contract approval at the October Board meeting.

Attachments:
SMUD proposal



SMUD proposal for

Valley Clean Energy Alliance

Community Choice Energy Program Launch and Operational Services



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1. Table of Contents

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2. Letter of Transmittal

July 31, 2017

Mr. Mitch Sears
Interim General Manager
Valley Clean Energy Alliance
C/O City of Davis, City Manager's Office
City Hall
23 Russell Boulevard
Davis, CA 95616

Re: Proposal for Community Choice Energy Program Launch and Operational Services

Dear Mr. Sears,

Thank you for the opportunity to submit a proposal for SMUD to provide services to support the launch and ongoing operations of the Valley Clean Energy Alliance (VCEA).

SMUD is in a unique position to be able to provide a full service proposal to ensure VCEA achieves its mission to deliver cost-competitive clean electricity, product choice, price stability, energy efficiency, and greenhouse gas emission reductions. We're genuinely excited to partner with VCEA to bring the benefits of public power and local empowerment to its customers in Yolo County.

Our missions are aligned. As a community-owned, not-for-profit utility governed by an elected Board of Directors, SMUD measures success by the value we bring to the people of the community we serve. Our customers expect reliable, affordable electricity, and they expect it to be delivered to their homes and businesses in the most environmentally responsible manner possible. But SMUD does so much more with its delivery of innovative, world class energy solutions and products.

SMUD is a vertically-integrated utility, with the experience and expertise in all facets of energy supply – from power generation to product and service delivery to customers and everything in between. It means we have the scope to provide all the services required to launch and operate VCEA successfully – and more. The size of SMUD's operations means our proposal is scalable. We can support future load and customer growth and expand services to meet VCEA customers' evolving needs for clean and innovative energy-related products, services, tools and information.

As the nation's sixth-largest community-owned electric service provider, SMUD has been providing low-cost, reliable electricity in an environmentally responsible way for more than 70 years to Sacramento County (and small adjoining portions of Placer and Yolo Counties).

Environmental leadership is one of SMUD's core values, imbedded into all of our business practices. We take pride in our reputation as one of the nation's greenest, most progressive utilities. SMUD is a recognized industry leader and award winner for its innovative energy efficiency programs, renewable power technologies, and for its sustainable solutions for healthier communities.

2. Letter of Transmittal

We are responding with a detailed full service proposal, which includes:

- Technical and Energy Services (Service Category 1)
- Data Management and Call Center Services (Service Category 3)
- Wholesale energy services
- Operational services
- Advanced energy solutions
- Marketing and community outreach services

What sets SMUD apart from others is our capacity to meet virtually all of VCEA's staffing needs for launch and ongoing operations and our ability to provide additional value added services beyond those listed in the service categories.

SMUD is offering a unique opportunity for VCEA to use the talents, expertise and commitment of a 2,000-plus strong workforce with experience in all facets of providing power, meeting customer service expectations and offering best in class energy solutions – all within a single organization. It means VCEA's staffing needs would be minimal. VCEA's Board and general manager would have responsibility for making important governing decisions, setting policy and direction, determining risk parameters and SMUD's VCEA team would develop and execute launch and operational plans within the parameters set by VCEA. This approach offers numerous benefits – flexibility, speed and it allows key VCEA personnel to focus almost exclusively on policy, oversight and related decisions to ensure your CCE objectives are met, rather than on administrative and operational tasks.

All of our support will come from experienced in-house senior leaders and subject matter experts, and in a small minority of cases subcontractors who have been performing these services exclusively for the utility industry.

The services we're proposing are SMUD's core competencies – the work we do successfully 24/7, 365 days a year. SMUD has a proven track record of leadership, innovation and achievement. Highlights include:

- SMUD was the first large utility in California to have 20% of its power supply come from resources classified as renewable by the state. The figure is now approaching 30% and we expect to be at about 41% by 2020, exceeding the 33% target. SMUD's current power supply portfolio is more than 50% carbon free.
- SMUD was awarded a \$127.5 million Smart Grid Investment Grant from the U.S. Department of Energy in 2009 which helped us create one of the country's earliest smart grids.
- Innovative renewable energy products to help SMUD and customers achieve their environmental objectives. Greenergy®, the first program of its kind, allows residential and commercial customers to pay a small premium to meet up to 100% of their electricity needs from renewable energy. Through SolarShares®, residential and commercial customers can meet their power needs with utility-scale solar energy without having to install solar panels.

2. Letter of Transmittal

- Our rates are among the lowest in the state, and about 30% lower than neighboring utilities.
- In 2016, SMUD was recognized by the White House for “strong commitment to reducing greenhouse gas emissions in all of its operations, including a net long-term reduction of 90% from 1990 levels by 2050.”
- Strong customer satisfaction. In J.D. Power surveys SMUD has been ranked #1 in overall residential customer satisfaction in California for 15 consecutive years and #1 in overall commercial customer satisfaction in California for 11 of the last 12 years.
- Strong brand trust. SMUD was ranked the most trusted electric utility brand in the nation among residential customers in the “2017 Utility Most Trusted Brands & Customer Engagement: Residential Customers” Cogent Reports study by Market Strategies International.

While SMUD’s proposal is backed with experience and expertise of a 2,000-plus strong workforce, more than 70 years of utility experience and shared values, we recognize that VCEA must build a unique brand, organization, operations and product offerings to meet the needs of customers in Yolo County. We will partner with you to put VCEA front and center with its customers to deliver value.

SMUD’s approach to product development and delivery is based on a multi-layered approach to market segmentation that brings a granular and dynamic view of the customer. It allows us to tailor product and service offerings to reach all of our residential and business customer segments with energy-related products, services, tools and information in the right channel at the right time. It’s an approach we’d bring to VCEA to tailor offerings that deliver value to customers in Yolo County if we are selected to provide advanced energy solutions.

We are proud of our track record and enthusiastic about sharing our experience, expertise and values to support VCEA and its customers.

SMUD is headquartered at 6201 S St., Sacramento, CA 95817. The main point of contact for this proposal is Victoria Zattero. She can be reached at 916-732-5483 or victoria.zattero@smud.org.

Thank you for the opportunity to submit SMUD’s proposal. We look forward to discussing how SMUD can support VCEA in its mission to serve customers in Yolo County.

Sincerely,



Arlen Orchard

Chief Executive Officer & General Manager

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3. References

References

The following organizations, partners and customers are references that illustrate a sampling of the strong professional relationships that SMUD holds with those we work for and with to deliver value to our customers and community. The primary contact for each reference has been contacted and is ready and willing to talk with VCEA staff should they be called upon.

California Energy Commission – regulatory agency



Contact Name and Title:

Courtney Smith, Deputy Director, Renewable Energy Division

Contact Phone | Email:

916-654-4906 | courtney.smith@energy.ca.gov

Company Description: As the state’s primary energy policy and planning agency, the California Energy Commission (CEC) is committed to reducing energy costs and environmental impacts of energy use – such as greenhouse gas emissions – while ensuring a safe, resilient and reliable supply of energy.

Relevance: As a governing body, the CEC plays a huge role in providing guidance and requirements to SMUD in reaching a multitude of goals, including the Renewable Portfolio Standard (RPS). SMUD staff work closely with the CEC RPS team to maintain compliance and to develop innovative ways to pursue even higher penetrations of renewables while continuing to offer SMUD customers uncompromised reliability.

SMUD’s RPS compliance staff and internal RPS tracking process have ensured all RPS compliance obligations have been met for the first and second compliance periods as required by the CEC. SMUD maintains a good communicative relationship with the CEC’s RPS compliance staff which has been helpful in ensuring SMUD’s RPS reporting obligations are met.

California Energy Commission – energy efficiency expert



Contact Name and Title:

Gabriel Taylor, Engineer

Contact Phone | Email:

916-616-3189 | Gabriel.taylor@energy.ca.gov

Relevance: Gabe has worked with SMUD staff to help in the design of programs and customized pilots to help State agencies achieve their sustainability goals.

3. References

Transmission Agency of Northern California – public power agency



Contact Name and Title:

Bryan Griess, General Manager

Contact Phone | Email:

916-631-3240 | bgriess@tanc.us

Company Description:

The Transmission Agency of Northern California (TANC) is a joint powers agency established by a group of California publicly-owned utilities in 1984. TANC's initial purpose was to plan, design and construct the California-Oregon Transmission Project (COTP), a 340-mile long, 500-kV AC transmission line between the California-Oregon border and Central California. The COTP was completed and energized in 1993.

Today, TANC's primary purpose is to provide electric transmission to its member utilities through transmission line ownership or contract arrangements. As the project manager for the COTP, TANC is responsible for its day-to-day operation and maintenance, and any potential upgrades to the line.

Relevance: SMUD is TANC's largest member. SMUD provides Treasury and Accounting services to TANC.

First Solar – solar developer



Contact Name and Title:

Alex Martin, Manager, Government & Public Affairs

Contact Phone | Email:

415-935-2532 | alex.martin@firstsolar.com

Company Description: First Solar provides the industry's leading eco-efficient PV solutions which generate more energy at a competitive cost with the smallest environmental impact. First Solar is committed to sustainable PV manufacturing, responsible construction practices and minimizing the environmental impacts of products across their life cycle, from raw material sourcing through end-of-life recycling.

Relevance: First Solar worked with SMUD to develop the Rancho Seco solar project in Herald, California. The year-long project delivered an 11 MW utility-scale solar array on 60 acres. The power generated by the Rancho Seco solar site is contracted to be sold through SMUD's SolarShares program to Sacramento's Golden 1 Center, home of the NBA's Sacramento Kings and to the State of California Department of General Services (DGS)-owned buildings in Sacramento County, including the State Capitol Building. All sites are within 30 miles of the solar arrays.

3. References

The Fishery Sturgeon Farm – agricultural customer



Contact Name and Title:

Kenneth Beer, Owner

Contact Phone | Email:

916-687-7475 | beerfishery@yahoo.com

Company Description: The Fishery is a large agricultural commercial customer that’s been a SMUD customer since the early 1980’s. An aquaculture farm nestled in the lush fields of the Delta where largemouth bass, carp, sturgeon and catfish are raised, The Fishery specializes in raising white sturgeon for caviar and meat, as well as providing fresh fish to numerous gourmet markets throughout Northern California.

Relevance: In addition to years of ongoing support in their operations, SMUD’s Strategic Account Advisors recently assisted in the replacement of The Fishery’s deep well and recirculation pumps used to provide and move water throughout the facility. SMUD provided advice in the specification of equipment and guidance through SMUD’s incentive programs that resulted in a highly touted and successful project.

GRID Alternatives – nonprofit community partner



Contact Name and Title:

Rebekah Casey - Director, Development & Strategic Partnerships

Contact Phone | office:

916-588-9279 | rcasey@gridalternatives.org

Company Description: GRID Alternatives is a nonprofit organization that brings the benefits of renewable energy, solar technology and job training to underserved communities that wouldn’t otherwise have access to these technologies.

Relevance: SMUD partners with GRID Alternatives to provide energy efficiency measures and solar systems to qualifying low-income customers. SMUD contacts and refers eligible low-income customers in disadvantaged communities in our service area as defined in SB535 to Grid Alternatives. SMUD’s energy specialists provide an energy audit on the home to determine the needed energy efficiency measures and coordinates installation with GRID alternatives at no-cost to the customer.

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4. Organization and Key Personnel

4. Organization and Key Personnel

A. Organizational Focus and Capacity

SMUD's foundation is based on a commitment to provide value to our customers and community by delivering innovative energy solutions to the Sacramento region. By expanding our collaboration and support of CCEs, we can provide mutual benefits for VCEA, SMUD and customers of both utilities.

SMUD's proposal includes services to support the launch and operations of VCEA, with VCEA retaining all policy, decision making and rate setting authority. VCEA was created to respond to its constituent communities and SMUD will draw on extensive utility expertise to help VCEA accomplish its unique mission, offering a blend of services and innovative technologies that respond to the City of Davis, City of Woodland, Unincorporated Yolo County and future jurisdiction needs.

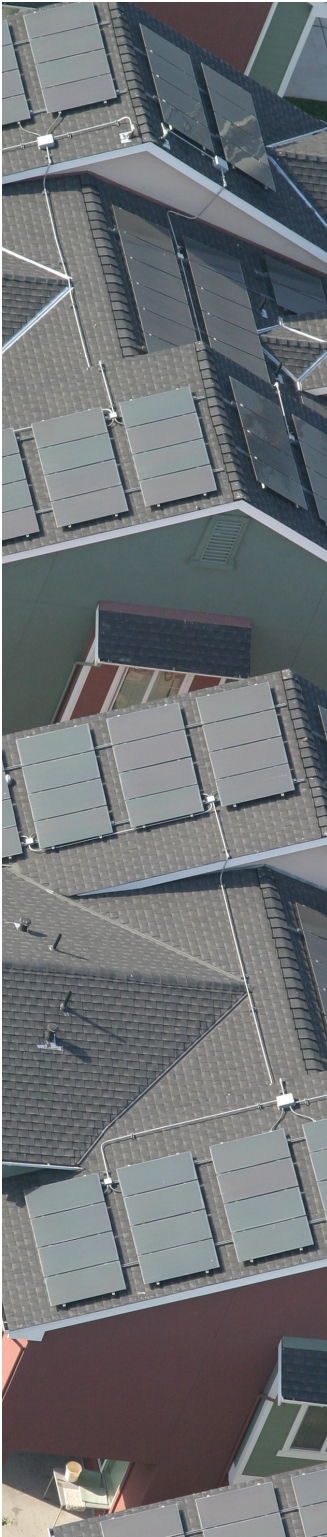
SMUD has decades of experience partnering with other agencies and organizations that have been mutually beneficial to both parties and customers.

Significant examples include:

- SMUD sponsored the first California Energy Expo in the 1970s.
- SMUD was among the first utilities to offer customer programs for energy efficiency to help customers reduce electric bills amid rising energy costs.
- In 1984, the City of Folsom decided to join SMUD and has been the beneficiary of low rates, community engagement and renewable energy choices ever since.
- Following the energy crisis in the early 2000s, SMUD formed a partnership with several utilities in Northern California to develop the Balancing Authority of Northern California (BANC). Operated by SMUD, BANC is comprised of SMUD, the Modesto Irrigation District, the City of Roseville, the City of Redding, Trinity Public Utility District, the City of Shasta and the Western Area Power Administration (Sierra Nevada Region). The organization performs similar functions to CAISO and was formed to realize benefits for all members including reduced costs, improved local influence over decisions and better choices regarding energy sources.



4. Organization and Key Personnel



We believe our partnership with VCEA will deliver similar long-term benefits for VCEA, its customers and SMUD.

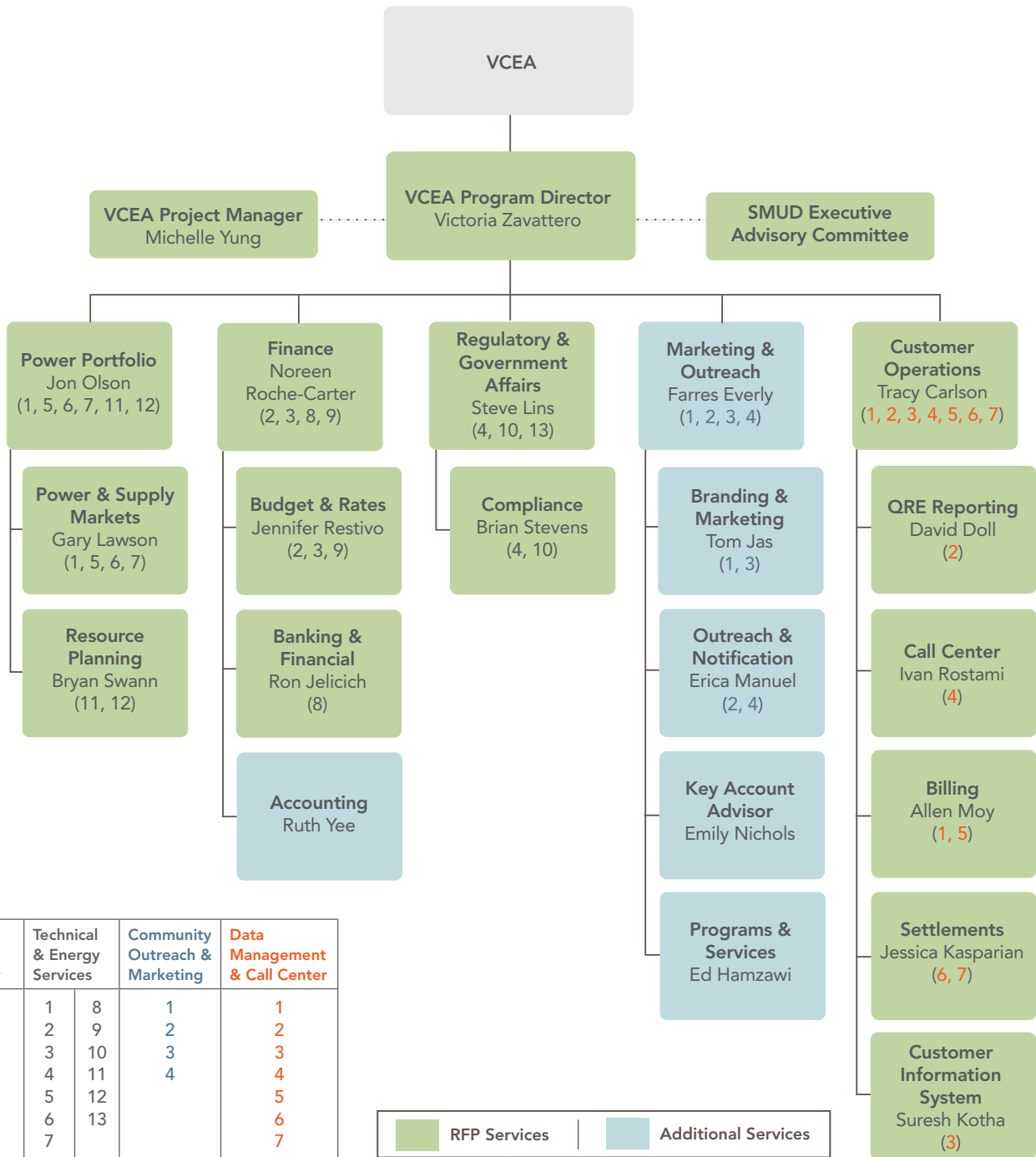
We recognize the importance of a successful launch and ongoing operations for VCEA. SMUD has the scope and scale of operations to ensure VCEA's success while maintaining SMUD's best-in-class operations for our customers. We will draw on our 2,000-plus strong workforce of highly skilled subject matter experts, backfilling and re-assigning roles within SMUD's day-to-day operations where necessary.

Key personnel at SMUD have been strategically selected to lead our support for VCEA, which shows our commitment to ensure the commercial and operational success of VCEA through our proposed services. We have the full support of our Chief Executive Officer & General Manager Arlen Orchard and his executive team in pursuing our proposed services to support VCEA. Every key function in our proposal is supported by the senior business leader who currently performs this work for SMUD today:

- Victoria Zavattero, VCEA Program Director
- Jon Olson, Power Portfolio
- Noreen Roche-Carter, Finance
- Steve Lins, Regulatory & Government Affairs
- Farres Everly, Marketing & Community Outreach
- Tracy Carlson, Customer Operations

These senior business leaders have decades of experience in all the key segments of VCEA's operations. Moreover, they have detailed insights on what it takes to build, grow and sustain a successful business in the rapidly changing utility industry. This group would be led by a VCEA Program Director responsible for coordinating all matters for VCEA, acting as the liaison between VCEA and SMUD's team. Supporting the VCEA Program Director is a VCEA Project Manager to assist in managing the various CCE services. SMUD's executive team would act in an advisory role for input and guidance (SMUD Executive Advisory Committee), as necessary. We are prepared to fully support VCEA with an experienced staff, allowing VCEA to be the front-facing organization while SMUD provides operational services. The following organization chart demonstrates the proposed structure and the associated service tasks for each area.

4. Organization and Key Personnel



RFP Service Category	Technical & Energy Services		Community Outreach & Marketing	Data Management & Call Center
Tasks	1	8	1	1
	2	9	2	2
	3	10	3	3
	4	11	4	4
	5	12		5
	6	13		6
	7			7

As shown in the organization chart, the senior leaders are supported by expert staff that will be charged with carrying out the various service tasks. This group of leaders has the authority to draw upon all parts of their business lines to ensure that VCEA receives the full support needed for a successful launch and early operations.

The Key Personnel in the following pages includes the leadership group identified in the organization chart above as well as the subject matter experts SMUD has on staff that will handle day-to-day activities as needed for VCEA.

4. Organization and Key Personnel

B. Key Personnel

VCEA PROGRAM MANAGEMENT

Victoria Zavattero – VCEA Program Director



Director, Energy Research & Development

SMUD
6100 Folsom Blvd, M.S. MA-1
Sacramento, CA 95817

Tel: 916-732-5483
Fax: 916-732-6581
Email: victoria.zavattero@smud.org

Educational Background

B.A., Statistics, University of California, Berkeley
M.A., Economics, University of California, Berkeley

Relevant Experience and Certifications/Merits

Victoria joined SMUD in 1992 and has held various leadership positions. She developed load management programs and integrated resource planning. As the Manager for SMUD's Smart Grid program, she led the deployment of smart meters and other smart grid technologies, including partnerships with local educational and state institutions. Most recently, Victoria has led SMUD's energy storage, energy efficiency, and electric transportation research and development programs.

Years with SMUD: 25

Role in Connection with VCEA Services

Victoria will direct SMUD's overall VCEA services. She will manage all aspects of development and delivery, and be the main liaison between VCEA and SMUD.

Michelle Yung – VCEA Project Manager



PMO Supervisor, Energy Research & Development

SMUD
6100 Folsom Blvd, M.S. MA-1
Sacramento, CA 95817

Tel: 916-732-6526
Fax: 916-732-6581
Email: michelle.yung@smud.org

Educational Background

B.A., Economics, University of California, Davis
MBA, Finance and International Business, Santa Clara University

Relevant Experience and Certifications/Merits

Michelle joined SMUD in 2011 as part of the DOE Smart Grid Investment Grant team. She has lead numerous projects at SMUD, including My Energy Tools (SMUD's suite of online energy analysis tools that includes energy usage, bill comparisons, high bill alerts, and home energy audits) and EPA's Portfolio Manager application (integration of SMUD commercial customer electric usage data for building energy efficiency benchmarking). She currently manages the Energy Research & Development portfolio of 60+ projects ranging from energy efficiency, electric vehicles, battery storage, demand response, and distributed generation projects. Before coming to SMUD, Michelle worked at Wells Fargo and led the Business Banking Command Center during the \$15B merger between Wells Fargo and Wachovia. She ensured that each state by state conversion of back office systems, local branch branding and equipment, and staff training was completed and issues were resolved immediately.

- Certifications/Merits: Certified Project Management Professional (PMP), Project Management Institute (PMP #1362522)

Years with SMUD: 6

Role in Connection with VCEA Services

Michelle will be the dedicated Project Manager assigned to VCEA's Program Launch. She will coordinate with SMUD's internal resources for delivery manage scope, schedule, budget and risks to deliver a high quality program to VCEA.

4. Organization and Key Personnel

Service Category 1: Technical and Energy Services

POWER PORTFOLIO AND RESOURCE PLANNING

Jon Olson



Director, Energy Trading & Contracts

SMUD
6301 S Street, M.S. 404
Sacramento, CA 95817

Tel: 916-732-7378
Fax: 916-732-6581
Email: jon.olson@smud.org

Educational Background

B.S., Ag Education, Life Science, and Earth Science,
University of Minnesota

Relevant Experience and Certifications/Merits

Jon joined SMUD in 2016 to manage SMUD's \$500 million commodity budget, which includes power, natural gas, hydro, renewable energy and carbon allowance. Prior to SMUD, Jon worked in the private sector providing consulting services for energy market and risk management activities. He also directed business development for a leading energy solutions software company.

Years with SMUD: 2

Role in Connection with VCEA Services

Jon will direct VCEA's overall wholesale power needs, including energy procurement, trading and scheduling.

Gary Lawson



Manager, Energy Commodity Contracts

SMUD
6301 S Street, M.S. A404
Sacramento, CA 95817

Tel: 916-732-5802
Fax: 916-732-6002
Email: gary.lawson@smud.org

Educational Background

B.S., Mechanical Engineering, California State University
San Luis Obispo

Relevant Experience and Certifications/Merits

Gary has unique utility experience having worked in all three of the key areas that make up the wholesale energy services part of SMUD's business: Grid Operations, Power Generation and Energy Trading & Contracts. Gary is responsible for a team that negotiates and administers SMUD's long-term energy commodity contracts, including renewables.

Years with SMUD: 23

Role in Connection with VCEA Services

Gary will coordinate the provision of the comprehensive Wholesale Energy Services to VCEA. Gary will be directly involved in development of power supply procurements, in evaluation of power supplier proposals, and in contract negotiations with suppliers.

4. Organization and Key Personnel

Scott Martin



**Director, Resource Planning,
Commodity Risk & Settlements**

SMUD
6301 S Street, M.S. A-451
Sacramento, CA 95817

Tel: 916-732-6872
Fax: 916-732-6833
Email: scott.martin@smud.org

Educational Background

MA, Economics, University of Nevada, Las Vegas
BA, Economics, University of California, Berkeley

Relevant Experience and Certifications/Merits

Scott joined SMUD in 1999, managing commercial and residential pricing. After a brief three year stint as a consultant, Scott returned to SMUD in 2004 and is now leading SMUD's long term resource planning efforts, development of SMUD's commodity budget, management of SMUD's various commodity risks and settlement of commodity transactions.

Years with SMUD: 16

Role in Connection with VCEA Services

Scott will direct activities to support VCEA's long term resource planning activities, including meeting state greenhouse and renewable standards, and commodity risk management efforts and associated regulatory requirements and filings.

Dennis Holcomb



**Manager, Commodity Hedging
and Trading**

SMUD
6301 S Street, M.S. A 404
Sacramento, CA 95817

Tel: 916-732-5102
Fax: 916-732-6581
Email: dennis.holcomb@smud.org

Educational Background

BA, Environmental Studies, CSUS
Advanced Studies:

Engineering Economics - Colorado School of Mines
Load Reach Sample Design – Georgia Tech University
Energy Futures and Options – Princeton Energy Programme

Relevant Experience and Certifications/Merits

Dennis joined SMUD in 1985 as a large commercial/industrial energy advisor where he worked with some of SMUD's largest customers to improve their production efficiency and reduce their energy consumption. He has also worked as senior analyst in the Rates department performing statistical analysis on customer load patterns. Dennis has also worked in the Resource Planning department where he performed economic studies to plan SMUD's resource future after the closure of Rancho Seco. Dennis then moved to the Energy Trading & Contracts department where he has progressed from Senior Analyst to Principal Trader to Manager over the past 18+ years. He has been responsible for procurement of SMUD's mid-term energy, capacity and renewable energy credits, and mitigates SMUD's financial exposure to market and climate uncertainty.

Years with SMUD: 32

Role in Connection with VCEA Services

Dennis and his staff will support VCEA's energy procurement and portfolio management.

4. Organization and Key Personnel

Bryan Swann



Manager, Forecasting and Economic Analysis

SMUD
6301 S Street, M.S. A451
Sacramento, CA 95817

Tel: 916-732-5534
Fax: 916-732-6581
Email: bryan.swann@smud.org

Educational Background

B.S. Business, California State University, Sacramento

Relevant Experience and Certifications/Merits

Bryan is the manager of forecasting and economic analysis, managing SMUD's long-term integrated resource planning process and analysis. He ensures SMUD's long-term resource needs are met while achieving renewable and carbon targets and staying within defined risk tolerances. He has previously held SMUD positions managing and reporting on commodity risk and financial swaps. Prior to SMUD, he worked as a Market Analyst at the California ISO and as a senior project manager at Global Energy Decisions.

Years with SMUD: 7

Role in Connection with VCEA Services

Bryan will lead efforts around resource forecasting and planning.

Debra Warady



Manager, Resource Optimization

SMUD
6301 S Street, M.S. A404
Sacramento, CA 95817

Tel: 916-732-6939
Fax: 916-732-6581
Email: debra.warady@smud.org

Educational Background

BA, Economics/French, University of Colorado, Boulder
MA, U.C. Davis, Economics

Relevant Experience and Certifications/Merits

Debra joined SMUD in 1989 as an analyst assistant while she was pursuing her graduate degree at UC Davis. Upon graduation, Debra accepted a full time position in the Energy Efficiency department. During her 28 years at SMUD, Debra has worked in several different departments, all focused on creating a least-cost energy portfolio that balances multiple, sometimes competing objectives.

Years with SMUD: 28

Role in Connection with VCEA Services

Debra and her staff will support VCEA with the portfolio modelling and key analysis during the VCEA launch.

4. Organization and Key Personnel

FINANCE, ACCOUNTING AND RATES

Noreen Roche-Carter



Director, Treasury

SMUD
6100 Folsom Blvd, MD-1
Sacramento, CA 95817

Tel: 916-732-6509
Fax: 916-732-5831
Email: noreen.roche-carter@smud.org

Years with SMUD: 29

Role in Connection with VCEA Services

Noreen will support SMUD's VCEA efforts by consulting in the area of financial services.

Educational Background

MBA, University of Manitoba,
BA, Economics, University of California, Berkeley

Relevant Experience and Certifications/Merits

Noreen joined SMUD in 1988 and has served as a Financial Analyst, Supervisor, Assistant Treasurer and Director, Treasury. Prior to coming to SMUD, Noreen worked as a Cash Management Analyst in the Department of Finance of the Province of Manitoba, Canada. Noreen has served as Chair of the Tax & Finance Task Force for the Large Public Power Council since 2004.

Jennifer Restivo



**Acting Director, Planning, Budget,
Pricing, Enterprise Performance
& Risk Management**

SMUD
6301 S Street, M.S. A309
Sacramento, CA 95817

Tel: 916-732-5193
FAX: 916-732-6581
Email: jennifer.restivo@smud.org

Years with SMUD: 18

Role in Connection with VCEA Services

Jennifer will coordinate and oversee financial services.

Educational Background

MBA, University of Phoenix
B.S. Accounting, California State University, Sacramento

Relevant Experience and Certifications/Merits

Jennifer joined SMUD in 1999 in the Accounting department as an accountant, handling accounting for commodities, and income statement analysis. She then supervised the accounting for 6 Joint Power Authorities, from journal entries, allocating costs based on cost sharing contracts to financial statements and audits. She was then the Assistant Controller, responsible for SMUD's financial statements, working with auditors, and implementing accounting processes for grants and other large initiatives. Since 2013, she has been responsible for SMUD's budget, short-term financial modeling, and revenue requirement calculations. She has participated in the rate process, determining required rate increases, preparation of the General Manager's Report and Recommendation, and the approval of the rate. Prior to working at SMUD, Jennifer was an accountant at two local manufacturing companies.

4. Organization and Key Personnel

Michael Champ



Manager, Enterprise Performance
SMUD
6301 S Street, M.S. A309
Sacramento, CA 95817

Tel: 916-732-6030
Fax: 916-732-6581
Email: michael.champ@smud.org

Educational Background
MBA, U.C. Davis
B.A. Linguistics, U.C. Davis

Relevant Experience and Certifications/Merits

Michael joined SMUD in 2013 in the Enterprise Performance Office. There, he has been responsible for developing reporting and governance structures on key projects and operational metrics, as well as driving improvements in overall data quality and management. Prior to working at SMUD, Michael was a manager at CalPERS facilitating the development of and reporting on Strategic and Business plans.

Years with SMUD: 4

Role in Connection with VCEA Services

Michael will support overall financial analysis and development of operating budget and key metrics.

Alcides Hernandez



**Rates/Pricing Advisor Pricing,
Division of Planning, Pricing,
Performance & Risk**

SMUD
6301 S Street, M.S. A309
Sacramento, CA 95817

Tel: 916-732-6397
Fax: 916-732-6581
Email: alcides.hernandez@smud.org

Educational Background

MPA, National University, Sacramento, CA
MBA, Universidad de El Salvador (University of El Salvador)
BS, Engineering, Universidad Tecnologica
(Technological University), El Salvador

Relevant Experience and Certifications/Merits

Alcides joined SMUD in June 2011 as a Rate Analyst and was promoted to Pricing Advisor in 013. Alcides led the most recent public rate action which was successfully approved by SMUD's Board in June 2017. His experience includes rate design, development of cost of service studies, rate proposals, general rate cases and participation in ten public rate proceedings. Before coming to SMUD, Alcides worked seven years with Roseville Electric and nine years for the largest investor-owned utility in El Salvador owned by AES Corp. Alcides has developed marginal cost studies, embedded cost studies and rate analyses.

Years with SMUD: 6

Role in Connection with VCEA Services

Alcides will lead the development of the proposed rates schedules and rate recommendations.

4. Organization and Key Personnel

Ron Jelichich



Assistant Treasurer

SMUD
6100 Folsom Blvd, M.S. MD-1
Sacramento, CA 95817

Tel: 916-732-6287
Fax: 916-732-6581
Email: ron.jelichich@smud.org

Educational Background

MBA, CSU Sacramento
B.S. Business Administration CSU Sacramento

Relevant Experience and Certifications/Merits

Ron has served in a variety of financial roles at SMUD, including as an auditor, a senior financial analyst and 23 years as Assistant Treasurer. He has extensive experience evaluating financial statements and negotiating financial services with banks, bondholders and insurance companies. In addition, he oversees the fixed income investment portfolio, and regularly interfaces with the rest of SMUD's financial organization to ensure a comprehensive approach to financial risk management.

Years with SMUD: 32

Role in Connection with VCEA Services

Ron will lead efforts around banking, insurance and credit relationships as well as financial risk analysis.

Nathan Toyama



Manager, Load Research and Forecasting

SMUD
6301 S Street, M.S. A451
Sacramento, CA 95817

Tel: 916-732-6685
Fax: 916-732-6752
Email: nate.toyama@smud.org

Educational Background

BA, Economics, San Francisco State University
MA, Economics, U.C. Davis

Relevant Experience and Certifications/Merits

Nate has worked in the electric utility industry since 1985. His experience includes rate design and revenue allocation, marginal cost analysis, survey research and data collection, econometric analysis, rate research, load research, sales and load forecasting and database development for billing and interval data.

Years with SMUD: 26

Role in Connection with VCEA Services

Nate will lead the effort in developing VCEA's load forecast.

4. Organization and Key Personnel

REGULATORY & GOVERNMENT AFFAIRS

Steve Lins



Chief Assistant General Counsel

SMUD
6301 S Street, M.S. A311
Sacramento, CA 95817

Tel: 916-732-6274
Fax: 916-732-6581
Email: steve.lins@smud.org

Educational Background

M.A., Woodbury University
J.D., Loyola Law School
B.A., Management Science, U.C. San Diego

Relevant Experience and Certifications/Merits

Steve joined SMUD in 2014 as SMUD's Chief Assistant General Counsel. He directs SMUD's legislative, regulatory and government affairs efforts. Prior to SMUD, Steve held various positions with the City of Glendale and Glendale Water & Power, most recently as General Counsel and Chief Assistant General Manager for Glendale Water & Power. In these roles, he oversaw power supply, resource planning, energy trading, and commodity risk management. He also coordinated all regulatory and legislative issues at FERC, the CPUC, CARB, CEC, CAISO, Congress, and the California Legislature.

Certifications/Merits: CA State Bar License

Years with SMUD: 3

Role in Connection with VCEA Services

Steve will manage the regulatory and government affairs services on behalf of VCEA.

Brian Stevens



Strategic Business Planner, Distributed Energy Strategy

SMUD
6100 Folsom Blvd, M.S. MD-2
Sacramento, CA 95817

Tel: 916-732-6135
Fax: 916-732-6581
Email: brian.stevens@smud.org

Educational Background

MBA, U.C. Berkeley
BA, Economics, Chapman University

Relevant Experience and Certifications/Merits

Brian was pivotal in the launch of California's 4th Community Choice Energy program, CleanPowerSF, for the City and County of San Francisco and San Francisco Public Utilities Commission (SFPUC). For CleanPowerSF, Brian set up the back office operations and represented CleanPowerSF on State regulatory issues. While at the SFPUC, Brian was awarded an SFPUC Recognition Program Award, along with others on the CleanPowerSF team, for the successful launch of a new community enterprise.

Prior to launching CleanPowerSF, Brian was an energy industry advisor to the President of the CPUC. Brian led Commission direction on energy efficiency, demand response, integrated distributed energy resources, and large-scale system and local resource procurement. Brian also led a major redesign of components of the California Energy Efficiency Strategic Plan.

Prior to the CPUC, Brian worked on energy issues at the California Energy Commission in Sacramento and Center for Strategic and International Studies in Washington, DC. As an alumnus of U.C Berkeley, Brian holds a lifetime membership to the Berkeley Energy Resources Collaborative (BERC).

Years with SMUD: Less than 1

Role in Connection with VCEA Services

Brian will provide strategic planning expertise on CCE industry specific issues, with a focus on regulatory requirements and operational issues.

4. Organization and Key Personnel

Service Category 3: Data Management and Call Center

CUSTOMER OPERATIONS: CALL CENTER AND BILLING

Tracy Carlson



Director, Customer Care

SMUD
6301 S St., M.S. A-151
Sacramento, CA 95817

Tel: 916-732-7248
Fax: 916-732-6581
Email: tracy.carlson@smud.org

Educational Background

A.A. Liberal Arts, American River College

Relevant Experience and Certifications/Merits

Tracy brings 20 years of experience in all aspects of customer service and operational leadership. As Director of Customer Care, she is responsible for contact center operations, self-service operations, customer interconnection, operations support, and strategic business planning.

Years with SMUD: 8

Role in Connection with VCEA Services

Tracy will lead SMUD's Customer Care VCEA services. She will manage all aspects of customer service provided to VCEA and will serve as the subject matter expert for customer service.

Allen Moy



Manager, Revenue Operations

SMUD
6301 S St M.S. A254
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Fax: 916-732-6581
Email: allen.moy@smud.org

Educational Background

BS, Business Administration –California State University, Sacramento

Relevant Experience and Certifications/Merits

Allen joined SMUD in 2002 as senior revenue analyst and currently is a manager in revenue operations. Allen has extensive knowledge and experience with the meter to cash process and has improved SMUD's billing and collections process with cost savings and improved performance. Prior to SMUD, Allen held positions as an assistant controller and financial analyst.

Years with SMUD: 15

Role in Connection with VCEA Services

Allen will manage billing and data exchange administration and will be the point of contact related to billing and collection operations for VCEA.

Ivan Rostami



Manager, Customer Operations

SMUD
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Sacramento, CA 95817

Tel: 916-732-7216
FAX: 916-732-6581
Email: ivan.rostami@smud.org

Educational Background

BA, Communications, California State University Sacramento
Concentration in Interpersonal Communications

Relevant Experience and Certifications/Merits

Ivan joined SMUD in 2009 as a Resource Management Coordinator and is now the Manager of Customer Operations, with responsibility for SMUD's Call Center. Before coming to SMUD, Ivan was a National Forecasting Manager at AT&T Wireless. He managed 13 call centers that were located all across the country, and abroad which included India, Canada and Mexico.

Years with SMUD: 9

Role in Connection with VCEA Services

Ivan will manage all customer facing aspects including IVR, calls and email correspondence. Ivan will be the point of contact for all customer interactions and escalations.

4. Organization and Key Personnel

DATA MANAGEMENT

Suresh Kotha



**Director, IT Strategy & Governance
and Operational Technology**

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Sacramento, CA 95817

Tel: 916-732-5496
Fax: 916-732-6581
Email: suresh.kotha@smud.org

Educational Background

Masters, Computer Science, Jawaharlal Nehru Tech Univ., India
Bachelors, Electronics & Communications,
Gulbarga University, India

Relevant Experience and Certifications/Merits

Suresh joined SMUD in 2002 as a Principal Technical Developer and is now Director in IT Strategy and Governance. Suresh has CTO/Director level experience in strategic planning, pioneering and managing complex information technology and operational technology systems and enterprise-wide business applications. Proven strengths in visioning and aligning IT/OT strategy and management with business goals and objectives across complex organizations. He led the development of the SMUD's smart grid architecture and technical interoperability aspects, and oversaw the SmartSacramento Smart Grid Program technical integration. He has 25+ years of core IT experience, with 15 years in the utilities industry.

Years with SMUD: 15

Role in Connection with VCEA Services

Suresh will lead the Data Management Services (DMS) for VCEA which includes overseeing all aspects of DMS systems/product design, development, deployment and on going management of services after deployment.

Mandar Nimkar



**IT Business Relationship Manager
(BRM), Information Technology**

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Sacramento, CA 95817

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Fax: 916-732-6581
Email: mandar.nimkar@smud.org

Educational Background

BS, Science, M S University of Baroda, India
MBA for Executives, California State University Sacramento

Relevant Experience and Certifications/Merits

Mandar joined SMUD in 2009 as an Enterprise Technical Developer and worked on many customer facing web applications, Mandar worked as a Technical Lead for Enterprise Service Bus upgrade project. He also worked as a Supervisor managing and mentoring Business Technology Analysts. In the current role as IT Business Relationship Manager (BRM), Mandar works on facilitating multiyear project planning, serving as a key liaison between IT and other business unit BRMs, conducting gap analysis and proactively engaging all stakeholders to become their trusted technology partner.

Years with SMUD: 8

Role in Connection with VCEA Services

Mandar will work as a technical lead for data management services. He will oversee the design and architecture of the software solution.

4. Organization and Key Personnel

Raed Samara



**IT Business Tech Program Manager,
Information Technology**

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Email: raed.samara@smud.org

Educational Background

M.B.A. California State University Sacramento (CSUS)
B.S. Electrical and Electronics Engineering, CSUS

Relevant Experience and Certifications/Merits

Raed joined SMUD in 2016 as a project manager and worked on major projects such as web content management system, web access & security, DSM and SolarShares®. Raed is currently working on establishing and operationalizing the enterprise mobility initiative at SMUD. Prior to joining SMUD, Raed held several managerial and leadership positions at multinational corporations (Intel) and a couple of start-ups (Level one communications and Nymonyx) where he was responsible for the management of executive accounts and key relationships, strategic technology solutions and new business development and ecosystem enablement.

Years with SMUD: 2

Role in Connection with VCEA Services

Raed will assume the role of a project manager for the data management services (DMS). Raed will oversee and direct the project teams. Responsibilities included overall projects governance and direction related to DMS scope, schedule, budget, quality of the deliverables and risk management. Duties will be focused on monitoring, control, team integration, and change integration. Raed will ensure the application of PMI, SDLC standards and best-know-methods.

QRE REPORTING

David Doll



Sr. Business Technology Analyst

SMUD
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Sacramento, CA 95827

Tel: 916-732-5378
Fax: 916-732-6581
Email: david.doll@smud.org

Educational Background

Currently working towards BA, Sociology, CSUS

Relevant Experience and Certifications/Merits

David joined SMUD in 1990 as meter reader. Through experience and continuing education in electronics and computers technology he has risen to his current level of Sr. Business Technology Analyst. For SMUD Generation Assets, David collects, validates and uploads data for required QRE reporting with WREGIS. He maintains adherence to all regulatory rules and regulations associated to QRE functions.

Certifications/Merits: State of California Certification, Meter Technician

Years with SMUD: 27

Role in Connection with VCEA Services

David will be responsible for the QRE reporting, including collection, validation, and uploading of data to the WREGIS website.

4. Organization and Key Personnel

SETTLEMENTS

Jessica Kasparian



Manager, Commodity Risk & Settlements

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Sacramento, CA 95817

Tel: 916-732-6312
Fax: 916-732-5554
Email: jessica.kasparian@smud.org

Years with SMUD: 12

Role in Connection with VCEA Services

Jessica will lead wholesale energy settlements and commodity risk monitoring services for VCEA.

Educational Background

BA, Economics, CSUS

Relevant Experience and Certifications/Merits

Jessica joined SMUD in 2005 as a Power System Analyst in the Settlements department, leading the CAISO MRTU settlements implementation in 2009, and promoted to manager in 2011. In 2014, Jessica also assumed leadership of the Commodity Risk department. Before coming to SMUD, Jessica worked at the CAISO for 6 years performing settlement dispute resolution.

Heather Wilson



Supervisor, Commodity Settlements

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Sacramento, CA 95817

Tel: 916-732-6751
Fax: 916-732-6581
Email: heather.wilson@smud.org

Years with SMUD: 18

Role in Connection with VCEA Services

Heather will support SMUD's VCEA services in the area of wholesale power settlements and CAISO Scheduling Coordinator activities.

Educational Background

Major coursework in Economics, California State University Sacramento [BA in Progress]
AA, General Education, Cosumnes River College Sacramento

Relevant Experience and Certifications/Merits

Heather joined SMUD in 1999 and spent 7 years in Customer Billing performing analysis for Residential, Commercial, Industrial and Net Metering accounts. She moved to SMUD's Wholesale Power Procurement department as a Power System Analyst in Energy Settlements, where her responsibilities included the validation and reconciliation of wholesale power and gas transactions, Interchange, Generation and CAISO market settlements. In 2010 she became the lead Senior Analyst responsible for the validation of CAISO market settlements including participation in CAISO Stakeholder processes, and serving as a subject matter expert in the negotiation of CAISO located Power Purchase Agreements. In 2017 Heather was promoted to the Supervisor of Commodity Settlements.

4. Organization and Key Personnel

ACCOUNTING

Ruth Yee



Manager, Records Reporting Services and Assistant Controller

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Sacramento, CA 95817

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Email: ruth.yee@smud.org

Educational Background

BS, Business Administration – Accounting emphasis CSUS

Relevant Experience and Certifications/Merits

Ruth is Manager, Records Reporting and Services and Assistant Controller. Her team consists of the Statements, Joint Power Authority (JPA), and Plant group. Her team prepares the financial statements for SMUD and the JPAs. She also oversees the annual independent audit of financial statements. Her experience also includes supervising the Statements, JPA and Cash Management sections of Accounting, preparing audited financial statements, researching accounting regulations, developing budgets, leading department projects, and coordinating an Enterprise project for the Accounting department.

Prior to SMUD, she worked nine years in a CPA firm. Her experience as a Certified Public Accountant includes auditing financial statements where she prepared the financial statements along with the footnotes, managing the audits for nonprofit organization and supervising staff.

Years with SMUD: 17

Role in Connection with VCEA Services

Ruth would lead SMUD's VCEA services with respect to accounting. She will manage all aspects of accounting and be the main point of contact for any service related matters.

ADVANCED ENERGY SOLUTIONS

Ed Hamzawi



Director, Customer Solutions

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Sacramento, CA 95817

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Fax: 916-732-6581
Email: ed.hamzawi@smud.org

Educational Background

MS, Engineering, University of Colorado, Boulder
BS, Engineering, University of California, Davis

Relevant Experience and Certifications/Merits

Ed has worked in the field of energy in both the private and public sectors for more than 30 years and has been with SMUD since 1999. In his current role as Director of Customer Solutions he is responsible for meeting SMUD's strategic, tactical, and customer goals related to implementation and delivery of SMUD's energy efficiency, distributed generation, demand-response, electric vehicle, green pricing, special assistance, financing and commercial account management programs and services.

Certifications/Merits: Registered Professional Mechanical Engineer License # M27306

Years with SMUD: 18

Role in Connection with VCEA Services

Ed would coordinate and oversee the delivery of customer programs, including energy efficiency, green pricing, renewable energy and others.

4. Organization and Key Personnel

Obadiah Bartholomy



Manager, Distributed Energy Strategy

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Sacramento, CA 95817

Tel: 916-732-6835
Fax: 916-732-6581
Email: obadiah.bartholomy@smud.org

Educational Background

MS, Transportation Technology & Policy U.C. Davis
BS, Mechanical Engineering, Cal Poly San Luis Obispo

Relevant Experience and Certifications/Merits

Obadiah has significant experience in a variety of distributed energy technologies and understanding of how they play into SMUD and California's long-term energy vision of a carbon free energy system. He has worked on carbon policy for SMUD for more than 7 years along with overseeing innovative new program and strategy development. Most recently Obadiah oversaw the development of an enterprise-wide comprehensive strategy for DERs at SMUD.

Certifications/Merits: Professional Engineer

Years with SMUD: 15

Role in Connection with VCEA Services

Obadiah would provide technical and strategy resource expertise to develop recommendations for VCEA's DER planning and implementation.

Emily K. Nichols



Manager, Commercial Account Solutions

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Educational Background

BA, Ethnic Studies, California State University Sacramento

Relevant Experience and Certifications/Merits

Emily joined SMUD in 2015 following 10 years in customer experience at Pacific Gas & Electric Company. She has led utility teams in account management, sales operations, SMB rate education, corporate and national sales and customer experience strategy.

Years with SMUD: 2

Role in Connection with VCEA Services

Emily would lead SMUD's VCEA commercial account management and outreach efforts. Emily's team comprises segment expertise across all potential customer markets and includes utility sales and service delivery.

4. Organization and Key Personnel

Richard Oberg



Manager, Customer Program Delivery

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Email: richard.oberg@smud.org

Educational Background

BS, Engineering, Portland State University

Relevant Experience and Certifications/Merits

Richard joined SMUD in 2000 as a Demand Side Specialist where he was involved in the evaluation of energy efficiency programs. Since then, he has been a planner for the customer programs for the commercial/industrial sector supervisor for the planning group and is now the manager for customer Distributed Energy Resource (DER) programs. Before coming to SMUD, Richard spent 16 years as a consultant in the energy efficiency industry.

Certifications/Merits: California Professional Mechanical Engineer, # M25542

Years with SMUD: 17

Role in Connection with VCEA Services

Richard would be responsible for ensuring successful delivery of any VCEA distributed energy programs.

Joey Penneman



Strategic Account Advisor, Customer Solutions

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Email: joseph.penneman@smud.org

Educational Background

BS, Business Administration, Oregon State University
BS, General Science, Oregon State University
AS, Energy Management, NW Energy Education Institute

Relevant Experience and Certifications/Merits

Joey joined SMUD in 2012 as an Energy Advisor with a focus on supporting customer initiatives utilizing SMUD's vast suite of existing programs & services, as well as being involved in the development of several new programs and pilots. Joey was a part of SMUD's Smart Grid project and has been a part of the team to facilitate one of the nation's largest green power purchase agreements with the State of CA. Prior to working at SMUD, Joey worked as a Transmission Scheduler for Pacificorp, an Energy Advisor performing energy audits for Franklin Energy in Lansing, MI and developing energy tools and models for Air Advice in Portland, OR.

Certifications/Merits: Certified Energy Manager, Association of Energy Engineers

Years with SMUD: 5

Role in Connection with VCEA Services

Joey would serve as team lead in the development of the strategy for serving VCEA's key customers.

4. Organization and Key Personnel

MARKETING & COMMUNITY OUTREACH

Farres Everly



Director, Marketing and Communications

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Fax: 916-732-6581
Email: farres.everly@smud.org

Years with SMUD: 9

Role in Connection with VCEA Services

Farres would lead communications for VCEA, including marketing, brand management, market research, corporate communications, web and digital user experience, public affairs, video services, community engagement, graphic design and energy education.

Educational Background

BA, Journalism, California State University Chico

Relevant Experience and Certifications/Merits

Farres joined SMUD in 2008 as the supervisor of communications and advertising services. Over the years, his responsibilities and scope have grown to oversight of numerous specialized departments and 75 professional staff members. Prior to SMUD, Farres served as the Advertising and Direct Response Manager for VSP and as the Assistant Vice President of Marketing for The Money Store Commercial Lending Division.

Tanya Andrews



Manager, Digital & User Experience

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Tel: 916-732-5610
Fax: 916-732-6581
Email: tanya.andrews@smud.org

Years with SMUD: 3

Role in Connection with VCEA Services

Tanya would lead VCEA's digital user experience, including web and mobile app applications.

Educational Background

BS, eBusiness, Bellevue University, Omaha, NE
AAS, Website Design, Hennepin Technical College

Relevant Experience and Certifications/Merits

Tanya joined SMUD in 2014 and has been working in web operations and digital marketing exclusively for the past 17 years. The Digital and UX team at SMUD is a team of 10 highly skilled professionals with a team average of 10 ½ years of working in web/digital industries.

Certifications/Merits: Neilson Norman Group UX Certification (UX Management), 2017

4. Organization and Key Personnel

Tom Jas



Manager, Marketing, Research and Data Analytics

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Fax: 916-732-6581
Email: tom.jas@smud.org

Educational Background

MBA, West Coast University
BA, Carroll College

Relevant Experience and Certifications/Merits

Tom joined SMUD in 1999 as the Supervisor of Market Research. His responsibilities have expanded and now include Marketing and Analytics. Before coming to SMUD, Tom worked at American Honda Motors, Nissan Motor, Accpertance Corp, and Boeing.

Years with SMUD: 18

Role in Connection with VCEA Services

Tom would be responsible for VCEA's research and analytics, assisting VCEA in benchmarking and implementing marketing opportunities.

Erica Manuel



Manager, Community, Economic Development, Education

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Sacramento, CA 95817

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Fax 916-732-6581
Email: erica.manuel@smud.org

Educational Background

BA, Economics, Stanford University

Relevant Experience and Certifications/Merits

Erica directs SMUD's economic development, community engagement, volunteerism and energy education. Prior to SMUD, Erica was appointed by the Governor of California to oversee communications efforts for the California Exposition and State Fair. Before working under the Governor, Erica developed and implemented strategic communications campaigns at the largest independent public relations firm in the nation.

Certifications/Merits: Graduate Certificate, Corporate Citizenship, Boston College, 2017

Years with SMUD: 7

Role in Connection with VCEA Services

Erica would oversee development and implementation of community and stakeholder engagement strategies for VCEA.

Appendix B includes resumes for all Key Personnel.



5. Description of Proposed Services

5. Description of Proposed Services



In spring 2018, VCEA will go live and assume most of the responsibilities and operational risks of a utility. This includes running all aspects of grid supply and demand, budgeting, risk management and long-term planning. It also includes covering major aspects of customer communications, marketing and ensuring key customer support and back-office functions are effective.

SMUD's proposal includes a wide range of services to enable VCEA to ramp up operations smoothly. SMUD's extensive utility experience will help VCEA's successful entry into utility operations, planning, data management and customer service market.

The first two sections are in direct response to VCEA's RFP and the remaining sections are additional services SMUD is offering to VCEA as part of a full service package.

5. Description of Proposed Services

A. Technical and Energy Services (Service Category 1)

SMUD's proposal includes a full range of services to help VCEA ramp up operations smoothly, including running all aspects of grid supply and demand, budgeting, risk management and long-term planning. SMUD has decades of operational experience in the functional areas needed for VCEA's success. By leveraging our experience as a vertically-integrated utility, we believe we can offer VCEA the unique opportunity to quickly ramp up operations and planning with a minimal learning curve.

CAISO and CPUC Knowledge. Since our inception in 1946, SMUD has traded in the California energy markets, as an independent balancing authority (we operate the Balancing Authority of Northern California (BANC) and as an active participant in the California ISO (CAISO) markets. We buy renewable energy from assets across the Western Electricity Coordinating Council (WECC) and sell surplus energy back to the CAISO in the day-ahead and real-time markets. SMUD transacts with the CAISO by importing energy and Resource Adequacy capacity from CAISO while exporting energy, spin and regulation services back to the CAISO market. SMUD is also active in energy policy setting proceedings at the CAISO, California Public Utilities Commission (CPUC), California Energy Commission (CEC) and Federal Energy Regulatory Commission (FERC).

CCE Regulatory Experience. SMUD brings extensive experience in managing the regulatory affairs for all aspects of our utility business to assist with the VCEA launch. SMUD will leverage this experience to successfully complete the necessary filings to launch VCEA. Having operated in the

California regulatory and utility environment for more than 70 years, we are intimately familiar with all aspects of state and federal regulatory requirements with respect to the power sector and greenhouse gas regulations and environmental rules and regulations. For launch requirements that are unique to CCEs, SMUD has staff with CCE launch experience and is working with its regulatory counsel to ensure that all pertinent documents and requirements will be provided and filed as needed.

Resource Planning. SMUD manages its own resource planning and procurement for its resource portfolio, which includes management of large hydro, small hydro, wind, solar PV, geothermal, seasonal electricity, seasonal gas, biomass, gas pipeline, natural gas-fired combined cycle, natural gas-fired peakers, natural gas reserves, renewable gas, electric transmission, gas transportation, resource adequacy capacity, carbon allowances, carbon offsets and financial swaps. We have a successful track record of maintaining a balance of community values, attractive rates and an environmentally sound power supply.

We were the first utility in North America to promote early rooftop solar programs for customers in the 1990s and the first to offer a community solar option. In 2010, SMUD was the first U.S. utility to have a large-scale Feed-In Tariff (FIT) for utility scale solar (the total FIT program capacity was 100 MW). Thanks to this progressive and long-term outlook, SMUD and our customers are now reaping the benefits of low rates, financially sound operations and a sustainable energy supply.

5. Description of Proposed Services

Integrated Resource Plan. SMUD is the fifth largest utility in California with an all-time peak load of 3,299 MW and annual retail sales of almost 11,000 GWh. SMUD has conducted integrated resource planning (IRP) for over 35 years. This has been vital to SMUD's ability to meet its key resource planning and environmental objectives. SMUD's IRP has ensured an appropriate mix of resources and programs that have delivered high reliability, reasonable rates and environmental leadership. The IRP process ensures consideration of all demand, demand side reductions and supply side resource options from the various departments across SMUD. This includes incorporating the forecast impacts of demand reductions from energy efficiency, electric vehicles, behind-the-meter solar PV, as well as any expected time-of-use rate impacts. Resource location preferences (for example, a preference for local solar PV) can be analyzed against a non-local option and cost differences and rate impacts can be compared between the options. SMUD's portfolio includes numerous local renewable developments owned by SMUD or purchased through a PPA, including local solar PV, biomass and battery storage.

Rates and Net Energy Metering (NEM). SMUD is a leader in electric rate design, conducting studies on the impact of pilot rates on customer behavior and testing the performance of residential time-of-use rates, critical peak pricing for commercial and residential customers, and various other rate designs. SMUD commercial customers have been on time-of-use rates for a number of years which has allowed us to gain a wealth of experience using hourly load data for load and revenue forecasts, budget preparation and development

of pro-forma income statements. We are also very familiar with PG&E's current rate structures and rate trends in California and the nation. As an early adopter of residential time-of-use rates, SMUD staff has extensive experience and historical data to draw upon when designing rates that may not be available from other providers. As a result of the successful plan to gradually eliminate residential tiers and test residential pilot rates, the investor-owned utilities and CPUC often cite SMUD rates policy and pilot rate studies as a benchmark to follow in rate design and rate transition.

SMUD has extensive experience in designing specific rate structures for its current Greenergy® programs, innovative SolarShares® program, FIT and NEM. The Pricing department uses economic data and statistical information from third parties, and has developed proprietary rates models to perform rate analysis and maintain SMUD's rate structures. SMUD will use the same information as needed and will create new versions of costing models for VCEA.

Financial Analysis and Budget. SMUD annually creates an operational budget to provide our Board control over organizational direction, and outside stakeholders visibility into projected financial performance. SMUD budgets are an integral part of the overall governance process ensuring we meet financial targets set by the Board and credit providers. SMUD has a proven track record of setting budgets that drive financial stability and meeting budget targets. This is evidenced by our high grade bond ratings of AA3 and AA- by Moody's and Fitch, respectively.

5. Description of Proposed Services



CAISO and PG&E Registration. SMUD has knowledge in all aspects of pre-launch CCE requirements, including the CAISO registration and deposit, PG&E service agreement and security deposit, bond postings and required regulatory compliance reporting and information for notifying customers.

Technical Capacity. SMUD has over 2,000 employees and more than 70 years of experience serving retail power load in California. SMUD has the necessary technical and energy services abilities to successfully launch and operate VCEA.

Construction Labor Market Experience. As a public agency, SMUD is very familiar with California construction labor markets and requirements. SMUD must comply with all statutory requirements for construction projects, including prevailing wage requirements (Labor Code). Further, SMUD has an internal department dedicated to contract compliance which monitors labor matters and reviews certified payrolls. A project demonstrating SMUD's labor market experience is the recent 11 MW solar project at Rancho Seco. In 2016, SMUD developed a unique project dedicated to deliver renewable power to the new Golden 1 Center, and some of the State of California facilities in downtown Sacramento. It is on

62 acres of SMUD's Rancho Seco property located in the south of Sacramento County. For large projects, SMUD staff analyzes different contract options and considers the labor implications of each approach. For the solar system construction, SMUD utilized a power purchase agreement (PPA) model where the solar developer is responsible for constructing, owning and otherwise controlling the project. Because the project was on SMUD-owned property, prevailing wages applied even though SMUD did not directly fund the construction. SMUD chose the PPA model in order to take advantage of labor efficiencies and tax credits available for private entities. Additionally, SMUD worked with the solar developer to ensure a project labor agreement was in place for the project. For the site preparation work, including demolition and grading, SMUD competitively bid "public works" contracts. The open, public procurement process ensures transparency, competition and inclusion. To further promote SMUD's commitment to investing in our local community, under SMUD's Supplier Education & Economic Development (SEED) program, a bid incentive is provided to contractors who are California Department of General Services Certified Small or Micro-businesses and SMUD customers.

5. Description of Proposed Services

These extensive service offerings cover a wide variety of essential utility functions.

1. Serve as an expert resource to VCEA staff, and at VCEA staff direction, also to City and County staff, elected officials and the VCEA Board, and its advisory bodies on matters related to energy markets, power procurement/contracting, State energy requirements and regulations, rate design, budgeting, regulatory registrations, and CAISO matters.

SMUD will provide subject matter experts who will support VCEA launch and operations tasks. Furthermore, SMUD will retain the appropriate CCE outside consulting expertise to advise on all CCE-specific regulatory and tariff obligations. SMUD will not be providing legal services, but SMUD's technical and regulatory staff will closely coordinate with VCEA Counsel. SMUD departments providing subject matter experts for the Technical & Energy Services tasks are:

- Energy Trading & Contracts
- Resource Planning, Commodity Risk Settlements
- Energy Research & Development
- Environmental & Real Estate Services
- Planning, Performance & Risk
- Accounting & Controller

Each of these departments is fully operational and staffed for meeting SMUD's operational, planning and research needs. It's common for staff to have 10 to 15 years of directly relevant experience in their respective fields. We will draw on this staff and experience to form task-specific teams that will be able to quickly respond to VCEA's needs.

2. Recommend customer-phasing schedule based on VCEA program economics, organizational capacity, customer benefit, and availability of credit for power purchases.

With the ultimate goal of creating an effective customer-phasing schedule, SMUD will provide VCEA with analysis of VCEA customer, load and financial data. We will use this information to provide recommendations for changes to rates, rollout schedules and credit arrangements to optimize financial health and benefits to VCEA's customers – while reducing operational and financial risk.

Key elements of the analysis will include:

- **Program Economics:** Review overall financial impacts of CCE launch, to both VCEA and its customers. This includes analysis of the proposed rate impact to customers in the aggregate and by customer class. Analyze the expected VCEA income statement and monthly cash flow statements.
- **Organizational Capacity Analysis:** Evaluate readiness of technology systems to support billing, data exchange, customer service and operational reporting needs. Take account of support areas and their readiness to handle CCE launch.
- **Customer Benefit Analysis:** Analyze likely customer opt-out rates based on customer demographics and market segmentation, as well as representative combinations of customer load shape and rate. Identify impacts to customers, such as those seeing the greatest increase/decrease in their bill.
- **Credit Analysis for Power Purchases:** Analyze expected financial ratios used by credit rating agencies, such as fixed charge ratio and days cash.

5. Description of Proposed Services

SMUD has extensive experience evaluating the impact of new programs and services, which translates well to launching a CCE. SMUD is prepared to draw on years of data from rate changes and program launches in Sacramento in modeling expected outcomes for VCEA, and is able to apply knowledge of what financial services firms look for in utilities to better understand how financial ratios will impact VCEA's ability to secure credit.

3. Refine VCEA operating budget based on final list of VCEA members, number of estimated accounts, and load requirements.

SMUD will create a draft operating budget for VCEA to review and approve. The operating budget will include forecasts of:

- Customer accounts based on current data, historical trends and expected opt-out rates, including breakdown by customer class.
- Load based on customer account forecast, weather forecast, historical load data and economic indicators, including breakdown by customer class.

- Revenue based on load forecast and VCEA-selected rates, including breakdown by customer class.
- Energy costs based on VCEA-selected resource portfolio, historical data and forward commodity cost curves
- Operational costs from VCEA, SMUD and other contractors.

SMUD will use the above forecasts to inform discussions with VCEA about proposed rates and resource portfolios. SMUD will also facilitate discussions about the overall financial, operational and power resource risks inherent in the operational budget, as well as opportunities to make changes to achieve an optimal balance. Once discussions of rates and resource portfolios are complete, SMUD will present an operational budget to VCEA for approval.

SMUD has a long history of integrating rate setting, resource planning and operational budgeting components of utility management. This leads to a more holistic approach to operational and financial planning. Offering these services from a single-service provider like SMUD ensures consistency in the assumptions used and leads to a more cohesive overall plan.



5. Description of Proposed Services

4. Prepare VCEA's Implementation Plan for certification by the CA Public Utilities Commission and address any questions the CPUC or other may have.

The implementation plan will include the following:

- Process and consequences of aggregation
- Organizational structure of the program, its operations and funding
- Rate setting and other costs to participants
- Disclosure and due process in setting rates and allocating costs among participants
- Methods for entering and terminating agreements with other entities
- Participant rights and responsibilities
- Termination of the program
- Description of third parties that will be supplying electricity under the program, including information about financial, technical and operational capabilities

SMUD will develop an implementation plan that complies with the following requirements set forth by California law and the CPUC. After SMUD has submitted the implementation plan to VCEA, SMUD will be available to address any questions from the CPUC. To ensure that VCEA is able to fully cover all regulatory filing needs in a timely fashion, SMUD will utilize experienced consultants as needed.

SMUD has extensive experience creating and developing filings for California regulatory agencies that demonstrate compliance with state laws and regulations. Additionally, SMUD has extensive experience as a party to numerous rate setting and quasi-adjudicatory proceedings at the CPUC.

5. Work with VCEA staff to finalize desired power supply mix and draft RFP for wholesale energy procurement through a single or multiple energy service providers (ESP) and CAISO scheduling services. Bids will be solicited from full-service ESP suppliers as well as independent and local power suppliers. ESP services will include wholesale energy supply sufficient to meet all needs of CCE customers (energy, resource adequacy, RPS compliance), as well as schedule coordination services with the CAISO.

Finalizing the power supply mix will be part of making sure the VCEA is able to offer customers renewable/clean energy. SMUD will work with VCEA to first refine the portfolio mix working through various impacts of particular portfolio options. Once portfolio goals are determined, SMUD will prepare one or more Requests for Proposals for VCEA's electric supply.

5. Description of Proposed Services



6. Assist in bid evaluation, negotiations and power contracting with one or more counterparties.

SMUD Energy Trading & Contracts staff will support VCEA staff with the development of the power supply Request for Proposal and evaluation of resulting submissions. We propose that this task also include finalization of Power Purchase Agreement (PPA) term sheets, which typically are the last step in the power provider selection process. The negotiation part of this task is covered in Task 7 below.

7. Develop master Power Purchase Agreement (PPA) and term sheets; assist VCEA senior staff in overseeing power negotiations and contracting.

SMUD's Energy Trading & Contracts staff will develop the master PPA in close collaboration with VCEA and support VCEA in negotiating the energy transactions. In summary, SMUD will:

- Draft a master PPA.
- Work with the VCEA legal team to finalize the draft PPA.
- Conduct negotiations with power suppliers.
- Finalize contracts.

5. Description of Proposed Services

- 8. Assist VCEA staff, as necessary, with program financing and solicitation of banking services based on projected operating revenues, financial analysis and customer enrollment schedule. The Technical and Energy Services Consultant(s) will review and amend, as appropriate, the Pro-Forma analysis developed for the technical study and at the direction of VCEA staff participate in discussions with financial institutions as the VCEA seeks working capital to fund final tasks prior to launch, including procurement of initial power requirements and required deposits. The Consultant will assist the City, County and VCEA Board and staff in providing the financial analysis needed to secure bank or other third-party financing.**

SMUD will provide an analysis of the pro-forma included in the Request for Proposal. It will be updated with customer count and load data from VCEA and with VCEA rates to determine expected revenue. Market data will then be used to forecast power costs, operational costs as well as expected net income, cash flow and balance sheets. SMUD will provide these forecasts in a pro-forma format for use by potential financial service providers. SMUD will also monitor financial metrics specified by VCEA.

SMUD will assist in evaluating potential financial partners and comparing products. We will assist VCEA with any financial analysis needed to secure bank or third-party financing. This may go beyond the pro-forma financials to include evaluation of key financial metrics, or “stress testing” the financial metrics with scenarios such as lower rates, higher borrowing costs, higher CAISO rates or delays in revenue.

SMUD regularly enters into agreements with banks, bondholders and insurance companies to secure credit and contracts that mitigate risk to our financial position. SMUD staff aggregates, summarizes and presents financial information to third parties to help them understand SMUD’s financial position and secure advantageous terms for SMUD. In addition, staff regularly reviews financial product offerings to determine relative costs and benefits.

SMUD has 40+ years of direct experience of working with utility-specific financial services providers, including local providers in the Sacramento and Yolo county region. In our view, there is no substitute for direct experience in managing the utility business. We believe our background will deliver value to VCEA and its customers.

5. Description of Proposed Services

9. Prepare tariff schedule and rate recommendations for three power supply options (e.g. default product at 50% renewable and voluntary products at 100% renewable and 100% local renewable) and design tariffs for complimentary programs such as net energy metering, community solar and/or local feed in tariff. The rate design should include recovery of all expenses and targeted reserves or coverage requirements set forth in bond covenants or other debt-service requirements. Rate design will likely follow PG&E's tariff structure at the outset to ensure ease in rate comparison by customer class. Included in the rate structure should be consideration of policies that further encourage and support local renewable energy development, including but not limited to:
- a. A feed-in-tariff program to incentivize renewable energy projects within the CCE service territory;
 - b. A net energy metering tariff that encourages solar installation on the customer side of the meter;
 - c. A 100% renewable, opt-in choice. Customers will be offered a 100% renewable energy option at a premium price, based on the costs of 100% renewable supply.
 - d. A 100% local renewable, opt-in choice. Customers will be offered a 100% local renewable energy option at a premium price, based on the costs of a locally sourced 100% renewable supply.

Setting proper tariffs is a critical element of the financial viability of VCEA. SMUD will work closely with VCEA staff to provide:

- Standard rate schedule and designs for residential and commercial customers following current PG&E rate structures to reflect a default 50% renewable mix. This initial design will help customers with the transition to a CCE service model.
- Rate design and recommendations on policies that further encourage and support local renewable energy development as follows:
 - Optional 100% renewable premium.
 - Once local renewable options are identified, SMUD will advise VCEA in developing a 100% local renewable rate.
- Tariff for the following complementary programs:
 - Net energy metering program tariff.
 - Feed-in-tariff program.
 - Rate recommendations on community solar programs.
- The rates and financial models will take into account the recovery of all expenses, target reserves and debt coverage requirements.
- Development of materials for use in VCEA's rate approval process.
- All rates will conform to applicable regulations and VCEA policies and restrictions.
- Upon VCEA request, SMUD will handle additional rates such as CARE, PCIA, UUT and franchise fees.

5. Description of Proposed Services



SMUD will provide a variety of rate options (example: sample rates that are 1%, 3% and 5% below PG&E rates) along with their impact to VCEA's overall financial position. SMUD will work with VCEA to explore targeted rate options and develop a recommended rate structure. SMUD has extensive knowledge of PG&E's rate structure. SMUD would leverage internal data and extensive staff expertise in providing a thorough analysis of potential rates on an accelerated timeframe.

SMUD has experience designing and implementing rate structures, including pioneering work in time-of-use rates, and internal development of sustainable energy programs, feed-in-tariff and net energy metering rates. The CPUC has often cited SMUD as a model for rate development.

10. Address PG&E, CA Public Utility Commission and CA Independent System Operator agreements and registrations including: CAISO registration and deposit, PG&E service agreement and security deposit, Bond posting, and required regulatory compliance reporting and information for customer noticing.

SMUD has extensive experience interacting with PG&E, CAISO and the CPUC and will make sure registration requirements are met in a timely manner for a successful VCEA launch. This includes drafting CAISO registration and deposit, PG&E service agreement and security deposit, and CPUC bond postings and regulatory compliance requirements for customer notification. Financial requirements for these deposits and bond postings will be the responsibility of VCEA.

5. Description of Proposed Services

11. Develop an initial integrated resource plan and complete related regulatory reporting for the purposes of launching and early operation of the VCEA program.

SMUD will work closely with VCEA to develop an integrated resource plan (IRP) that aligns with VCEA's customer portfolio, desired resource mix and risk tolerance. We envision a long-term portfolio that balances local renewable energy with regionally available low-cost renewables. We will evaluate portfolios that have a blend of short-term and long-term contracts to provide a balanced spread between cost, long-term rate stability and environmental objectives. SMUD will also help VCEA complete all necessary reporting of planning documents with the CPUC and the California Energy Commission (CEC), prepare an initial IRP and complete related regulatory reporting for the purpose of launching and early operation of VCEA. Ongoing support and updates following completion of the initial integrated resource plan is not covered here but is offered separately and addressed in Task 12.

An ideal partner for VCEA, SMUD has a shared resource philosophy, experience balancing low costs with aggressive renewable energy and environmental goals and a desire to offer customers services and rates that meet their needs.

12. Following program launch, it is anticipated that VCEA will initiate an integrated resource planning process more closely examining mid and long-term program goals and objectives. At the direction of VCEA staff, participate in and support the mid/long-term IRP planning process.

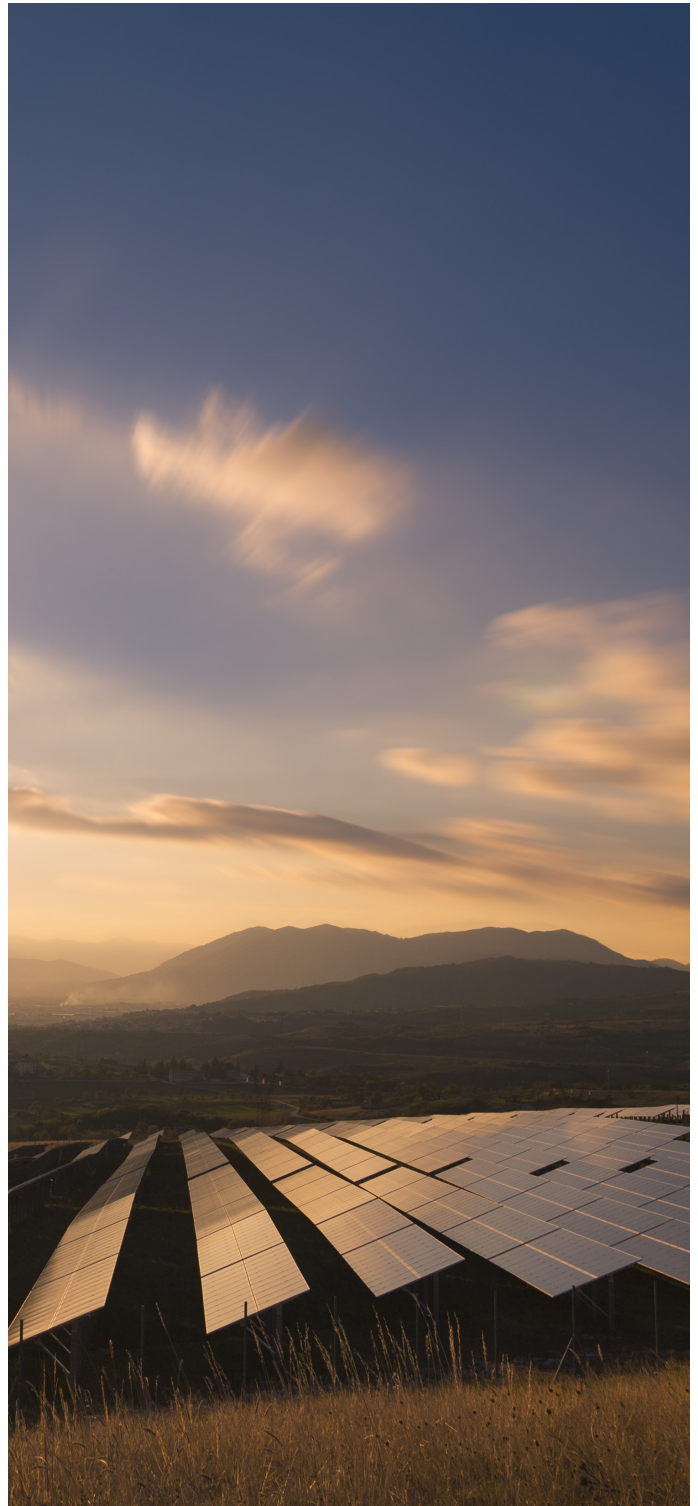
Following completion of the first IRP, SMUD will provide ongoing support for VCEA's integrated planning process. SMUD will meet periodically with VCEA staff to validate the direction of the current plan (whether the initial or subsequent IRP). As requested, SMUD will provide an annual or bi-annual update for VCEA. SMUD will provide a process that covers the following key activities:

- Build capacity for VCEA's integrated resource plan process.
- Support development of key integrated resource plan objectives including those mandated by the State and those desired by VCEA.
- Develop compliance strategies for key environmental goals.
- Develop VCEA's 20-year load forecast for use in long-term integrated resource plan analysis, including demand side impacts from energy efficiency, distributed generation, electric vehicle loads, demand response and time-of-use rates.

5. Description of Proposed Services

- Develop forecasts of key economic model input data for use in VCEA's IRP analysis including renewable and other generation costs, wholesale electricity and capacity prices and carbon allowance prices. SMUD will include cost variations related to specific resource options required by VCEA such as the desire for local renewable generation over non-local resources.
- Prepare alternative scenarios regarding business environment, demand growth, resource costs, energy costs and regulatory environment to allow VCEA to gain insight on drivers of uncertainty and risk.
- Develop VCEA's 20-year production cost simulation model to forecast mid- and long-term resource portfolio costs and ensure key integrated resource plan objectives are met. All financial drivers associated with procurement or development of renewables or other resources and regulatory compliance costs will be included in this model.
- Provide 20-year IRP results reporting focusing on resource portfolio costs and rate impacts, capacity or generation shortages, reliability, environmental goals and risks of each portfolio studied. Standard report granularity will be monthly and annual. However, SMUD has the ability to look at model results at the hourly level if a circumstance calls for a deeper dive into the results data. SMUD will work with VCEA to develop reports and metrics that meet VCEA's needs.

In addition to extensive experience in developing IRPs, SMUD also has the unique experience of having implemented IRPs to meet short- and long-term needs and make adjustments in accordance with market developments.



5. Description of Proposed Services



13. Be available for participation in governance and advisory meetings, weekly planning calls, meetings with PG&E, and other necessary meetings to complete all energy/procurement and rate-related tasks in bringing the program to successful launch and into early operations

SMUD will provide expertise and be available to participate in governance and advisory meetings, weekly planning calls and PG&E meetings. We will draw upon SMUD staff and experts to ensure that VCEA's interests are represented in a professional and independent manner.

SMUD has extensive experience of all aspects of the utility business in California, including negotiations, planning, regulatory compliance, stakeholder processes and public affairs.

14. Additional Service Category 1 items included at no additional cost in pricing

- **Insurance** – SMUD could assist VCEA in setting up insurance contracts for liability and directors and officers insurance. SMUD has similar policies in place and regularly evaluates and goes to market for these products.
- **Cash Management** – SMUD could provide expertise and advice in how power contracts can be structured to help match payment times and volumes to VCEA's expected free cash flows. Ensuring power procurement plays a part in cash management helps reduce overall cash management risk and can reduce overall cost by having smaller exposures spread across more counterparties.
- **Credit** – SMUD would be able to provide working capital relief by deferring payment for SMUD services until 3 months after VCEA first receives revenue.

5. Description of Proposed Services

B. Data Management and Call Center Services (Service Category 3)

SMUD will provide the full scope of data management and call center services requested by VCEA. SMUD will work with PG&E to send and receive the full set of Electronic Data Interchange (EDI) files. We will implement and manage the back office system architecture required for VCEA to manage customer data and interactions, including:

- Customer Relationship Management (CRM) for customer information and programs.
- Customer usage data repository.
- Billing management system for VCEA's rates, billing and settlements.
- Call center technology, and an Interactive Voice Response (IVR) system for self-service.
- Website pages for program enrollment.

SMUD will provide dedicated call center representatives to provide excellent customer service to VCEA customers through multiple channels in both English and Spanish. SMUD will manage the QRE services for any VCEA FIT program and upload renewable data to WREGIS and will also forward VCEA load SQMD to CAISO as required. VCEA will have access to all of the systems managed by SMUD and we will ensure that specified reporting is completed for full transparency and tracking.

SMUD has a long history managing settlement quality meter data with CAISO and can easily extend this service for VCEA. Additionally, SMUD has performed Qualified Reporting Entity services for our renewable generating projects from the inception of WREGIS in 2008.

Data management and call center services are key services when launching and operating a new CCE Program and it's critical that they are delivered well.

SMUD performs these integrated services in-house and is dedicated to delivering the highest level

of customer service to all customers, including VCEA's. SMUD's in-depth knowledge of utility data management systems and high aptitude for customer satisfaction through our call centers and self-service channels will be leveraged to quickly establish a data management infrastructure and call center to meet VCEA's needs. SMUD can provide pertinent reporting and analysis to VCEA to aid in identifying future programs that will meet the needs of its customers.

SMUD's dedication to providing best-in-class customer service has been recognized by J.D. Power and Associates, which has ranked SMUD:

- **#1 in Overall Residential Customer Satisfaction in California for 16 years in a row**
- **#1 in Overall Commercial Customer Satisfaction in California 11 of the last 12 years**

In recent years, SMUD has also invested in advanced meter infrastructure (AMI), consumer behavior studies on dynamic rates, demand response, energy storage, electric vehicles and cyber security. SMUD has also invested in our technology infrastructure, including CRM and billing systems and an Enterprise Service Bus (ESB) that allows SMUD to easily transfer customer data with third parties. We have leveraged our Enterprise Service Bus to exchange customer usage, program enrollment and billing data with third parties who have provided value added analytics to our customers online through our "My Energy Tools" application. A large portion of this investment came in 2009 from the \$127.5M Smart Grid Investment Grant from the Department of Energy.

These significant investments helped SMUD provide an improved customer experience and better visibility to customer energy profiles and program preferences that enables us to provide more tailored services to our customers.

5. Description of Proposed Services



1. Electronic Data Exchange Services

SMUD will send and receive the full set of Electronic Data Interchange (EDI) files to/from PG&E on behalf of VCEA. CCE transactional data includes CCESRs (814 EDI file), customer usage data (867 EDI file), billing (810 EDI file) and payment (820 EDI file). Data from PG&E will be received by SMUD, which will process and apply VCEA rates and then generate EDI transaction files to be sent back to PG&E for billing and enrollment services.

- a. **Process CCE Service Requests (CCESRs) from/to PG&E which specify the changes to a customer's choice of services such as enrollment in CCE programs, customer initiated returns to bundled utility service or customer initiated returns to direct access service (814 Electronic Data Interchange Files).**

SMUD will work with PG&E to establish the transactions required to transfer customer enrollment information via the 814 EDI files and requirements specified by PG&E.

5. Description of Proposed Services

- b. Obtain all customer usage data from PG&E's Metered Data Management Agent (MDMA) server to allow for timely billing (according to PG&E requirements) of each customer (867 Electronic Data Interchange Files).**

SMUD will work with PG&E to establish the transactions required to transfer customer usage data from PG&E's MDMA to usage database via the 867 EDI files and requirements specified by PG&E.

- c. Maintain and communicate the amount to be billed by PG&E for services provided by VCEA (810 Electronic Data Interchange Files).**

SMUD will maintain a rate table of VCEA rates. We will obtain the customer usage data and apply the applicable tariffs to calculate the amount to be billed by PG&E for services provided by VCEA. SMUD will work with PG&E to establish the transactions required to transfer the billing amounts to PG&E via the 810 EDI files and requirements specified by PG&E.

- d. Receive and maintain all data related to payment transactions toward CCE charges from PG&E after payment is received by PG&E from customers (820 Electronic Data Interchange Files).**

SMUD will work with PG&E to establish the transactions required to transfer the payment transactions toward CCE charges from PG&E after payment is received from customers via the 820 EDI files and requirements specified by PG&E. SMUD will store this payment data as required by VCEA.

- e. Process CCESRs with PG&E when customer status changes.**

SMUD will process CCESRs with PG&E when customer status changes and reflect these changes in the CRM to maintain up to date records.

- f. Provider shall participate in the Customer Data Acquisition Program (CDA) beta testing for SmartMeter data sharing as VCEA's Data Manager.**

SMUD is open to providing this service to VCEA, and will work with VCEA to further identify the required components and requirements.

2. Qualified Reporting Entity (QRE) Services

SMUD will provide QRE services. SMUD's wind project near Rio Vista and several qualifying small hydro projects that SMUD owns or has rights to, are located within the CAISO. SMUD has performed Qualified Reporting Entity services for these renewable generating projects since the inception of WREGIS in 2008. In addition, SMUD conducts WREGIS QRE services for all renewables within the SMUD service area.

5. Description of Proposed Services

- a. **Consistent with terms and conditions included in the Qualified Reporting Entity Services Agreement(s) between VCEA and Data Management Provider, serve as QRE for certain locally situated, small-scale renewable generators supplying electric energy to VCEA through its feed-in tariff (FIT).**

SMUD will manage the QRE services required for any VCEA feed-in-tariff (FIT) program project to upload renewable project meter data to the WREGIS system. QRE service will begin upon the initial generation of VCEA's first FIT project, in the month for which the first upload of meter data WREGIS occurs (usually during the month following the first month any production occurs).

- b. **Submit a monthly generation extract file to Western Renewable Energy Generation Information System (WREGIS) on VCEA's behalf, which will conform to the characteristics and data requirements set forth in the WREGIS Interface Control Document for Qualified Reporting Entities.**

As VCEA's agent, in accordance with WREGIS procedures, SMUD will set up a WREGIS account on VCEA's behalf in order to manage the Renewable Energy Certificates (RECs) for VCEA's Renewables Portfolio Standards

compliance. Furthermore, SMUD will register each FIT project in WREGIS into VCEA's WREGIS account as VCEA generators. WREGIS service will begin in the first month in which a FIT project Commercial Operation Date (COD) is achieved and for which COD certification is granted or acknowledged by WREGIS. Please note: the WREGIS meter data uploads will occur as part of the Task 2.a above.

- c. **Provider shall receive applicable electric meter data from PG&E for VCEA FIT projects, consistent with PG&E's applicable meter servicing agreement, and shall provide such data to VCEA for purposes of performance tracking and invoice creation.**

SMUD will obtain from PG&E and VCEA FIT project meter data, in accordance with the applicable PG&E meter servicing agreement. SMUD will provide such data to VCEA for the purposes of performance tracking and power purchase invoice creation and/or verification.

5. Description of Proposed Services

3. Customer Information System:

SMUD will provide and operate scalable and robust software systems to manage customer data via Customer Relationship Management (CRM) software, that will enable customers to manage program enrollment options online and through the Interactive Voice Response (IVR). SMUD will also ensure that the CRM is compatible with the billing engine and data repository for customers' electric usage data. SMUD has extensive and demonstrated experience in managing meter to cash and customer value chain for electric utility customers.

- a. **Create and maintain an online database for VCEA that is an accurate database of all eligible accounts who are located in the VCEA service area and that identifies each account's enrollment status (opt out, program enrollment), rate tariff election(s), payment history, collection status, on-site generating and storage capacity, if applicable, and any correspondence with customers as well as other information that may become necessary to effectively administer VCEA as is mutually agreed to by parties from time to time.**

A CRM will be established to meet VCEA's data requirements and updated accordingly with customer account data received from PG&E. SMUD has ample expertise in this area as we currently maintain a CRM database that stores account data for our 600,000+ customers.

- b. **Design VCEA's online database so that in addition to the service provider, VCEA has functional access to the online database to add customer interactions, account notes, and other information fields necessary to effectively administer the program.**

SMUD will implement a cloud-based CRM solution that will have role based access to allow VCEA, SMUD Call Center Representatives, and SMUD system administrators to view customer interactions, edit account notes and view other information fields as necessary.

- c. **Design VCEA's online database so that it can view customer email or written letter correspondence within the online database**

SMUD will store the customer email interactions in the CRM. SMUD will scan written letter correspondences, store the files and link them to CRM to allow easy access and visibility to customer correspondence.

- d. **Maintain and provide historical usage data on all customers for a time period equal to the lesser of either (a) the start of customer service to present or (b) five years.**

SMUD will work with PG&E to establish the transactions required to transfer customer usage data from PG&E's MDMA to VCEA's CRM via the 867 EDI files and any requirements specified by PG&E. SMUD will maintain a current record of all historical usage data for a time period equal to the lesser of either (a) the start of customer service to present or (b) five years. SMUD will store the historical usage data in either on premise or off premise database. The data stored will be in-line with the data provided by PG&E via Electronic Data Interchange standards.

5. Description of Proposed Services



- e. **Until a cloud-based storage solution for SmartMeter historical usage data is implemented, Provider will store SmartMeter historical usage data, as received by the MDMA, for a 48 hour window.**

SMUD will store the historical usage data either on premise or in an off-premise database. The data stored will be in-line with the data provided by PG&E via Electronic Data Interchange standards.

- f. **Maintain viewing access, available to appropriate VCEA staff, to view PG&E bills for VCEA customers, including supporting the intuitive parsing and labeling of PG&E provided files. Maintain accessible archive of billing records for all VCEA customers from the start of VCEA Service for a period of no less than five years.**

SMUD will keep all files provided by PG&E for VCEA viewing access to support intuitive parsing and labeling for a period of no less than five years.

- g. **Maintain and communicate as needed record of customers who have been offered service with VCEA but have elected to opt out, either before or after starting service with VCEA.**

SMUD can provide a report of opt out customers to VCEA at a frequency interval to be discussed with VCEA. VCEA or SMUD Call Center Representatives will have access to view a customer's enrollment status as needed to service customer calls.

5. Description of Proposed Services

- h. Maintain and communicate as needed records of Net Energy Metering credits and generation data for customers to be posted on bill and settled annually.**

SMUD will store customer generation data and credits in the billing system in order to post on the bill and to perform annual settlement.

- i. When requested by VCEA, place program charges on the relevant customer account, identified by Service Agreement ID (SAID).**

SMUD will ensure that program charges can be applied to the relevant customer account based on SAID.

- j. Identify customers participating in various VCEA programs in database.**

The cloud-based CRM solution that SMUD will implement for VCEA will include program participation information for each customer account.

- k. Include various program payment information in all relevant reports.**

SMUD will produce reports that meet VCEA's requirements to include program participation and program payment information. Timing and frequency of these reports can be discussed with VCEA.

- l. Perform quarterly VCEA program reviews to assess appropriate customer charge level.**

SMUD will perform quarterly VCEA program reviews based on further discussion around requirements with VCEA to ensure that VCEA can assess the appropriate customer charge level.

- m. Maintain all customer data according to VCEA's customer privacy policy and the requirements of relevant California Public Utilities Commission Decisions including D.12-08-045, including a daily backup process.**

SMUD will approach VCEA's customer data with the same care and responsibility that we do with that of our customers. This ensures that we will adhere to VCEA's customer privacy policy and the requirements of relevant CPUC decisions, including a daily backup process.

Because protecting the privacy of sensitive and confidential customer information is a core value of SMUD, we only collect the minimum sensitive and confidential information (SCI) that is directly relevant and necessary to accomplish the specifically authorized purpose(s) and only retain SCI for as long as is necessary to fulfill the specifically authorized purpose(s). Once this SCI is no longer needed, it is destroyed immediately.

- n. Maintain a Data Management Provider Security Breach Policy.**

SMUD will help VCEA develop, implement and adhere to a Security Breach Policy.

SMUD abides by a strict Data Breach Notification Policy that outlines the steps taken in response to data breach incidents involving personally identifiable information (PII). Upon a determination that an unauthorized person has acquired or is likely to have acquired PII of a SMUD customer or employee, our Incident Response and Data Breach Response teams will document the incident, ascertain the scope and extent of the breach and take all necessary measures to restore the integrity of the affected system. All affected parties are sent a Notice of Data Breach, including customers, payment card processors, law enforcement and consumer reporting agencies.

5. Description of Proposed Services



4. Customer Call Center

SMUD will provide professional and dedicated staffing for a VCEA customer call center, including the option for customers to use self-service through an Interactive Voice Response (IVR). The call center scope will include responses to IVR, phone and email inquiries from customers in both English and Spanish. SMUD is scheduled to deploy a chat feature next year and can discuss if VCEA would like to explore this option.

Regular reporting on metrics specified by VCEA will be provided in order to track and maintain high customer service levels. Any coordination required with PG&E to contact and inform customers will be handled by SMUD to provide VCEA customers with the best customer service. VCEA customer call center services can be provided at three different level options to meet VCEA's needs:

- **"VCEA RFP" Service:** 75% service level in 20 seconds with 10% abandon rate.
- **"SILVER" Service:** Average Speed of Answer (ASA) of 60 seconds with a 3% abandon rate.
- **"PLATINUM" Service:** 90% service level in 60 seconds with 2% abandon rate.

a. **Provide professional Interactive Voice Response (IVR) recordings for CCE customer call center.**

SMUD will provide a professional Interactive Voice Response (IVR) tool that will include custom prompts and recordings to align with the VCEA customer base. SMUD currently uses the Avaya IVR platform and professional services to develop all custom IVR recordings. These recordings are of professional quality and can be updated as business needs dictate.

5. Description of Proposed Services

- b. Provide option for IVR self-service and track how many customers start and complete self-service options without live-agent assistance.**

SMUD will provide reporting to show the success rate of completed transactions through the IVR platform. SMUD currently tracks these metrics and reviews them regularly to ensure that the IVR is successfully meeting the needs of our customers. SMUD can provide reports on many different aspects of the IVR. These include successful completion percentage, number of customers that interacted with the IVR and how many customers exited the IVR in need of Customer Service Representative (CSR) assistance.

- c. Staff a call center, during any CCE Statutory Enrollment Period, 24 hours a day 7 days a week to process opt out requests.**

SMUD will provide dedicated professional call center staff to VCEA to assist customers during the CCE statutory enrollment period 24 hours a day, 7 days a week to process opt-out requests. SMUD recommends providing call center coverage from 7 a.m. to 7 p.m. (PST) daily because our experience, and that of other CCEs we have consulted with, found that there is little to no call volume outside of these hours. This may be an opportunity for cost savings for VCEA without compromising customer service. SMUD, however, can offer 24/7 coverage if the VCEA desires it.

- d. Staff a call center during Non-Enrollment Period between the hours of 8 AM and 5 PM PPT Monday through Friday, excluding VCEA and PG&E holidays.**

SMUD will continue to provide VCEA customers with dedicated professional call center staff to manage all customer contacts during the non-enrollment period from 7 a.m. to 7 p.m. (PST) Monday through Friday excluding VCEA and PG&E holidays. SMUD currently provides these extended hours to our customers and we find that they allow better flexibility around their normal workday schedules.

- e. Provide sufficient call center staffing to meet the requirements set forth herein, including designating VCEA specific agents to the extent needed to provide for full functionality.**

SMUD handles 1.2 million customer contacts a year and routinely meets or exceeds all service level goals. Current service level goals include a matrix: 90% of calls in 60 seconds and average speed of answer of 60 seconds, depending on the call type. SMUD will provide and train CSRs dedicated to serving VCEA customers. They will be staffed to meet the requirements set forth by VCEA.

SMUD makes training and development of our call center staff as a top priority. We have CSRs go through a comprehensive training program and exam process that has them perform in real-event situations to identify if they are a good fit with SMUD's customer service-focused culture. SMUD will provide these dedicated professional call center staff to VCEA and ensure that our call center staff is fully trained to the specifics around VCEA, its customer concerns and local characteristics and needs.

5. Description of Proposed Services

SMUD's training programs have been recognized as best-in-class by Training Magazine, ranking in their Top 125 training organizations seven out of the last nine years (2009 to 2017).

f. Provide sufficient number of Data Manager Experts available to manage escalated calls between the hours of 8 AM and 5 PM PPT Monday through Friday, excluding VCEA and PG&E holidays ("Regular Business Hours").

Along with professional call center staff, SMUD will ensure that data manager experts are available to manage escalated calls between the hours of 7 a.m. and 7 p.m. (PST) Monday through Friday excluding VCEA and PG&E holidays. SMUD currently utilizes a three-tier support system that includes CSR I, CSR II and CSR III levels. These experts will all be used to support any customer inquiries and escalations that may arise.

g. Ensure that a minimum of 75% of all calls will be answered within 20 seconds during Non-Enrollment Periods.

SMUD will ensure that a minimum of 75% of calls will be answered within 20 seconds during non-enrollment periods. SMUD uses the Avaya Aura Contact Center platform to manage call routing and the Verint WFO to manage schedules and call recordings.

h. 100% of voicemail messages answered within one (1) business day.

SMUD will respond to 100% of voicemail messages within one business day. SMUD will route the voicemail inquiries to the proper staff to respond on a timely basis to any inquiry which includes managing a dedicated voicemail box that will be available 24/7 to all VCEA customers.

i. 100% of emails receive an immediate automated acknowledgement.

SMUD will provide an automated response acknowledgement that an email was received to 100% of customers. SMUD has the technology to customize an automated message to the customers that reach out via email for any correspondence.

j. 95% of emails receive a customized response within one (1) business day.

SMUD will provide customized email responses within one business day to 95% of emails received. We have a team of 20 CSRS that are dedicated to managing all email correspondence with our customers.

k. 100% of emails receive a customized response within three (3) business days.

SMUD will provide a customized response within three business days to 100% of emails received from customers. Our current service level is to provide customized responses to 100% of emails within (two) business days which falls within the parameters of the request of this RFP.

5. Description of Proposed Services

l. Achieve a no greater than 10% abandon rate for all Non-Enrollment Period calls.

SMUD will commit to no greater than 10% abandon rate for all non-enrollment period calls. With the Silver Service Level package we can commit to an abandon rate of 3%. With the Platinum Service Level package we can commit to an abandon rate of 2%. Both the Silver and Platinum Service Levels are provided to SMUD customers today.

m. Provide callers with the estimated hold time, if applicable. Provide an automated 'call back' option for callers who will be put on hold for an estimated five minutes or longer.

SMUD will provide estimated hold time, if applicable, to all customers. SMUD will provide an automated call back function for callers who are put on hold for an estimated five minutes or longer. However, in SMUD's experience, we provide an average speed to answer rate and call center coverage that mitigates the need for an automated call back service. Note that SMUD has also proposed several call center service level offerings, all which operate under the assumption that calls are answered and would not require an automated call back.

n. Record all inbound calls and make recordings available to VCEA staff upon request. Maintain an archive of such recorded calls for a minimum period of 24 months.

SMUD will record 100% of inbound calls and provide the records to VCEA staff upon request. SMUD will archive 100% of call recordings for a minimum period of 24 months. SMUD uses the Verint WFO platform to record all inbound calls into the call center. These calls are stored for 24 months and can be accessed at any time for review.

o. Track call center contact quality with criteria including:

- (1) Use of appropriate greetings and other call center scripts**
- (2) Courtesy and professionalism**
- (3) Capturing key customer data**
- (4) Providing customers with correct and relevant information**
- (5) First-contact resolution**
- (6) Accuracy in data entry and call coding**
- (7) Grammar and spelling in text communication (email and chat)**

SMUD will track call center contact quality on all of the criteria listed above. Prior to launch, SMUD will work with VCEA to discuss the details of these metrics. SMUD tracks several call center metrics to ensure that we are providing the best customer experience and can recommend the most successful metrics in achieving high customer satisfaction rates for VCEA's customers.

5. Description of Proposed Services

- p. Evaluate customer satisfaction through voluntary customer surveys that ask general questions about call quality, call resolution, and how satisfied the customer was with the service received.**

SMUD will evaluate customer satisfaction through voluntary customer surveys. We understand that customer satisfaction is a high priority and want to ensure that we are tracking and maintaining our ability to deliver a high level of service. The surveys will be tailored to meet VCEA's needs and include general questions regarding call quality, call resolution and how satisfied the customer was with the service received.

SMUD's market research professionals are experienced in both qualitative and quantitative research techniques. They complete dozens of research studies each year across all aspects of SMUD's operations. For more than 10 years, SMUD has conducted a monthly customer satisfaction study. In 2016, more than 3,800 customers who reached out to SMUD's Contact Center were interviewed. Interviews are now being done online and by telephone.

- q. Respond to customer emails.**

SMUD will have dedicated CSRs who can respond to 100% of VCEA customer email inquiries. We currently respond to over 120,000 email inquiries each year from our customers and anticipate that we will be able to easily accommodate VCEA's customer email volume.

- r. Receive calls from VCEA customers referred to Provider by PG&E and receive calls from VCEA customers choosing to contact Provider directly without referral from PG&E.**

SMUD will be able to receive calls from VCEA customers referred by PG&E and receive calls from VCEA customers choosing to call directly without referral. SMUD can "warm transfer" the customer to ensure the highest level of customer experience when we have to hand off the customer to PG&E.

- s. Provide the call center number on PG&E invoice allowing VCEA customers to contact the call center. Collect and/or confirm current email, mailing address and phone number of customers and add to or update database during inbound call.**

SMUD will provide a toll-free number that will be placed on PG&E invoices allowing VCEA customers to contact the call center. SMUD will have professional staff collect and/or confirm current email, mailing address and phone number of customers. SMUD will update database during inbound calls as needed. We currently collect all customer information including phone number, updated address, email address and other pertinent customer information on every interaction.

5. Description of Proposed Services

- t. Collect permission (via voice recording, email request, or electronic form submittal) from customers to send electronic correspondence instead of printed mail.**

SMUD will collect permission from customers to send electronic correspondence instead of printed mail. Currently SMUD gives customers the option of receiving their bills electronically by opting to go paperless online on our website.

- u. Respond to telephone inquiries from VCEA customers using a script developed and updated quarterly by VCEA. For questions not addressed within the script, refer inquiries either back to PG&E or to VCEA.**

SMUD will use a script developed with VCEA for us in all correspondence with VCEA customers. For questions not addressed within the script, SMUD will refer customers to PG&E or to VCEA as directed to do so. SMUD CSRs are familiar with using scripts to ensure consistent and clear communications to our customers about their SMUD accounts.

- v. Respond to customer inquiries within 24 hours, excluding weekends and holidays, including inquiries received either through telephone calls, email, fax or web-portal.**

SMUD will respond to customer inquiries within 24 hours excluding weekends and holidays. These include inquiries received via telephone, email, fax or web-portal. SMUD handles thousands of contacts daily and responds within all Service Level commitments.

- w. Offer bi-annual cross training to PG&E call center in coordination with VCEA.**

SMUD will provide bi-annual cross training to PG&E call center representatives in coordination with VCEA. SMUD has a robust training team that trains all of our CSRs on all new business, process changes and refresher trainings. These training processes can be extended to PG&E call center representatives to accurately reflect VCEA information.

- x. Ensure monthly status reports are provided during the first week of each month. Provide weekly status reports during Statutory Enrollment Periods.**

SMUD will provide status reports during the first week of each month. SMUD will also provide weekly status reports during the Statutory Enrollment Periods.

- y. Use commercially reasonable efforts to make Spanish speaking call center staff available to customers during Regular Business Hours.**

SMUD is staffed with bi-lingual CSRs who speak Spanish and will be able to help Spanish-speaking VCEA customer inquiries coming in from all communication channels. We currently have over 30 CSRs that are bilingual and they are available to respond to customer inquiries via email and phone.

5. Description of Proposed Services



z. Provide translation services for inbound calls for inbound calls for English and Spanish. Any other languages to be determined in consultation with VCEA.

SMUD will utilize our contract vendor (Voiance) for all translation services to manage inbound calls for customers when translation services are needed. SMUD currently uses this vendor to provide multi-lingual translations and if needed, SMUD can easily use this same vendor if VCEA would like support for additional languages in the future.

aa. Create and maintain forms for the VCEA website so that customers may change their account status to enroll or opt out of various VCEA programs.

SMUD will create and maintain forms for the VCEA website so that customers may change their accounts status to enroll or opt

out of various VCEA programs. SMUD has a dedicated web team that manages all of our forms and data content on our website. Customer account change forms will be seamlessly integrated with VCEA's website to provide an easy and intuitive experience for customers who wish to adjust their account status or enrollment options.

bb. Host VCEA meetings with call center management and representatives on a monthly basis.

SMUD will host VCEA meetings with call center management and representatives on a monthly basis. We will work with VCEA to establish a regular agenda so that SMUD is meeting the needs and expectations for VCEA. These meetings can be used to review call center metrics, recurring customer concerns and any pertinent topics at VCEA's request.

5. Description of Proposed Services

5. Billing Administration

SMUD will deliver billing services to VCEA by building efficient and automated processes and focus on data validation accuracy with quality assurance measures.

SMUD proposes two approaches to implementing and managing Billing Administration:

- Option 1: SMUD will build and manage a billing engine for VCEA.
- Option 2: SMUD will work with PG&E to leverage their billing engine through the Rate Ready option in PG&E's Electric Rule 23. SMUD would provide VCEA rates to PG&E annually to be configured in PG&E's billing engine.

SMUD recognizes that the monthly bill is a key component of customer satisfaction. SMUD's goal is to provide an accurate bill for every customer, on time and every time. Since the implementation of our data-driven exception monitoring and response system, SMUD has experienced a 70% reduction in billing exceptions.

Most utilities strive for a billing exception rate between 1% and 3%. SMUD's billing exception rate currently stands at less than 1%. In addition to lowering our exception rate, data automation has reduced the delays associated with resolving exceptions, thus lowering the overall cost of billing services. SMUD continually delivers sustainable process improvements that have resulted in cost reductions in our billing operations that enable resources to take on additional initiatives.

a. Maintain a table of rate schedules offered by VCEA to its customers.

SMUD will maintain a table of rate schedules offered by VCEA to its customers and ensure that all data are accurate and consistent in the multiple systems between VCEA, PG&E and SMUD.

b. Send certain VCEA program charges for non- VCEA customers, when supported by PG&E, based on information provided to Provider by VCEA.

As VCEA develops future program service offerings, SMUD will send certain and pertinent VCEA program charges for non-VCEA customers, when supported by PG&E, based on information provided to Provider by VCEA.

c. Send certain VCEA program charges as a separate line item to PG&E for placement on monthly bill during term of repayment.

SMUD will send relevant VCEA program charges as a separate line item to PG&E for placement on the monthly bill during term of repayment. Our billing team is able to efficiently apply various line item charges ranging from non-electric charges, special programs, special contracts, collective billing, energy assistance programs and net energy metering.

5. Description of Proposed Services

d. Apply PG&E account usage for all VCEA customers against applicable rate to allow for customer billing.

SMUD will apply PG&E account usage for all VCEA customers against applicable rate to allow for customer billing. SMUD provides various programs and services to our customers. Our billing team is able to efficiently apply various line item charges ranging from non-electric charges, special programs, special contracts, collective billing, energy assistance programs and net energy metering.

e. Review application of VCEA rates to PG&E accounts to ensure that the proper rates are applied to the accounts.

SMUD will review the application of VCEA rates to PG&E accounts to ensure that the proper rates are applied to the accounts. SMUD's quality assurance process ensures accuracy of data and rates maintained in our systems. In addition, several audits are performed from the initiation of new rates to the invoicing output.

f. Timely submit billing information for each customer to PG&E to meet PG&E's billing window.

SMUD will timely submit billing information for each customer to PG&E to meet PG&E's billing window. SMUD currently processes 99.95% of our billing data from our meter data management system to invoicing within 24 hours.

g. Use commercially reasonable efforts to remedy billing errors for any customer in a timely manner, no more than two billing cycles.

SMUD will use commercially reasonable efforts to remedy billing errors for any customer in a timely manner – no more than two billing cycles. SMUD's billing quality assurance measures focuses on accuracy prior to invoicing. Our billing accuracy rate averages 98.93%. Although the standard for resolving billing errors is within two billing cycles, SMUD resolves 97% errors within one billing cycle.

h. Assist with annual settlement process for Net Energy Metering (NEM) customers by identifying eligible customers, their NEM anniversary dates, providing accrued charges and credits, and providing mailing list to VCEA designated printer.

SMUD will assist with annual settlement process for Net Energy Metering (NEM) customers by identifying eligible customers and their NEM anniversary dates, and providing accrued charges and credits and a mailing list to the VCEA designated printer. SMUD can also use our internal print shop to fulfill the print and mailing services.

Although net metering can be complex, SMUD implemented improvements to the NEM process that helps guide customers with their bills. In addition, SMUD recently implemented a monthly treatment option that provides for a monthly settlement. SMUD equips our staff with the training and tools so that they can efficiently address customer's questions.

5. Description of Proposed Services



- i. **Provide customer mailing list to VCEA designated printer for new move-in customer notices and opt out confirmation letters routinely within 7 days of enrollment or opt out.**

SMUD will provide customer mailing list to VCEA designated printer for new move-in customer notices and opt out confirmation letters routinely within 7 days of enrollment or opt out. SMUD successfully manages meter types and meter applications for our opt-out customers. SMUD has a very low smart meter opt-out number, with less than 600 out of our 620,000 customers opting out.

- j. **Send a VCEA provided letter to customers that are overdue. If no payment is received from the customer after a certain amount of time, issue a CCESR to return customer to PG&E.**

SMUD will send a VCEA provided letter to customers that are overdue. If no payment is received from the customer after a certain amount of time, SMUD will issue a CCESR to return customer to PG&E. SMUD has a very knowledgeable in-house collections staff that maintains our net write off amount well below 0.40% of annual billed revenue. SMUD is proactive with our collections and our process begins before the customer's bill balance escalates. Working with our customers in maintaining a lower delinquency balance has resulted in SMUD having a low number of write-offs. SMUD assigns written-off accounts to our collection agencies.

5. Description of Proposed Services

6. Reporting

Report	Frequency	Delivery Method
Aging	Weekly, Monthly	SFTP
Call Center Statistics	Weekly, Monthly	Email
Cash Receipts	Weekly, Monthly	SFTP
Invoice Summary Reports	Monthly	SFTP
Days To Invoice	Weekly, Monthly	SFTP
Program Opt Up with Address	Weekly, Monthly	SFTP
Utility User Tax (UUT) where applicable	Monthly	Email
Invoice Summary Report	Weekly, Monthly	SFTP
Invoice Summary Report – Mid Month	Monthly	SFTP
Monthly Transaction Summary	Monthly	Email
Opt Out with Rate Class	Weekly, Monthly	SFTP
Retroactive Returns	Monthly	Email
Sent to Collections	Monthly	Email
Snapshot	Weekly	SFTP
Snapshot with Addresses	Weekly	SFTP
Unbilled Usage	Monthly	SFTP
Full Volume Usage by Rate Class	Monthly	SFTP

Provider shall also assist VCEA, as needed, in compiling various customer sales and usage statistics that may be necessary to facilitate VCEA's completion of requisite external reporting activities. Such statistics will likely include annual retail sales statistics for VCEA customers, including year-end customer counts and retail electricity sales (expressed in kilowatt hours) for each retail service option offered by VCEA.

SMUD will assist VCEA in compiling the customer sales and usage statistics detailed in the RFP. These are standard reports that can easily be generated from the IVR, Call Center and CRM applications built for VCEA. SMUD will work with VCEA to configure the reports to meet their needs for each retail service option offered by VCEA.

7. Settlement Quality Meter Data

Having operated in California as a vertically integrated utility, SMUD has a long history managing settlement quality meter data. With the formation of the CAISO, SMUD has gained more experience managing settlement quality meter data for those resources located within the CAISO.

- a. **Provider shall provide VCEA or VCEA's designated Scheduling Coordinator (SC) with Settlement Quality Meter Data (SQMD) as required from SC's by the California Independent System Operator (CAISO).**

SMUD will obtain VCEA load data from PG&E, ensure it is verified and complies with CAISO requirement for SQMD and will provide it to VCEA or its Scheduling Coordinator.

- b. **Upon VCEA's request, Provider shall submit the SQMD directly to the CAISO on behalf of VCEA or VCEA's designated SC.**

SMUD will forward VCEA load SQMD directly to the CAISO at the required time for load settlement purposes.

5. Description of Proposed Services



C. Wholesale Energy Services

SMUD will provide comprehensive Wholesale Energy Services to VCEA as an additional service. This approach allows VCEA to benefit from the services of an experienced energy provider which has managed to keep rates significantly lower than those of the state's investor-owned utilities.

SMUD has identified the key tasks it believes are necessary to set up for and manage the VCEA wholesale Power Supply, and to schedule VCEA load and resources. We have categorized the tasks as Launch and Operations activities. Proposed tasks are outlined on the following pages.

5. Description of Proposed Services

Bundled Tasks for SMUD Wholesale Energy Services Option:

Wholesale Energy Services Launch

1. Load Forecast Models Development
2. Wholesale Power Procurement & Risk Policies and Reporting
3. Develop Model Resource Portfolios and Power Supply Budget
4. Resource-Related Launch Filings

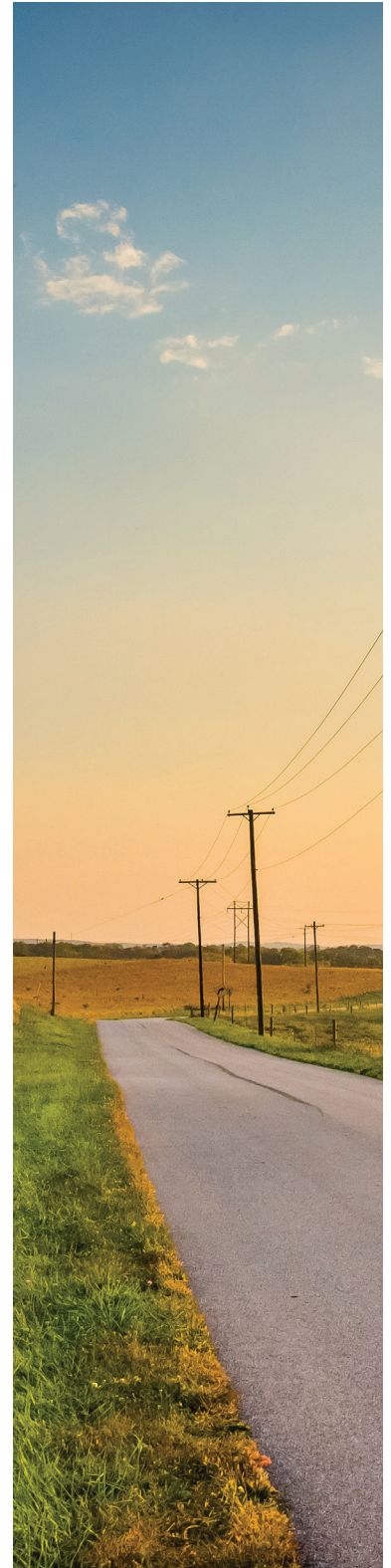
Wholesale Energy Services Operations

5. Scheduling Coordinator Service
6. Load and Resource Portfolio Operation Service
7. Wholesale Load and Resource Settlements and Verification
8. Power Portfolio Purchase Service
9. Market Risk Instruments Management
10. Update Portfolio Model and Report Power Supply Risk Metrics
11. CAISO Market Monitoring
12. Resource Portfolio Compliance Reporting
13. Credit Support Service

SMUD offers these tasks as a whole package. These tasks are not offered as individual a la carte services. With exception of Task 4 (Resource Related Pre-Launch Filings), all of these tasks are in addition to (not instead of) the tasks proposed in the Technical and Energy Services (Category 1) section.

VCEA can benefit from SMUD's status as a utility that has been operating for more than 70 years, has well established long-term operations and that has established an excellent credit rating (AA3 and AA-) for SMUD's most recent bond issuance. SMUD also wants to offer the most flexibility to help VCEA manage the Power Supply credit issues it will face, and to help VCEA manage some of the risks associated with the Power Supply, such as volumetric risk from uncertainty surrounding the VCEA load (opt outs) and energy market price risk.

Charges for such services are exclusive of the actual costs of Power Supply, as well any fees, taxes or other type of assessment that may be associated with the activities undertaken by SMUD in the execution of these Services. SMUD will pass through Power Supply costs and any such fees to VCEA through the Power Supply Charges.



5. Description of Proposed Services

Wholesale Energy Services Launch

1. Load Forecast Models Development

SMUD will develop two load forecast models for VCEA. A long-term load forecast model will be developed to forecast both total energy usage and peak demand by customer load class out into future years, to use for planning and budgeting. A short-term load forecast model will also be developed for daily load forecasting activities associated with scheduling of resources and load.

To build the load forecast models, it would be ideal to have access to actual PG&E load data of customers within Yolo County. In the absence of actual PG&E customer load data, SMUD will construct estimated load shapes for customers. Given that SMUD is in the same climate zone as VCEA customers, SMUD will be able to use its customer load shapes to inform the Load Forecast Model.

SMUD will work with VCEA to develop assumptions about the number of customers expected within each rate class based upon the number of customers expected to be enrolled in VCEA (as opposed to customers choosing to opt out). Historic or modeled loads will then need to be adjusted for factors impacting changes in expected customer loads. These factors can include: changes in population, economic health and employment per household, usage due to the impacts of energy efficiency and electricity demand and use caused by major shifts in customer end use, such as increased penetration of electric vehicles. This will form the basis of the retail load forecast for purposes of projecting expected VCEA revenues.

The wholesale load forecast will be developed from the retail load forecast by applying and adjusting for transmission and distribution loss factors as appropriate.

From the long-term load forecast model, SMUD will also develop a short term forecast model to use for wholesale scheduling of loads and resources. The model must take key weather variables as inputs, as well as seasonal data, to forecast daily VCEA load by hour.

2. Wholesale Power Procurement & Risk Policies and Reporting

SMUD will work with VCEA to develop Wholesale Power Procurement and Power Supply Risk Policies. Energy commodity price volatility risk can be significant without adequate hedging practices to minimize that risk. SMUD will work with VCEA to develop a Power Supply Risk Model to assess and monitor VCEA's exposure to price volatility risk including developing appropriate exposure metrics. This task will also include setting up reporting structure and tools to use for monthly risk reporting to VCEA. VCEA's adoption of the trading and risk policies will guide SMUD in the Power Portfolio Purchase Service and Market Risk Instruments Management tasks.

3. Develop Model Resource Portfolios and Power Supply Budget

SMUD will model the proposed resource mix in the PLEXOS dispatch simulation model in order to assess the cost impacts of the resource mix on the overall power supply portfolio cost. The model will form the basis for the power supply budget and input into the financial model to determine VCEA revenue requirements.

5. Description of Proposed Services

As part of the modeling of resource portfolios to develop VCEA's Power Supply, SMUD will evaluate the options for managing market price risk, locational price risk and volumetric (load) risk, with the goal of determining the level and extent to which the VCEA Power Supply should be hedged. To conduct the modeling, SMUD will obtain indicative pricing offers from suppliers.

Load serving entities in the CAISO manage three types of risk:

Volumetric Risk: Risk associated with MWh volume changes as compared to expected volumes. Examples include budget load forecast as compared to actual as well as day ahead load forecast as compared to actual. These differences create the need for short term buys or sells into the market at unhedged prices. This risk is the most difficult to manage as load deviations are typically weather driven and present themselves in the short-term planning window.

Price Risk: Risk associated with market prices for the portion of the expected load that is unpriced. It is possible to price much if not all of a portfolio on a forward-looking basis. However, price volatility on volume changes remain on a short-term basis.

Locational Risk: Risk associated with locational differences between where a generator places energy on to the grid and the place where a load serving entity pulls energy off the grid. In the CAISO, this is reflected as the Loss and Congestion component of published prices at each node. This risk can be managed with products in the market, however, Volumetric Risk remains on a short-term basis.

Utilizing robust modeling and forecasting tools. SMUD can help manage these three risks to

reflect the overall risk appetite of VCEA. They can be presented as an expected production cost within a certain confidence band. Utilities typically express portfolio risk certainty as the 95% confidence level based on past price and volume volatility. An example statement would be, "At a 95% confidence level, this portfolio is expected to have a production cost between \$50 and \$60 million." If this potential variance is bigger than the risk appetite of the organization, action addressing Volumetric, Price or Locational Risk would be needed.

In accordance with VCEA's Power Procurement and Risk Policies, SMUD will work with VCEA to develop the appropriate risk appetite and objectives and then execute a hedging plan to meet these objectives.

As a result of the modeling effort, SMUD will provide an assessment to VCEA of the benefits and drawbacks of these alternate approaches. The end result of the portfolio modeling will be a decision by VCEA concerning which of these approaches it wants SMUD to implement for the Power Supply procurement.

4. Resource-Related Launch Filings

SMUD will assist VCEA by managing all of the necessary pre-launch filings required to run wholesale energy services. Among the filings expected are:

- CAISO Market Participant Filings
- SQMD Data Plan Filing with CAISO
- California Air Resources Board registration
- CAISO Registration and Deposits
- WREGIS Registration
- Develop and File Initial Integrated Resource Plan

5. Description of Proposed Services

Wholesale Energy Services Operations

To manage the resources procured by and for VCEA and to schedule for VCEA wholesale load, SMUD will provide service associated with managing and operating a balanced utility wholesale energy supply and load.

5. Scheduling Coordinator Service

SMUD will use its existing relationship as a registered Scheduling Coordinator with the CASIO to act as VCEA's Scheduling Coordinator. This includes maintaining the appropriate credit facilities with the CAISO to include VCEA transactions with the other transactions already managed. SMUD will serve as Scheduling Coordinator for both the VCEA wholesale load and the VCEA resource portfolio. This service includes:

1. Providing an updated load forecast each day for the next 7 days by hour
2. Submitting the forecast for the next scheduling day into the Day Ahead market at the appropriate time for Day Ahead submittals
3. Coordinating with supplying generator owners and submitting resource supply schedules to the Day Ahead market (where appropriate)
4. Verifying market award for Day Ahead load schedules
5. Coordinating e-tagging for power imports
6. Submitting forward market Inter-Scheduling Coordinator Trades transactions for the energy supply purchase from contracting parties serving as their own Scheduling Coordinator

SMUD will discuss with VCEA the various resource bidding strategies (such as self-scheduling versus submitting economic bids to insulate VCEA from extreme negative pricing) and establish scheduling guidelines for the Scheduling Coordinator Service.

6. Load and Resource Portfolio Operation Service

SMUD will also provide additional supporting services for managing the scheduling of wholesale load and power supply resources. These services include:

1. Coordinating with supplying generating power plant operators on outages to adequately factor outages into the VCEA wholesale scheduling needs
2. Communicating relevant outage information to the CAISO for those generating plants for which SMUD serves as scheduling coordinator
3. Updating the wholesale load forecast model on a monthly basis to account for the number and type of customers added to (or leaving VCEA's service), and updated information on how VCEA loads are impacted by climate conditions and other key variables

7. Wholesale Load and Resource Settlements and Verification

SMUD will perform all wholesale settlement activities for VCEA, including calculating shadow settlements for all load and power supplies. This will ensure that complex CAISO invoices are validated. Additionally, SMUD will flag any invoice that appears unusual and a potential candidate for dispute with the counter party

5. Description of Proposed Services

(whether the CAISO or any other counter party that supplies load and resources to VCEA). SMUD will work with VCEA in such situations to determine whether to dispute the invoice in question. SMUD will work directly with the counter party to resolve any invoice related to the dispute.

WREGIS Coordination and Submittals

As part of its Wholesale Load and Resource Settlements and Verification Service, SMUD will also make all WREGIS filings and submittals required for renewable resources supplying renewable energy for VCEA's Power Supply, and will coordinate REC transfers into VCEA's WREGIS account for renewable power purchases in the Power Supply portfolio. SMUD will also register any VCEA feed-in-tariff project into VCEA's WREGIS account as VCEA generators.

As a key part of WREGIS settlement activities, SMUD will manage and coordinate Qualified Reporting Entity (QRE) services for collection, verification, and reporting of renewable resource meter data to WREGIS as appropriate. Many renewable power project owners directly contract for QRE services for their projects, and as such SMUD would not need QRE services. For VCEA FIT projects, SMUD will perform or contract for QRE services for those projects. As the CAISO Scheduling Coordinator for VCEA FIT projects, SMUD will have access to the CAISO verified meter data through the Market Results Interface – Settlements (MRIS) system, and can pull meter data from that system for reporting to WREGIS. Alternatively, SMUD will obtain from PG&E and VCEA FIT project meter data, in accordance with the applicable PG&E meter servicing agreement. SMUD will upload data to WREGIS on a monthly

basis, as required in accordance with WREGIS procedures, for the creation of Renewable Energy Certificates (RECs) for VCEA Power Supply, and will use data on the VCEA FIT projects for power purchase settlement purposes.

Settlement Quality Meter Data for VCEA Wholesale Load Settlement

SMUD will obtain VCEA load data from PG&E, ensure it is verified and complies with CAISO requirements for SQMD. SMUD will forward VCEA load SQMD to the CAISO at the required frequency for load settlement purposes.

8. Power Portfolio Purchase Service

SMUD shall provide Power Portfolio Purchase Services to and on behalf of VCEA. Many of the transactions will be executed using existing "enabling" agreements that SMUD has with many parties trading energy in the west.

SMUD will use its status as an existing CAISO Market Participant to execute CAISO trades on VCEA's behalf. The types of products that SMUD will procure using these existing agreements include: power, ancillary services, resource adequacy capacity, renewable energy (PCC-1 and PCC-2), carbon allowances, carbon offsets and financial swaps (for power cost hedging).

In the event that VCEA chooses Credit Option 13a, SMUD will work with VCEA to have VCEA sign the appropriate master enabling agreements in advance of any specific Power Supply negotiations, and then SMUD will work with VCEA to negotiate the specific individual transactions (known as "confirms").

5. Description of Proposed Services

Should VCEA elect Credit option 13b, SMUD will use its status and credit as an active market participant in western energy markets and the CAISO managed market, to execute specific transactions for the VCEA Power Portfolio in SMUD's name. It is likely that transactions under Credit option 13b will yield more and lower cost power proposals from suppliers than if the transactions are directly in VCEA's name, because of SMUD's established credit position with western energy market trading partners.

9. Market Risk Instruments Management

Following the Wholesale Power Procurement & Risk Policies established in Task 3, SMUD will manage hedging of the Power Supply Portfolio (such as Congestion Revenue Rights or swaps, in addition to any fixed price power supply agreements procured). They will be part of the VCEA Power Supply. SMUD will coordinate the use of hedging instruments with VCEA so that any hedging instrument is procured with VCEA's approval.

10. Update Portfolio Model and Report Power Supply Risk Metrics

SMUD will update the Power Supply portfolio model on a monthly basis to reflect changed conditions so that the Power Supply budget and Power Supply Risk metrics can be updated. SMUD will report this in accordance with VCEA's Wholesale Power Procurement & Risk Policies.

11. CAISO Market Issues

SMUD will follow CAISO market trends, issues and rules changes, participate in CAISO stakeholder meetings (in person or remotely), and provide a summary to VCEA of any issues or rule changes that SMUD reasonably believes may impact VCEA's operations.

12. Resource Portfolio Compliance Reporting

SMUD will manage all wholesale load and resource portfolio compliance reporting. This is expected to include:

- Power Content Label Reporting
- RPS Compliance Reporting
- Annual Emission Performance Standard Attestations
- Annual SSP filings
- CEC IEPR Reporting
- Biennial Storage Progress Report
- California Air Resources Board (CARB) Compliance Reporting

13. Credit Support Service

As a newly established entity, VCEA is ultimately responsible for establishing and maintaining the financial credit and security necessary to transact for its Power Supply. However, VCEA's credit worthiness will be an issue to power suppliers. SMUD offers two options for managing those credit issues:

5. Description of Proposed Services

13a. Assist VCEA with Power Supply Credit Issues

Under this service option, all Power Supply procurements will be done with VCEA as the executing party (not SMUD). This means that

- All Power Supply invoices will be billed directly to, and must be paid, by VCEA, which will likely require VCEA to maintain significant working capital funds to manage early power payments while it begins to collect revenue from VCEA retail customers.
- Because VCEA does not have a credit history, and is not a financially rated entity, the financial security that energy suppliers expect in order to cover in the event of defaults must be either in cash, or a letter of credit. Some suppliers may only accept cash deposits into an escrow account which total deposits are determined by a “mark to market” calculation done daily that assesses how far away from current market prices the guaranteed transaction is for the balance of the term of agreement.

SMUD will assist VCEA in evaluating and negotiating credit requirements of suppliers, and providing assistance to VCEA in implementing required credit instruments.

13b. Provide VCEA SMUD Credit Support Service

Notwithstanding that obligation for VCEA to establish and maintain credit for its Power Supply, under this option SMUD will provide Credit Support Services to facilitate transactions associated with the Power Supply. To implement this Power Supply, procurement will be in SMUD’s name, not VCEA’s name. Provision of Credit Support Services is contingent up certain facilities being established and maintained:

Contingent Lock Box Pledge Account

SMUD will require that VCEA set up a Lock Box Pledge Account and put the related revenue deposit arrangements in place. However, SMUD will not immediately require VCEA to have PG&E deposit revenue payments directed to the Lock Box Account. As long as VCEA pays for Power Supply charges in a timely manner SMUD will not call for PG&E to deposit revenues into the Lock Box Pledge Account. If at any time VCEA has not timely paid the billed monthly Power Supply charge payments in full then SMUD will exercise its right to have PG&E revenues directed to the Lock Box Account, and priority rights on the Lock Box funds will be enforced.

Security Reserve Account

VCEA will establish a Security Reserve Account at a bank, meeting financial strength requirements acceptable to SMUD in accordance with an account control agreement for the purpose of security for the Power Supply purchase commitments made by SMUD on VCEA’s behalf. SMUD will require that VCEA fund the reserve account in the amount of \$1.00 for each MWh of wholesale energy transacted for VCEA in SMUD’s name. SMUD will determine the default exposure based upon a “mark-to-market” calculation of the VCEA Power Supply portfolio, considering the difference between the current market price for products, and the contracted-for prices, and the remaining duration of the contracts. Should the default exposure calculation exceed the amount of funds projected to be in the Reserve Account by the end of the term of the SMUD service agreement, VCEA will increase the rate of Reserve Account deposits (rate will go up from \$1.00 for each MWh of wholesale energy transacted for VCEA in SMUD’s name).

5. Description of Proposed Services



D. Enterprise Risk Management

All decisions carry degrees of risk and opportunity and the utility industry operates in an inherently risky environment. By strategically managing risk at SMUD, we proactively reduce the chance of loss, identify and take advantage of opportunities, create greater financial stability and protect our resources to support our organization’s mission and create value for our customers. SMUD is proposing a strategic and holistic approach to managing VCEA’s overall risk portfolio through the following Enterprise Risk Management (ERM) services.

1. Facilitate and develop risk tools

- Develop an enterprise-wide risk-scoring guide that rates risks on likelihood, impact and velocity, both before and after consideration of organizational controls.
- Develop risk assessment templates and risk response guidelines.
- Develop and coordinate risk surveys to better understand the current and emerging risks facing VCEA, analyze survey results and provide recommendations.
- Develop and conduct risk interviews with the VCEA Board, Management and Stakeholders.

5. Description of Proposed Services

2. Perform an enterprise-wide risk assessment to identify key organizational risks

- Facilitate stakeholder meetings to identify and assess current risks and document current controls and risk responses.
- Facilitate development of risk appetite and tolerance levels based on industry best practices as well as VCEA business requirements/needs.
- Develop guidelines to empower management and staff to make risk decisions within Board established risk appetite and tolerance levels.
- Develop key risk indicators for identified risks.
- Develop Risk Register and Risk Dashboard with listing of all risks, descriptions, and current risk levels.

3. Define risk governance structures and accountability

- Facilitate conversations with VCEA Board and Management to develop a risk governance structure with roles and accountabilities to support the continuation of VCEA's ERM Program. This may include drafting Board/corporate policies, working procedures and development of a risk organizational chart.
- Facilitate the development of an escalation process for risks exceeding criteria and a process to respond to escalation.

4. Train management and board members on ERM

- Develop and facilitate training for VCEA management and Board members on the ERM program and its applications.

5. Align risk with strategic objectives

- Work with VCEA to identify new and emerging risks impacting VCEA's strategic objectives. This process helps to prioritize VCEA's risks to allocate the appropriate amount of resources to the right areas of risk to help drive the strategy forward.

6. Improve efficiency of risk mitigation and controls

- Identify preventive, detective and corrective controls to mitigate risks outside tolerance levels. This could include implementation or changes to management controls, engineering controls, financial controls, policies, procedures, regular reports and organizational roles and responsibilities.

7. Develop standardized risk reporting for VCEA Board and stakeholders, including:

- Risk Dashboard Summary of the risk portfolio.
- Detailed reporting for individual risks segmented as required
- Commodity risk dashboard highlighting performance, exposure, trajectory, etc.
- Monthly and annual risk reports for VCEA Board and executives.

5. Description of Proposed Services



8. Provide leading practices and experienced advice in

- Insurance risk management
- Commodity risk management
- Business risk management
- Compliance risk management
- Credit risk management
- Market risk management
- Strategic business risk management

SMUD has an extensive background in running an Enterprise Risk Management Office in the utility industry. Many identified risks from our regulatory, resource planning, power generation, rate setting and billing areas apply directly to CCEs. SMUD's processes are already tailored to the unique risk profile facing nonprofit utility companies and SMUD staff has the experience and knowledge to identify and assess risks specific to CCEs.

Incorporating an Enterprise Risk Management approach with the other services provided by SMUD will provide VCEA with enhanced visibility to their overall risk exposure and offer opportunities to identify and implement changes that can positively impact VCEA's risk position.

5. Description of Proposed Services

E. Operational Services

SMUD is prepared to offer VCEA executive, managerial, staffing and professional services for all of the critical and operational functions of the CCE. This offering is outside of the scope of the RFP for CCE services, and it is envisioned this service may begin immediately after the launch services are complete.

The proposed offering spans the major functional areas for CCEs, including executive services, finance and administration, marketing and public affairs, regulatory, power resources, and administrative support. For legal services, SMUD proposes VCEA contract for outside independent legal counsel, which is not priced into this component.

SMUD is open to negotiating the structure for staff in the final agreement, including for in-house staff not included in this proposal. SMUD envisions using existing staff to be repositioned to work on VCEA related tasks. SMUD employees who are staffed for VCEA functions will remain employees of SMUD. Decision-making and policy-setting responsibility remains solely within the power of VCEA Board and management.

Beyond staffing, SMUD is prepared to offer a suite of professional services including accounting, technical, regulatory, human resources, information technology, customer program development and operation, printing services, general & administrative, financial reporting, collections and other services as needed. SMUD is also available to help bring facilities, human resources and information technology online.

In addition, as noted separately, SMUD is proposing a comprehensive suite of wholesale energy services with the associated, planning and reporting functions. Also, in response to Section 3 of the RFP, SMUD is proposing ongoing back-office and customer service functions.

SMUD envisions the cost for providing these services will be slightly lower than the reasonable costs that would be incurred by a similarly sized internally staffed CCE in PG&E's territory, due to economies of scale with SMUD's existing operations. SMUD will bring its industry expertise, helping VCEA function with best-in-class standards. From superior customer service, innovative distributed energy resource development and renewables leadership, SMUD is available to help VCEA maximize the value it returns to Yolo County and future customers.

On particular subjects, SMUD may subcontract for services. All sub-contracting will be clearly delineated to VCEA. One area that may require subcontracting is regulatory of specific CCE matters, where SMUD would contract with outside consultants that have significant experience representing CCE programs to State regulatory agencies. SMUD has significant experience and expertise reviewing PG&E cost allocation and can assist with the regulatory processes that determine which costs are passed onto VCEA ratepayers.

Through this offering, SMUD is committed to advancing the values and policy direction of VCEA. SMUD is prepared to provide cost effective renewable electricity supply and partner with individual member jurisdictions and their businesses, institutions and energy users to maximize local economic impact and GHG reductions.

SMUD is open to one agreement that covers both launch and post-launch activities. This proposal allows VCEA to staff up flexibly, allowing the organization to lean on SMUD for services that do not require a full-time staff person while still providing highly-skilled services.

5. Description of Proposed Services

Executive, Managerial and Staff Areas Offered

- Operations Direction
- Finance and Administrative
- Marketing and Public Affairs

Professional Services Offered

- Accounting
- Technical
- Regulatory
- Human resources
- Information technology
- Customer program development and operation
- Printing Services
- General & administrative
- Financial reporting
- Collections
- Other services as needed

SMUD will provide three management level staff members to be solely focused on the operations of VCEA. Additionally, SMUD will provide an administrative staff person to support the VCEA team. SMUD will work closely with VCEA management to ensure that the right skillsets and

cultural fit are brought to the table as contributors to the VCEA executive team. The cost for these employees will be all-in, including benefits, retirement, payroll tax, worker's compensation insurance, human resources and time off.

Sonoma Clean Power budgeted for additional expenditures in their FY 2016-17 budget. This comparison is solely a like-for-like comparison. Additionally, if VCEA wishes to employ additional staff beyond the SMUD proposal, that would be additive to the budgeted staff line.

Location

It is envisioned that VCEA staff would be located in Yolo County, with office space obtained in-jurisdiction. VCEA staff may utilize SMUD meeting space if needed and available. As part of the budget, VCEA will have reasonable on-site IT infrastructure setup.

Duration

SMUD proposes a five-year services contract with an off-ramp at three years.

5. Description of Proposed Services

F. Advanced Energy Solutions

What sets SMUD apart from others is our proven ability to deliver an extensive range of complementary advanced energy services and programs, in addition to the start-up and operational services proposed.

Leveraging SMUD's experience and expertise, we can help VCEA quickly develop a range of advanced energy solutions for customers in Yolo County. SMUD would welcome the opportunity to work with VCEA to develop a scope of services to provide the following supplemental services:

- Innovative energy efficiency and customer program development.
- Research and development demonstration projects and pilots that utilize cutting-edge technology.
- Local renewable development projects and procurement mechanisms for solar and biomass.
- Integrated distributed energy resources (DERs) initiatives that deliver efficiency, responsive loads, renewable energy and electrification packages.
- Transportation and building electrification offerings to accelerate decarbonization of the community energy system.
- Marketing, communications and community outreach.

This section outlines SMUD's experience, expertise and accomplishments in the advanced energy solution areas mentioned above.



5. Description of Proposed Services

Innovative customer program development

SMUD has over 40 years of experience in developing and operating innovative energy efficiency programs and services. Evidence of program success includes high program participation rates, energy savings, carbon reduction, recognition for our innovations, and outstanding customer loyalty and satisfaction. SMUD has built strong relationships with our customers by tailoring programs to meet the specific needs of the community. Our primary driver has been to meet the needs of our customers – not profits or shareholder returns. In 2016, more than 430,000 customers participated in SMUD programs (many participated in more than one program).

As a community-owned organization, SMUD's goals and motivations are very closely aligned to those of VCEA and there is a natural fit in providing additional services to meet VCEA's long-term needs for customer programs and services. SMUD can help VCEA enhance its relationship with customers and community through innovative programs that will help lower their energy bills, reduce their carbon footprint and improve their quality of life.

Working with VCEA we would apply our expertise in data analytics, customer segmentation, marketing, strategic analysis and research and development to provide a variety of customer program options that will maximize local impact and GHG reduction. We have extensive experience convening community groups, surveying customers, facilitating focus groups, crowd-sourcing ideas and leveraging online customer research panels to gain a deep understanding of community and customer needs or test new product concepts. When VCEA is interested in creating a new program or initiative to meet a customer need or to demonstrate an emerging technology, SMUD's team

will work with VCEA to develop program goals and to create an implementation plan to deliver on VCEA and customer objectives.

While helping VCEA harness the advantages of global innovations and advances in emerging energy technologies through partnerships with residential, commercial and agricultural customers, SMUD will be responsive to local concerns, creating the greatest value for VCEA customers. SMUD can support VCEA leadership in the promotion and adoption of electric transportation, energy efficiency and clean energy investment in the community. This will facilitate customer investment in existing building infrastructure, which will help to retain local jobs as well as promote local job growth.

SMUD currently offers the following customer programs which could be tailored to meet the local needs of VCEA customers:

- **Energy Efficiency** – a variety of programs covering all customer segments. These programs provide energy savings, reduced bills and improved customer comfort and satisfaction.
- **Electric Vehicles/charging infrastructure** – with a growing number of electric vehicles on the road, SMUD is promoting installation of charging infrastructure and initiatives to reduce greenhouse gases, increase electricity sales and reduce greenhouse gas emissions.
- **Demand response/connected home** – provide opportunities for customers to reduce electrical loads during peak periods through several avenues including smart thermostats and other load control technologies.
- **Community Solar** – providing solar energy opportunities in communities we serve.

5. Description of Proposed Services



- **Financing for energy efficiency programs** - to enable more customers to participate in our energy efficiency programs to reduce energy usage and greenhouse gas emissions and help customers save money.
- **Greenenergy** – residential customers can purchase 100% renewables. Commercial customers can purchase blocks of green energy.
- **Advisory services** – work with customers to provide energy information and tools to save energy and reduce utility bills.
- **Low-income weatherization** – provide free weatherization services to low income customers. This helps customers reduce energy use, and save their limited resources.
- **Education/outreach** – extensive education, outreach and marketing programs to educate and inform our customers on a variety of energy-related subjects to help them make informed choices about energy use.
- **Water district rebates** – rebates focused on the specific needs of water agencies.
- **Building electrification** – promote all-electric residential new construction to help meet GHG goals and promote net-zero energy homes. Provide heat pump water heater rebates and commercial electrification incentives.
- **Storage (battery and thermal)** – develop initiatives to work with customers to promote energy storage and coordinate storage to meet utility and customer needs.

SMUD's takes a win-win approach to program design. For example, our energy efficiency programs are designed to lower a customer's energy bills at peak, thereby lowering commodity costs which benefit all customers.

Pipeline projects, such as the SMUD Energy Store, scheduled to launch in late 2017 also hold significant potential for VCEA. The SMUD Energy Store is an online ecommerce website offering customers energy-related and smart-home products and services—with instant online rebates in the shopping cart—that can be delivered directly to them.

5. Description of Proposed Services

R&D Demonstration Projects

SMUD has extensive experience with research and development projects and programs having completed hundreds of demonstrations over the past 20 years. Our experience runs the complete lifecycle of R&D projects – grant applications, managing grant funding, grant reporting and applying advanced energy technology learned through R&D projects to customer products and services.

Most of SMUD’s R&D demonstration projects are done in partnership with our customers and span a variety of technology areas, including energy efficiency, electric transportation, demand response, climate change, energy storage, and distributed generation and renewables. Some examples of SMUD’s current research efforts include:

1. Energy efficiency

We test emerging energy efficiency products such as advanced lighting, air conditioning, building shells, motors and industrial processes. Examples of technologies tested and new tools include circadian lighting to improve sleep patterns for Alzheimer’s patients, equipment operating performance and predictive maintenance and efficient heat pump technologies.

2. Electric transportation

We demonstrate and evaluate emerging technologies, software and processes for advancing transportation electrification, including DC fast charging and moving to 400kW super-fast charging and looking ahead, examination of wireless charging and implications of autonomous vehicles. Additional focus areas include advancement of best practices in workplace charging infrastructure, electrification of school and transit buses and vehicle to grid integration.

3. Demand Response

SMUD’s demand response R&D activities focus on meeting the changing nature of modern electric grids which are increasingly managing the two-way flow of energy. Research activities include grid/ancillary services such as fast-response DR and increasing loads during times of negative pricing recognizing that DR will be used in much more flexible ways.

4. Climate Change

R&D climate change activities focus on planning for long-term attainment of SMUD’s sustainable power supply goals and understanding the physical impacts that projected climate changes will have on SMUD’s assets and operations. Major initiatives currently focus on forest health research, natural refrigerants, biosequestration and urban heat island reduction.

5. Energy Storage

Demonstration projects include thermal and electrical energy storage systems to reduce energy and demand costs and enhance electricity system reliability as reliance on intermittent renewable generation increases. New utility/customer partnerships will be developed where SMUD schedules and dispatches customer-sited storage (for both residential and commercial customers). Energy storage will help increase the value of the existing distribution system by reducing or delaying upgrades, shifting peak demands at feeder and transformer levels and improving overall system load factors. We are also evaluating and testing new rate structures & programs for shared customer-utility value, and technology integration with other DERs such as PV, EV and EE technologies.

5. Description of Proposed Services

6. Distributed Generation & Renewables

SMUD provides leadership in evaluating and demonstrating opportunities for cost reduction, operational efficiencies and increased efficiencies and value from Distributed Generation (DG) and renewable energy technologies. Other services include modeling, forecasting tools/methodologies that allow appropriate DG interconnection and development tools to evaluate technologies and/or methodologies for cost effective DG operations.

7. Grid Modernization

SMUD conducts pilot tests on technologies that improve grid performance and facilitate the effective management of a growing number of DERs on the electric grid. Projects include identifying the locational value of DERs, testing smart inverters (communications and functionality), implementing projects that will prepare SMUD for the transactive grid, testing grid hardware and software products that improve grid performance, reliability and safety and analyzing and mitigating the impacts of DERs.

Similar R&D initiatives can be tailored to meet the unique needs of VCEA and its customers, helping to position VCEA as a leader in bringing new technologies and initiatives into the marketplace.

Grants

SMUD has extensive experience writing grant proposals being awarded and then managing grants. We have received grants totaling more than \$200 million from the US Department of Energy, the

California Energy Commission, the California Public Utilities Commission, the American Public Power Association and others. SMUD also has extensive experience partnering with other entities—universities, research labs, customers, consultants and others to apply for, win and deliver grant-funded research projects.

Under the Smart Grid Investment Grant (SGIG), SMUD was awarded \$127.5 million to help fund a \$308 million smart grid project. This five-year project was widely recognized as one of the premier smart grid projects in the United States. Other grants have included work with electric vehicles, micro grids, photovoltaic research, biomass generation, grid modernization, energy efficiency and energy storage.

SMUD's grant experience can be leveraged to benefit VCEA and its customers. SMUD staff monitors grant announcements and the partnership with VCEA will open up new opportunities for grants that will focus on the needs of VCEA.

Local Renewable Development Projects

SMUD has a long history of renewable project development dating back more than 30 years to our first solar project. SMUD staff has experience with wind development, landfill gas projects, dairy and food waste digestion and community solar projects. We've developed these projects through a variety of mechanisms -- from building them ourselves, to RFPs, to feed-in-tariffs to our most current innovative approach of a land RFO to secure disturbed lands and parking lots for expansion of our SolarShares program. This direct experience will be available to VCEA to develop potential community energy solutions that directly demonstrate the value to customers.

5. Description of Proposed Services

Varied and in-depth knowledge in research, development, demonstration and deployment of renewables including biomass, solar, wind, geothermal and hydro, SMUD subject matter experts have expertise in:

- Providing technical evaluation of legislative and regulatory proposals related to renewable energy and the RPS.
- Conducting resource assessments and technical and economic feasibility studies.
- Planning for long-term attainment of renewable energy supply goals.

SMUD's Power Generation Project Development group was responsible for developing all three phases of SMUD's 230 MW Solano Wind Project near Rio Vista, and for development of the 11 MW Rancho Seco Solar project, completed last year at the location of SMUD's closed Rancho Seco Nuclear Generating Station. The Development group is currently planning for the possible addition of up to 90 MW of solar at the Rancho Seco site. In support of these projects, the Development group brings together a multi-disciplinary team from other SMUD departments including Environmental Services, Treasury, Resource Planning, Real Estate Services and Energy Commodity Contracts to coordinate various development-related matters. This approach has allowed SMUD to develop renewable resources at the lowest possible costs.

Examples of other completed local renewable development projects include:

- Delivery of a Community Renewable Energy Deployment (CRED) program that completed four innovative local renewable energy

projects through collaborative partnerships with technology developers and local entities, leveraging grant funding from the US Department of Energy. The projects provided 5.6 MW of additional clean energy generation. These projects included local renewable resources such as waste biomass and solar PV that delivered electricity to SMUD's grid. These CRED projects brought local economic and environmental benefits through the creation of jobs, increased tax revenue for the community, and supplemental revenue for dairy farmers, by transforming existing infrastructure and problem wastes into sustainable energy resources.

- Van Steyn Dairy Digester, Elk Grove. Commercial operation of this covered lagoon digester system began in 2015 with a generating capacity of 225 kW. Five of California's digesters are operating in SMUD's service territory -- far more than anywhere else in the state (33% of operational digesters are in SMUD's region).
- SMUD also executed contract amendments for extended procurement of renewable resources from the Kiefer landfill (landfill gas to energy in County of Sacramento).
- Completed the installation of 100 tons/day biodigester using food wastes at Sacramento Area Transfer Station for CNG and power production.
- SMUD has added 10.3 MW of behind-the-meter renewable systems through interconnection and incentive payment agreements with our customer-owners. 7.6 MW of these systems have been certified by the CEC and registered in WREGIS.

5. Description of Proposed Services

SMUD offers a range of renewable energy development services:

- **Develop plan for facilitating local renewable development.** SMUD would begin by assisting VCEA in developing a Local Renewables Development plan. The plan would establish the goals that VCEA has for local renewable development, and will lay out expectations and limitations. Included in this would be the scoping of the project development tasks and defining the various roles and responsibilities assumed VCEA and SMUD staff.
- **Site assessment and scoping. Possible site acquisition.** SMUD will work with VCEA to develop criteria for site suitability. SMUD can provide and coordinate a site search, contact land owners and conduct field activities to assess suitability. Sites can be secured through purchase by VCEA or by entering into lease options with landowners. Alternatively, VCEA may decide to rely on renewable developers.
- **Issue and manage competitive local renewables solicitations.** To get the best price (low cost and high value), SMUD typically uses competitive solicitations to select and award to renewable developers. Under this task, SMUD will assist VCEA in developing, issuing, and managing requests for proposals. SMUD will assist in the bid evaluation, short-listing and term sheet development with the short-listed developers.
- **Draft and negotiate local renewable PPAs.** SMUD can assist VCEA in negotiations and PPA development with selected renewable developers.



5. Description of Proposed Services

Feed-In-Tariff (FIT) Management

A feed-in-tariff program can be a very effective approach to procuring and promoting the development of local renewable energy projects. The FIT process can be very efficient because of the streamlined contracting process. There is not much PPA negotiation because of the development up front of a standard form PPA contract.

SMUD has direct experience developing, launching, and managing a solar FIT. In 2010, SMUD launched its FIT, seeking 100 MW of local, utility-scale renewables. As a result of the effort, 98.5 MW of local solar was installed.

Develop FIT Tariff, Rules, Procedures and PPA.

Working with VCEA to refine its goals for a FIT, SMUD will propose and design rates for a FIT tariff. Once the rate strategy is set, SMUD would design the tariffs and rules around the FIT rate availability. SMUD would also develop procedures for managing the FIT applications and would develop the standard FIT PPA template, which would be used for all FIT providers.

Manage FIT Enrollments, FIT Queue, PPA

Execution. SMUD will assist VCEA in managing the running of the FIT program, which includes taking applications, establishing and managing the FIT priority queue, managing developer milestones and PPA execution with developers.

Manage FIT PPA Administration. Once the FIT PPAs are executed, SMUD will provide services to VCEA to administer the PPAs. This includes coordinating with FIT developers as they work to achieve PPA pre-commercial milestones to ensure:

- Developer compliance with requirements to register the projects with the CEC as qualifying RPS projects.
- Project registration in WREGIS.
- The project obtains full RPS certification after COD.
- Manage the anticipated requests from developers for project specific lender consents (as part of project financing, developers will need to give financing parties the right to step into the PPA contracts, in the event of developer default).

FIT contract administration services provided by SMUD would end upon the later of project COD or approval of full RPS certification by the CEC.

5. Description of Proposed Services



DER Strategy Development

SMUD has for the past several years been building a comprehensive DER strategy team that examines all aspects of how DERs are changing our industry and examines opportunities to leverage these technologies to deliver greater benefits to the community through improved reliability and affordable rates.

We have done deep analysis of the combined impacts of DERs on our system and are evolving many of our rates and planning processes to influence optimal outcomes. This strategy development could be applied to VCEA's operations to create new opportunities and capture greater value for the VCEA community. This type of strategy development can also strengthen VCEA's voice in the state energy policy realm to ensure fair treatment and access to opportunities that keep more value in the community.

In June 2017, the Smart Electric Power Alliance (SEPA) and engineering firm Black & Veatch released a report that studied DERs and SMUD's efforts to bring customer-sited DERs into long-range resource plans. The report was based on more than a year of work integrating dozens of different sources of data about customers, and using it to predict how different neighborhoods will adopt DERs at different rates over the next decade or so.

SMUD worked with Black & Veatch for two years as part of SEPA's "Beyond the Meter" research into how utilities can plan proactively for a distributed energy future. The latest report, the fifth in the series, is the first time SEPA has been able to apply its new concepts to a real-world utility.

5. Description of Proposed Services



Some of the key findings of the study include understanding how the right combinations of technologies might be able to mitigate ramping associated with large amounts of solar, how much work remains to be done in aligning rate structures to get appropriate shared value from DERs, and overall, how important improving our ability to predict DER adoption will be to making the right infrastructure investments in the future.

Industry media, including Greentech Media, Smart Grid Today, PV Magazine, Daily Energy Insider, Renewable Energy News and APPA published articles about the report.

When working with VCEA on emerging technologies and new business models, our program team can work directly with customers to analyze, test, demonstrate and pilot new products and services. Our creative and dedicated team aims to deliver value to all areas of VCEA and its customers. Our vision is simple - provide innovative and sustainable business opportunities for VCEA through data-driven research and deliver proven solutions for implementation. Our team is frequently recognized for its outstanding research and creative solutions for challenging business problems. The team consists of highly skilled individuals from a variety of backgrounds in engineering, economics, industry, utilities and academia.

5. Description of Proposed Services



G. Marketing and Community Outreach

SMUD understands that VCEA has contracted with a vendor for initial launch services. This option is provided as an augmentation for initial services or as operational support during subsequent years if VCEA so chooses.

Marketing

SMUD's team of highly experienced marketing professionals consistently produces high-quality communications materials, award-winning multimedia campaigns, digital content and creative community outreach. We use fully integrated marketing, graphics, social media, video, news media and community engagement strategies to inform, educate and motivate our customers to take action. We take complicated information, make it relevant to customers and make sure they will see or hear messages that promote programs, services and brand image in the channels they prefer. Customer segment strategies are informed by

extensive market research and data analysis.

SMUD can help VCEA continue to present a consistent brand identity across all channels by utilizing the established brand, voice, look and feel for VCEA. Our branding team has over 50 years of brand experience in the energy industry and SMUD earned the highest score in the nation for "brand trust" among U.S. utilities in 2017.

SMUD's team of marketers and copywriters works closely with our in-house graphic design team to create visually appealing and easy-to-digest marketing and communications materials to support more than 70 programs and services and other corporate initiatives.

SMUD's team of highly skilled digital and user experience professionals can provide VCEA the timely and professional delivery of ongoing website updates and enhancements as well as email marketing campaign support.

5. Description of Proposed Services

Market Research

Market research supports marketing and operations with empirical data, customer experience and customer satisfaction information to ensure alignment between our programs and services and customer needs. In-house market research capabilities include traditional surveys, real-time online research communities, focus groups and others. Insights from data collected are used to support marketing, communication, strategic planning, program development and operational functions. We consistently track and adjust campaigns based on best-practice metrics, utilizing Google Analytics, Tableau Dashboard data visualization and other tools.

Community Outreach

As a community-owned utility, our customers and community are at the heart of all we do at SMUD. SMUD can leverage its versatile and strategic staff of community engagement professionals to ensure that VCEA continues to engage, inform and support the community after initial launch. With a 70-year history of community and stakeholder engagement, SMUD's community involvement is critical to our identity as a community-owned utility.

We can help VCEA identify short and long-term activities to build a solid foundation of trust among the community and stakeholders for long-term viability. Through stakeholder research and engagement, sponsorships and events, a speakers' bureau, multicultural outreach, customer and student education programs and other direct communications, we can tailor and refine a strategy specific to VCEA's customers and community.



5. Description of Proposed Services

Communications

SMUD's reputation for progressive electric utility industry leadership has been cultivated in large part, by SMUD's communication efforts and we can extend that support to VCEA. We have the in-house capabilities to produce professional-quality videos to further communicate VCEA's message, and educate customers on key programs and initiatives.

SMUD's social media expertise has developed thousands of followers across multiple social media platforms over nearly 10 years. SMUD has a robust understanding of social media methods, like the appropriate use of certain energy-focused hash tags and access to energy industry thought leaders who can help promote VCEA's ongoing social media growth.

We can develop a series of news releases, op-eds and other types of content to effectively tell the story of VCEA and how it's helping customers and the community with the formation and growth of this CCE.

Commercial Energy Advisory Services

SMUD is able to provide Strategic Account Advisory services. Our Strategic Account Advisors (SAA) work closely with the commercial and industrial customer segments to help customers achieve their energy and bottom line goals. This team meets with commercial and industrial customer organizations to address their daily operational concerns, discuss utility rate

structures, and identify changes that can save them money and energy through the promotion of a suite of programs and services. This team also facilitates the development of special pilot programs and projects for and with customers that have niche needs not met through the existing suite of programs.

SAA's work closely with customers to ensure that we meet their needs while also aligning with organizational goals. By earning the trust of these customers through consistent performance and meaningful support, SAA's are invited to join in the early stages of projects or initiatives, so that they are able to gain valuable insights into the motivations and challenges the customer is facing. In turn, the SAA is then able to bring that information back to program managers to customize offerings to that customer or segment. This partnership with both the customer and the program team leads to higher customer satisfaction and greater program enrollment.

For VCEA we believe this will result in higher customer loyalty, lower rate of defection and a growing enthusiasm for expanding the footprint and service offerings of VCEA. Furthermore, there are opportunities to create synergies between the commercial customer and VCEA which, in turn, can provide benefits to all VCEA customers.

SMUD can customize these services and programs to meet the specific needs of VCEA.



6. Implementation Plan and Schedule

6. Implementation Plan and Schedule

The implementation schedule assumes a June 1, 2018 launch date, however, SMUD is willing to accommodate alternative launch dates upon discussions with VCEA. SMUD's scope of services will be delivered in three phases as detailed below:

- **Phase 0: Initiation after tentative agreement (8/17 – 9/30/17)**
- **Phase I: Program Launch Activities (10/1/17 – 6/1/18)**
- **Phase II: Program Operations (Ongoing after 6/1/18)**

SMUD took several risk factors into consideration and conducted a high-level launch date analysis to develop the proposed VCEA Program Launch timeline. SMUD's Energy Trading & Contracts team evaluated the best opportunities for initial renewable power purchases and our Finance team paired this data with estimated kWh demand for each customer segment to ensure VCEA would be able to build up initial working capital during the critical summer months. Our Community Engagement, Customer Call Center, and Marketing teams also evaluated timing of launch to ensure that VCEA's customers will be well informed before Program launch. SMUD's Data Management team developed several options for back office implementation to ensure we deliver a robust CIS, billing, and reporting architecture that can meet the needs of VCEA's program launch and future customer program options.

SMUD has already identified key personnel to delve into the requirements outlined in the RFP and will work closely with VCEA to further detail

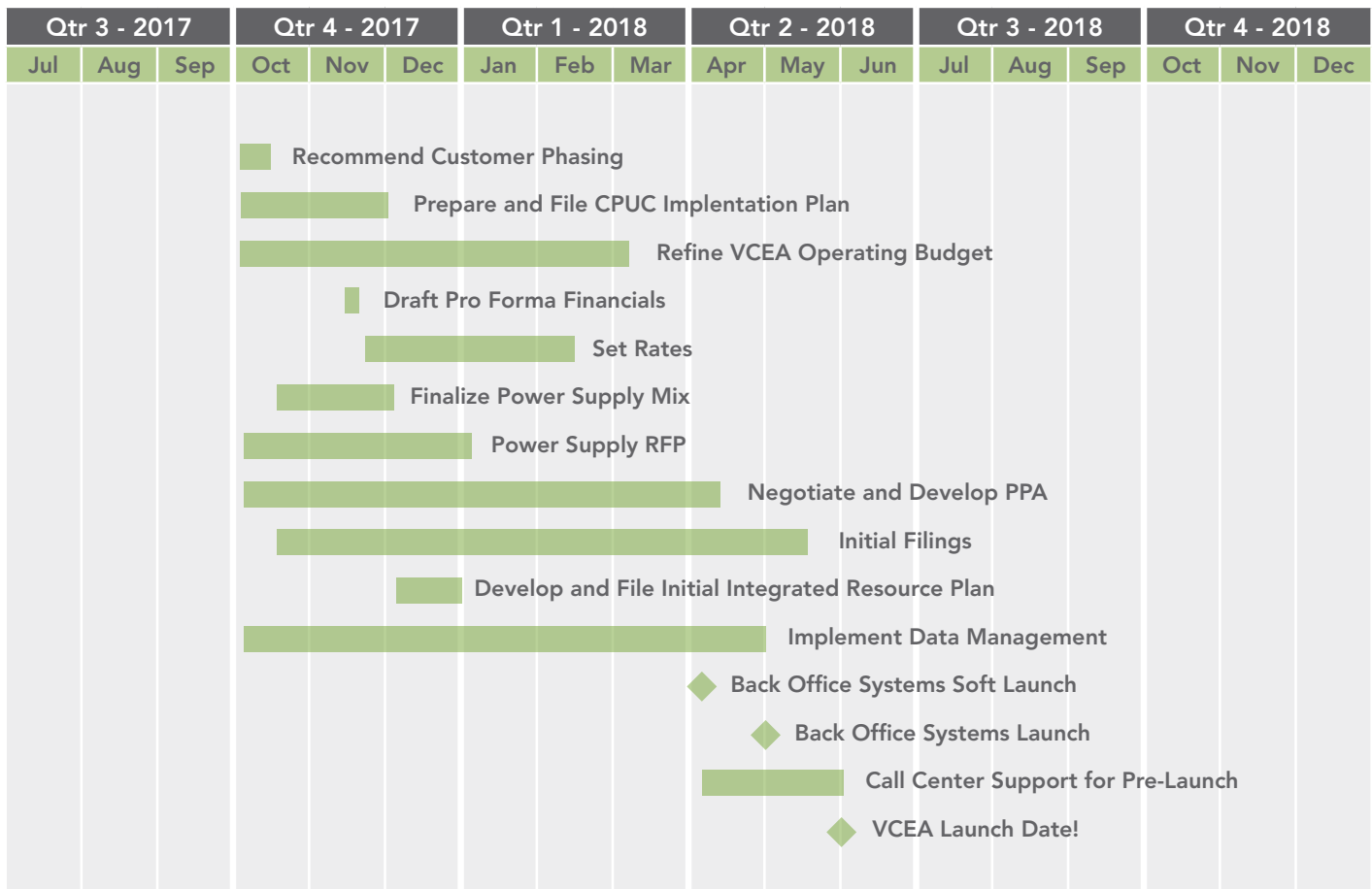
requirements for Program Launch. SMUD has the unique expertise to meet the breadth of VCEA's needs and provides many of the same award-winning services to our customers today:

- Trusted experience with CAISO and CPUC regulatory requirements
- Integrated resource planning and energy procurement
- Rate setting, design and sensitivity analysis
- Annual budget planning and financial analysis
- Community engagement, marketing and communications
- CRM, billing, and data exchange services
- Customer programs to help reduce energy use and costs
- Call Center operations
- WREGIS reporting

VCEA can have confidence in SMUD's ability to deliver these services. SMUD has a robust enterprise project management process in place, governed by Enterprise Performance to drive results and mitigate risks. SMUD understands that we only have one opportunity to make a good first impression on the VCEA community and will keep client and customer satisfaction top of mind in all aspects of the Program Launch. We will provide Victoria Zavattero as the VCEA program director and Michelle Yung as the dedicated VCEA project manager. Along with these dedicated resources, SMUD will provide highly experienced staff from the appropriate areas of our organization to ensure that deliverables are met. (Refer to the Key Personnel section for a full list of resources and experience.)

6. Implementation Plan and Schedule

Phase 1: Program Launch Activities - Proposed Timeline



It is anticipated that upon tentative agreement (August 2017) SMUD will immediately begin work on all lines of effort, accelerating the schedule listed above and shifting the start date and all dependencies by the corresponding time.

6. Implementation Plan and Schedule

Major Tasks and Responsibilities

ID	Name	Duration	Start	Finish	Involved Parties
0	VCEA CCE Launch	175 days	10/02/17	06/01/18	
1	Technical & Energy Services	165 days	10/02/17	05/18/18	
2	Recommend Customer Phasing	2 wks	10/02/17	10/13/17	VCEA, SMUD
3	Prepare and File CPUC Implementation Plan	9 wks	10/02/17	12/01/17	SMUD
4	Refine VCEA Operating Budget	112 days	10/02/17	03/06/18	VCEA, SMUD
5	Develop Operating Budget Template	4 wks	10/02/17	10/27/17	SMUD
6	Calculate VCEA Operational Costs	2 wks	10/02/17	10/13/17	VCEA, SMUD
7	Obtain Load Data From VCEA	1 wk	10/02/17	10/06/17	VCEA, SMUD
8	Build Load Forecast	4 wks	10/09/17	11/03/17	SMUD
9	Develop Revenue Forecasts (PG&E Rates)	1 wk	11/06/17	11/10/17	SMUD
10	Obtain Default Energy Costs	1 wk	11/06/17	11/10/17	SMUD
11	Finalize Operating Budget	3 wks	02/14/18	03/06/18	VCEA, SMUD
12	Draft Pro Forma Financials	1 wk	11/13/17	11/17/17	SMUD
13	Set Rates	62 days	11/20/17	02/13/18	VCEA, SMUD
14	Develop Rate Options	2 wks	11/20/17	12/01/17	VCEA, SMUD
15	Finalize Rate Options	2 wks	01/03/18	01/16/18	VCEA, SMUD
16	Rate Approval Process	4 wks	01/17/18	02/13/18	VCEA, SMUD
17	Finalize Power Supply Mix	7 wks	10/16/17	12/01/17	VCEA, SMUD
18	Power Supply RFP	67 days	10/02/17	01/02/18	SMUD
19	Draft RFP	4 wks	10/02/17	10/27/17	SMUD
20	Release RFP	1 mon	11/01/17	11/30/17	SMUD
21	Bid Evaluation	4 wks	12/04/17	12/29/17	VCEA, SMUD
22	Short List Bidders	1 day	01/02/18	01/02/18	VCEA, SMUD
23	Negotiate and Develop PPA	140 days	10/02/17	04/13/18	SMUD
24	Draft Master PPA Framework	1 wk	10/02/17	10/06/17	SMUD
25	Conduct Negotiations with Suppliers	3 mons	01/08/18	03/30/18	SMUD
26	Finalize Contracts (Including Approvals)	2 wks	04/02/18	04/13/18	VCEA, SMUD
27	Initial Filings	155 days	10/16/17	05/18/18	SMUD
28	CAISO Registration	6 mons	12/04/17	05/18/18	SMUD
29	PG&E Service Agreement	2 wks	10/16/17	10/27/17	SMUD
30	Bond Posting	1 wk	04/09/18	04/13/18	SMUD
31	Develop and File Initial Integrated Resource Plan	1 mon	12/04/17	12/29/17	SMUD
32	Data Management and Call Center Services	174 days	10/02/17	06/01/18	
33	Data Management	151 days	10/02/17	05/01/18	
34	Analysis & Design	2 wks	10/02/17	10/13/17	VCEA, SMUD
35	Development/Unit Testing	13 wks	10/02/17	12/29/17	SMUD
36	Development/Integration Testing	5 wks	01/01/18	02/02/18	SMUD
37	User Acceptance Testing (UAT)	8 wks	02/05/18	03/30/18	VCEA, SMUD
38	Back Office Systems Soft Launch	0 days	04/06/18	04/06/18	SMUD
39	Back Office Systems Launch	0 days	05/01/18	05/01/18	SMUD
40	Customer Call Center	109 days	01/01/18	06/01/18	
41	Set up IVR	1 mon	01/01/18	01/31/18	SMUD
42	Develop CSR Training	3 wks	02/01/18	02/21/18	SMUD
43	Staff Call Center	2 wks	02/22/18	03/07/18	SMUD
44	Train CSRs	1 wk	03/08/18	03/14/18	SMUD
45	Call Center Support for Pre-Launch	2 mons	04/06/18	06/01/18	SMUD
46	VCEA Launch Date	1 day	06/01/18	06/01/18	VCEA, SMUD

6. Implementation Plan and Schedule

SMUD will provide continued support for ongoing activities and systems during Phase II: Program Operations and will work with VCEA to ensure we meet necessary response times.

This proposal includes several additional services SMUD could provide to VCEA (section 5 F). We would welcome the opportunity discuss the scope of these services and delivery dates to meet VCEA's needs.



7. Credentials



A. Awards

SMUD is a recognized industry leader in many areas, has received numerous environmental leadership and customer satisfaction awards over the years. Significant awards received in recent years include:

Cogent Reports study by Market Strategies International

2017 Utility Most Trusted Electric Utility Brand in the nation among residential customers

J.D. Power and Associates Electric Utility Customer Satisfaction Study

Ranked #1 in California for 16 years in a row in Overall Residential Customer Satisfaction.

Ranked #1 in California 11 of the past 12 years in Overall Commercial Customer Satisfaction.

Ranked #1 nationally in 2014 and 2016 for Overall Commercial Customer Satisfaction.

Ranked #1 nationally in 2014 and 2016 for Corporate Citizenship (Commercial Customer) and ranked in the top 2 in the west for the past 12 years for Corporate Citizenship (Residential Customer).

American Public Power Association

2017 Energy Innovator Award for SMUD's service to the public power industry for the Climate Wizard air conditioner system.

7. Credentials

Association of Fundraising Professionals

2017 Outstanding Organization award for SMUD's philanthropic and fundraising efforts.

Alliance to Save Energy

2016 Star of Energy Efficiency for Transportation recognizing SMUD's 25 years of leadership in promoting electricity as a fuel to help improve air quality.

U.S. Department of Energy National Renewable Energy Laboratory – Utility Green Power Programs Rankings

2016 NREL rankings: #2 nationally for Participation Rate (11.72%), Power Sales (741 GWhs), and Sales Rate (7.2%); and #4 nationally in Green Power Participants (71,970).

Training Magazine

2009-2016 SMUD's learning and development program named one of the 125 most successful learning and development programs in the U.S.

Clean Energy States Alliance

2015 Clean Energy Award for SMUD's Community Renewable Energy Deployment Program recognizing SMUD's leadership, effectiveness and innovation in advancing renewable energy and other clean technologies.

ComputerWorld

2014-2015 One of the top 100 Best Places to Work in Information Technology

Community Link

2014 People Helping People Award for Exceptional Community Support. The award honors businesses with long histories of outstanding support for community initiatives, projects, and charities.

Peak Load Management Association

2014 Outstanding Publicly-Owned Utility Demand Response Program Award for SMUD's Smart Sacramento demand response portfolio of 10 research projects.

California Municipal Utility Association

2015 CMUA Resource Efficiency Awards Program entitled "Northern California Solar Regatta" won award in the Community Service Programs category for a large utility.

U.S. Environmental Protection Agency

2015 Energy Star Partner of the Year Award for commitment to saving energy, saving money, and protecting the environment through superior energy efficiency achievements

U.S. Department of Energy and Center for Resource Solutions

2014 Green Power Leadership Award for Green Power Market Development

B. Credentials

The following licenses/certifications/credentials relate to the individual references in Section 4 (Key Personnel) and Appendix B (Additional Resumes) this Proposal and the services supported by each individual.

Key personnel

Michelle Yung, VCEA Project Manager

Certified Project Management Professional – Project Management Institute

PMI Online Credential Registry

Search for Active and Retired credential holders by typing search criteria. Remember, some credential holders opt out of inclusion on the Credential Registry, and will not display.

Last Name: *
First Name:
Country:
Credential:

* indicates a required field

Name	City	Country	Credential	Earned	Status
Michelle Wan Cie Yung	Sacramento, CA	United States	PMP	02 Oct 2010	Active

7. Credentials

Steve Lins, Regulatory & Government Affairs

California State Bar License – The State Bar of California

Steve Lins – The State Bar of California (www.calbar.ca.gov)

Steven Gray Lins - #144642

Current Status: Active

This member is active and may practice law in California.

See below for more details.

Profile Information

The following information is from the official records of The State Bar of California.

Bar Number: 144642

Address:	Sacramento Municipal Utility District 6301 S St Mail Stop A311 Sacramento, CA 95817 Map it	Phone Number:	(916) 732-6274
		Fax Number:	(916) 732-6581
Email:	steve.lins@smud.org		
County:	Sacramento	Undergraduate School:	Univ of California San Diego; La Jolla CA
District:	District 3		
Sections:	Law Practice Mgmt Environmental Law Public Law	Law School:	Loyola Law School; Los Angeles CA

Status History

Effective Date	Status Change
Present	Active
4/2/1993	Active
1/1/1991	Inactive
12/18/1989	Admitted to The State Bar of California

[Explanation of member status](#)

Actions Affecting Eligibility to Practice Law in California

Disciplinary and Related Actions

This member has no public record of discipline.

Administrative Actions

This member has no public record of administrative actions.

Ed Hamzawi, Programs and Services

Registered Professional Mechanical Engineer – California State Board of Registration



7. Credentials

Tanya Andrews, Marketing and Community Outreach

UX Certificate – Nielsen Norman Group

Nielsen Norman Group UX Certificate

This **Certificate in User Experience** is awarded by Nielsen Norman Group,
a world leader in UX design and research, to

Tanya Andrews

in recognition of completing 30 hours or more of rigorous user experience training and passing the related exams. This status demonstrates a high level of dedication to UX education, and a strong commitment to the field of UX. The topics studied provide a solid foundation that rounds out personal, practical experience. This UX Certification (UXC# 1017959) was achieved on 14 June 2017.

We also award the following Specialty designation in recognition of focused studies including 30 hours or more of coursework in these topic areas:
UX Management Specialty


Jakob Nielsen
Principal



Coursework Completed:

Engaging Stakeholders to Build Buy-In
Facilitating UX Workshops
Leading Highly-Effective UX Teams

Lean UX and Agile
Managing User Experience Strategy

For more information refer to: www.nngroup.com/ux-certification

Erica Manuel, Marketing and Community Outreach

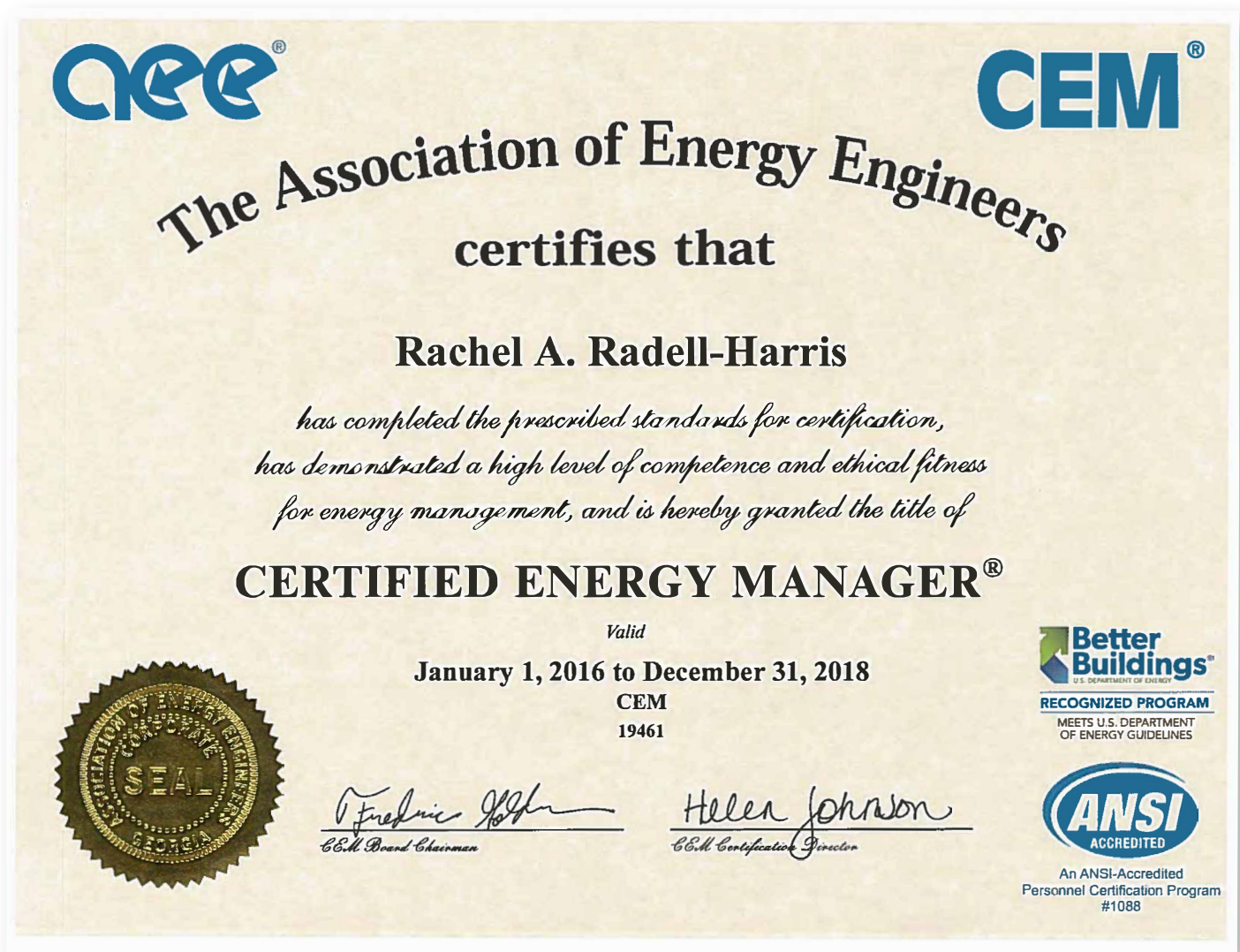
Certificate in Corporate Citizenship Management – Boston College Center for Corporate Citizenship



7. Credentials

Rachel Radell-Harris, Advanced Energy Solutions

Certified Energy Manager – The Association of Energy Engineers



Joseph Penneman, Advanced Energy Solutions

CEM Certificate

My Information

AEE ID: 119325 **Phone:** 916-732-6595
Member Name: Joseph Penneman **Fax:** N/A
Title: Strategic Account Advisor 3 **Email:** joseph.penneman@smud.org
Company Name: Sacramento Municipal Utility District **Member Type:** MEMB/B
Address: 11225 Pecos River Ct.
Rancho Cordova, CA 95670

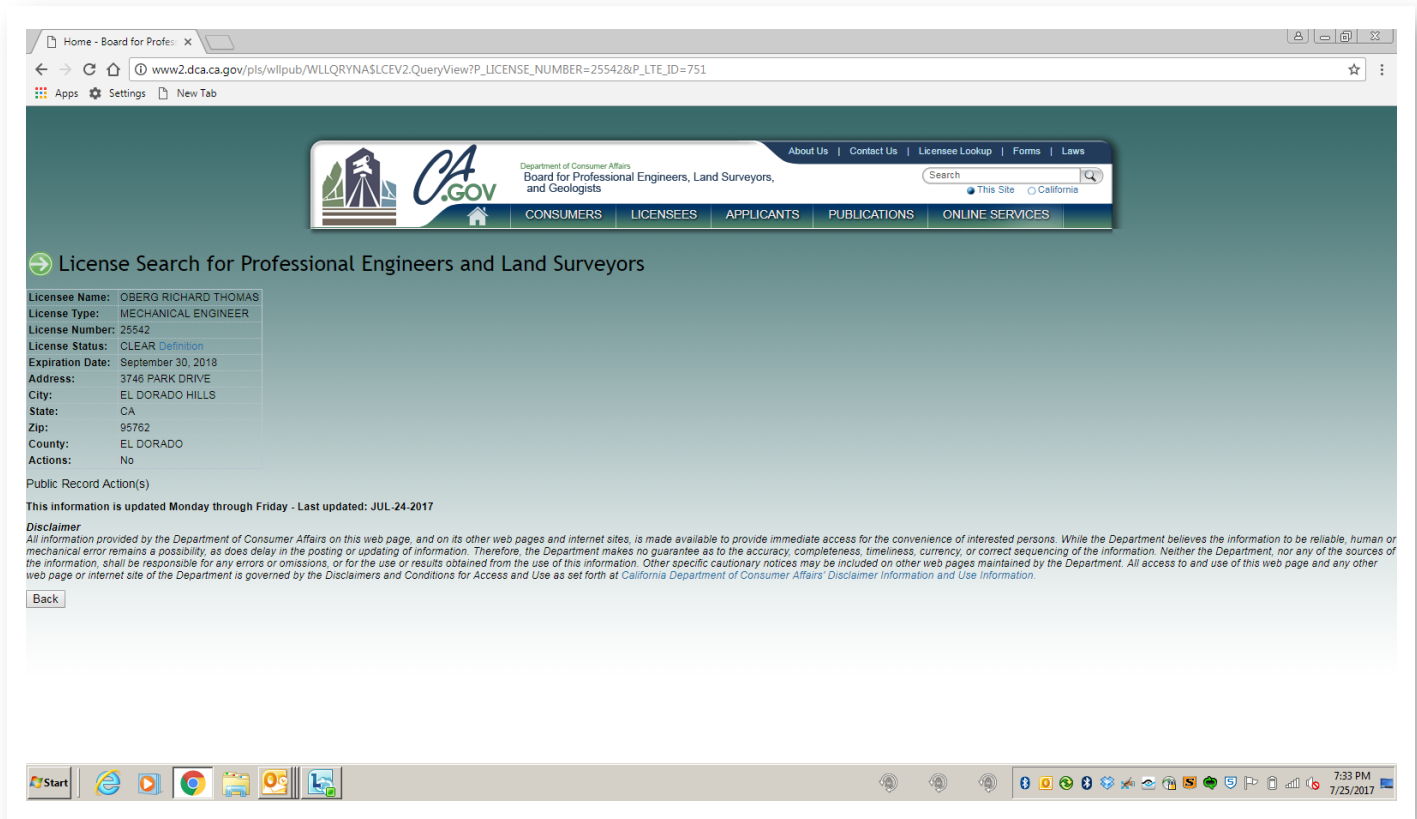
Current Certifications

Certificate Type	Certificate ID	Status	Expires
CEM	23296	Active	12/31/2019

7. Credentials

Richard Oberg, Advanced Energy Solutions

Licensed Mechanical Engineer – State of California



David Doll, WRE Reporting

Certified meter Technician – California Apprenticeship Council



7. Credentials

Ron Jelich, Banking & Finance

Certified Public Accountant – California Board of Accountancy

CALIFORNIA BOARD OF ACCOUNTANCY

Licensee Name:	RONALD STEPHEN JELICICH
License Type:	Certified Public Accountant
License Number:	35077
License Status:	INACTIVE Definition
Experience Completed:	A Definition
Expiration Date:	October 31, 2017
Issue Date:	June 11, 1982
Address:	12057 GOLD POINTE LN
City:	GOLD RIVER
State:	CA
Zip:	95826
County:	SACRAMENTO
Disciplinary Actions/License Restrictions:	No

No records returned

This information is updated Monday through Friday - Last updated: JUL-24-2017



8. Budget Detail

SMUD provides for your consideration:

- 1) **Base proposal pricing – We have provided a comprehensive and competitive pricing package to include our recommended approach for both categories:**
 - a. **Category 1, Technical and Energy Services**
 - b. **Category 3, Data Management and Call Center Services, with Silver Level support**
 - c. **Time and Materials Rates**
 - d. **Payment Terms**

We have also provided pricing for alternate Category 3 service levels and additional services not defined in the RFP, to include:

- 2) **Alternate Category 3 pricing, to include:**
 - a. **Silver Level Support, with PG&E providing the billing services in Task 3.5**
 - b. **RFP Level Support, as per the specifications outlined in the RFP document**
 - i. **SMUD providing all of the services**
 - ii. **PG&E providing the billing services in Task 3.5**
 - c. **Platinum Level Support**
 - i. **SMUD providing all of the services**
 - ii. **PG&E providing the billing services in Task 3.5**
 - d. **In addition to these options, SMUD is willing to work with VCEA on a customized offering to balance customer service level and cost.**
- 3) **Additional Services not defined in the RFP**
- 4) **Operational Services not defined in the RFP**

PLEASE NOTE:

SMUD can provide pricing for any task within Category 2: Community Outreach, Marketing and Customer Notification upon VCEA request.

8. Budget Detail

1. Base Proposal Pricing

a. Service Category 1

Service Category 1: Technical & Energy Services Launch Services				
Item No.	Task	Pricing Basis	Amount	Amount w/WES*
1.	1.1 Expert Resource on Energy Markets	Time and Materials. Estimate assumes 50 hours	\$9,500	\$9,500
2.	1.13 Participation in governance/ advisory meetings	Time and Materials. Estimate assumes 100 hours	\$15,000	\$15,000
3.	1.2 Customer Phasing Schedule 1.3 Operating Budget 1.8 Program Financing and Banking Services 1.9 Prepare Tariffs	Time and Materials.	\$47,500	\$47,500
4.	1.5 Power Supply Mix and Energy RFP 1.6 Bid Evaluation 1.7 Master PPA and Term Sheets, Negotiations	Time and Materials, Not to Exceed.	\$95,000	Included in WES
5.	1.4 Implementation Plan 1.10 PG&E, CA PUC, CAISO registrations	Time and Materials, Not to Exceed.	\$30,000	\$20,000
6.	1.11 Initial Integrated Resource Plan	Time and Materials, Not to Exceed.	\$75,000	Included in WES
7.	1.12 Post-launch Integrated Resource Plan	Time and Materials, Not to Exceed.	\$50,000	\$50,000
TOTAL ESTIMATED COST SERVICE CATEGORY 1, LAUNCH SERVICES:			\$322,000	\$142,000

*Amount w/ WES column reflects the reduction in Category 1 Services pricing if the Wholesale Energy Services proposal is chosen.

b. Service Category 3

Service Category 3: Data Management and Call Center Services				
Tasks	Price			
3.1 Electronic Data Exchange 3.2 Qualified Reporting Entity 3.3 Customer Information System 3.4 Call Center 3.5 Billing Administration 3.6 Reporting 3.7 Settlement Quality Meter Data	SMUD offers \$1.09 for the data management and call center services as described in the RFP. However, SMUD believes it can offer better customer service and lower price with the "Silver" service level described in the proposal. In addition, VCEA can obtain cost reductions by leveraging the PG&E billing engine. Price options are included below.			
	Price/Customer/Month			
	RFP	Silver	Platinum	
	SMUD*	\$1.09	\$1.00	\$1.27

* If PG&E provides Billing Administration services at \$0.21 per customer per month, total price/customer/month (including PG&E fees) will be reduced by \$0.11.

Call Center Service Levels

- RFP – This basic level of service would meet all metrics stated in the RFP.
- Silver – This reflects the service levels SMUD targets in the majority of its calls – 60-second average speed of answer with abandon rate below 3%, with 7 a.m. to 7 p.m. coverage. SMUD’s historical experience is that this level of service results in higher overall customer satisfaction at a lower cost than the metrics stated in the RFP.
- Platinum – This reflects the service level SMUD targets for time sensitive inquiries, such as outage reporting – 90% of calls answered within 60 seconds and abandon rate below 2%, with 7 a.m. to 7 p.m. coverage.
- SMUD is willing to work with VCEA on a customized offering to balance customer service level and cost.

8. Budget Detail

c. Time and Materials Schedule

Service	Price
Labor Rates	SMUD CEO/VP @ \$250/hr. Principal @ \$190/hr. Senior Analyst/Specialist @ \$150/hr. Analyst/Specialist @ \$100/hr. Administrative @ \$80/hr.
Travel	Travel within Sacramento and Yolo counties is included at no cost to VCEA. Other travel requested by VCEA will be billed at cost.
Materials	Materials will be billed at cost.
Subcontractor Services	Subcontractor services will be billed at cost.

d. Payment Terms:

Upon request, SMUD is willing to discuss terms for a deferred payment arrangement.

2. Additional Services Not in RFP

Service	Price
Wholesale Energy Services Note: If this option is selected, this cost will replace Item No. 3 in the Category 1 table above.	\$46,000/month
<ul style="list-style-type: none"> Enterprise Risk Management Insurance Consulting Cash Management Integration with PPAs Short-Term Financing Options 	Included with Wholesale Energy Services
Credit Support Service	\$0.80/MWh
ESTIMATED TOTAL ADDITIONAL SERVICES (12 months @ 800,000 MWh)	\$1,192,000

3. Operational Services not in the RFP

Operational Services are offered with SMUD providing 4 key personnel on a full-time, fixed price basis. This cost is significantly lower than the corresponding hourly rate. These key positions will manage the operational aspects of VCEA, paying for operational expenses and bringing in SMUD expertise where needed on an hourly basis. They would manage the work to stay inside the estimated budget below. SMUD will provide monthly trend reports to VCEA, and notify VCEA if any budgets require revisions due to external impacts, such as significant regulatory changes or the addition of communities to the service territory.

SMUD expects this to be a negotiation with VCEA to understand what is specifically needed and reasonable. Costs are based on an evaluation of Redwood Coast Energy Authority's budget and an evaluation of Sonoma Clean Power (scaled for VCEA).

Service	Annual Price
Salary – Dedicated Key Staff <ul style="list-style-type: none"> • Operations Director • Finance and Administrative Manager • Customer Operations and Public Affairs Manager • Administrative Support 	\$435,000 - \$870,000 based on 2 - 4 staff
General and Administration	Time and Materials Estimated @ \$200,000
Accounting	Time and Materials Estimated @ \$150,000
Technical	Time and Materials Estimated @ \$150,000
Other Services	Time and Materials Estimated @ \$75,000
Demand-side program development	Time and Materials Estimated @ \$75,000
ESTIMATED TOTAL OPERATIONAL SERVICES	\$1,085,000 - \$1,520,000

Note: All prices offered in Section 8 Budget Detail are fixed through June 30, 2019, and escalation at CPI thereafter.

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9. Governance Structure

SMUD Governance Structure

SMUD is owned by its customers, who elect a seven-member Board of Directors. Each director represents a different geographic area or “ward,” and serves a four-year term. SMUD Board members establish policies and values and set the organization’s long-term direction. In this role, the Board has established several statements of Strategic Direction (SD).

In particular, SD-11: Public Power Business Model states:

Supporting and strengthening the public power business model is a core value. Local decision making and flexibility are essential to effective and responsible local governance. Community-owned utilities are primarily accountable to customer-owners, not stockholders. Community citizens have a direct voice in public power decisions. Preservation of this business model is vital to ensure public power systems continue to provide innovative solutions tailored to best meet the needs of their customers and communities.

In addition, SD-7: Environmental Leadership states:

SMUD will provide leadership in the reduction of the region’s total emissions of greenhouse gases through proactive programs in all SMUD activities and development and support of national, State, and regional climate change policies and initiatives.

SMUD has a strategic interest in local governance and local decision-making. As a community-owned organization, SMUD sees the importance of delivering customer and community value over profits. SMUD also sees the development of renewable energy sources and the reduction of greenhouse gases as a key strategic initiative. In achieving these initiatives, SMUD sees CCEs, and VCEA in particular, as strategic partners.

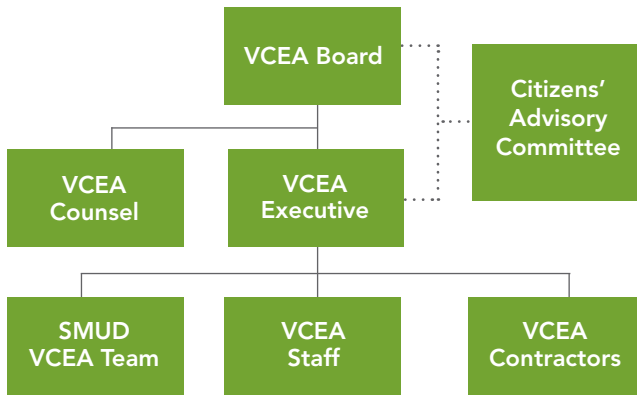
9. Governance Structure

SMUD and VCEA Relationship

SMUD views VCEA as a key client for any contracted work, and as a strategic partner in advancing the public power business model and the shift towards a renewable power portfolio. In the work proposed, SMUD will act as a contractor for VCEA, working at the direction of the VCEA executive and VCEA Board.

SMUD proposes the following organization structure and roles, and is willing to adjust our role as directed by VCEA.

Figure 1 - Proposed Organization and Roles



Role	Responsibility
VCEA Board	Set strategic direction Approve policies and power contracts
Citizens' Advisory Committee	Provide input to guide selection of alternatives
VCEA Executive	Oversee SMUD work Monitor Service Level Commitments Provide recommendations
VCEA Counsel	Review proposals for VCEA legal exposure
VCEA Staff and Contractors	Provide data for analysis Perform day-to-day operations
SMUD VCEA Team	Identify and analyse alternatives Perform day-to-day operations

In order to optimize overall value to VCEA, SMUD will retain the authority to subcontract portions of work needed to meet the overall deliverables, cost, service level, and schedules agreed to with VCEA.

9. Governance Structure

VCEA Autonomy

Under this proposal, SMUD will act as a contractor implementing decisions made by the VCEA Board and executive staff. The VCEA Board and executive staff will retain autonomy and decision-making authority, with SMUD executing key policy decisions in accordance with VCEA policies. These policy decisions include, but are not limited to:

- Development of rate schedules.
- Establishment of resource portfolio mix.
- Approval of power contracts.
- Approval of annual budget.
- Establishment of commodity and counterparty risk exposure limits.
- Creation of service level targets.

Governance Tools and Processes

To ensure VCEA has visibility into SMUD's work performance, SMUD will provide regular reporting on implementation schedule and operational metrics. Reports include, but are not limited to:

Report	Frequency
Implementation Schedule	Weekly
Contact Center Service Level	Weekly
Billing	Weekly
Opt-outs	Weekly
Commodity Risk	Monthly
Commodity Portfolio Status	Monthly

SMUD will provide additional regular or ad hoc reporting as requested by VCEA. All SMUD work plans and draft documents will be available for VCEA review.

SMUD will be available to provide additional detail on the reports and metrics in weekly status meetings with the VCEA Executive. The schedule of status meetings can be adjusted at VCEA's request.

9. Governance Structure

Sample Processes Implementing SMUD/VCEA Governance Structure

A proposed rate setting process provides an illustrative example of how the governance structure will work.

1. SMUD proposes a rate setting process to the VCEA Executive.
2. SMUD adjusts the rate setting process based on VCEA's input.
3. SMUD facilitates VCEA information gathering session with Citizens' Advisory Council.
4. SMUD facilitates VCEA Board and Executives in development of overall rate goals.
5. SMUD analyzes potential rate options and impacts, with input from VCEA staff and contractors, as needed.
6. SMUD presents rate options and impacts to VCEA Executive and VCEA Counsel
7. VCEA Counsel ensures any applicable legal requirements (e.g. Prop 26) are met.
8. VCEA Executive selects recommended option, with input from SMUD staff.
9. SMUD prepares presentation of recommendation and alternatives to VCEA Board.
10. VCEA Board approves recommendation.
11. SMUD implements recommendation.

Another example provided below is a potential "Day 2" service of creating an energy efficiency program.

1. SMUD proposes program development process to the VCEA executive.
2. SMUD adjusts the program development process based on VCEA's input.
3. SMUD facilitates VCEA information gathering session with Citizens' Advisory Council.
4. SMUD facilitates VCEA Board and Executives in development of overall Energy Efficiency program goals and principles (Reducing bills, reducing GhG impact, need for total resource cost efficiency, applicability across customer classes, etc.).
5. SMUD analyzes potential energy efficiency program designs and their impacts towards VCEA Board goals, with input from VCEA staff and contractors, as needed.
6. SMUD presents options and impacts to VCEA Executive and VCEA Counsel.
7. VCEA Counsel ensures proposed programs meet any applicable legal requirements.
8. VCEA Executive selects recommended options, with input from SMUD staff.
9. SMUD prepares presentation of recommendation and alternatives to VCEA Board.
10. VCEA Board approves recommendation.
11. SMUD implements recommendation, including pilot, marketing, and transition to operations.
12. VCEA executive and Board monitor implementation through ongoing metrics.

The roles, responsibilities, and processes set forth above are samples, and will be tailored to VCEA's specific needs based on conversations with VCEA Board and VCEA Executive.



10. Appendices

Appendix A: SMUD Executive Staff

Chief Executive Officer & General Manager.

Arlen Orchard was named chief executive in April 2014. He reports to the SMUD board of directors. As CEO, he leads the sixth largest community-owned electric utility in the nation, serving a population of 1.4 million residents and managing a \$1.5 billion budget. He joined SMUD in 1990 as a staff attorney and became general counsel in 2001. Mr. Orchard serves on the boards of the Large Public Power Council, California Municipal Utilities Association and Northwest Public Power Association. Before joining SMUD, Mr. Orchard was an attorney with the Sacramento firm Downey Brand. He received his juris doctorate from the University of California, Davis School of Law, a bachelor of political science from the University of Nevada, Reno, and attended UCD's Graduate School of Management.

Chief Customer Officer. Nicole Howard oversees customer and community services. She is responsible for SMUD's customer operations, services, and programs such as energy efficiency and advanced energy solutions. Her role includes customer strategy, brand, marketing, communications, and economic and community development. Ms. Howard joined SMUD in 2002 as a customer service representative and was a supply-chain supervisor before she became manager for customer operations in 2011. Her responsibilities included implementing operational changes brought about by SMUD's smart-grid initiative. She was promoted to senior management in 2014 and to the executive level in 2015. Ms. Howard holds a bachelor's degree in legal studies from UC Berkeley and an MBA from CSU, Dominguez Hills.

Chief Information Officer. Stephen Clemons joined SMUD as Chief Information Officer in February 2017, bringing with him over 20 years of information technology experience. Clemons' responsibilities include SMUD's information technology strategy, planning, implementation, operations, infrastructure and project management, as well as information security and privacy. Clemons came to SMUD from San Diego-based private sector cyber security firm iBoss Cybersecurity where he was the public sector vice president. His previous employment includes roles as a senior director for Product Management at Qualcomm Education in San Diego, chief information officer for the San Diego County Office of Education (the 2nd largest in the state) from 2007 to 2014, information technology director for the County of San Diego, chief enterprise architect for the State of California's Office of the CIO in Sacramento from 2003 to 2006, and chief enterprise technology architect for the Franchise Tax Board in Sacramento from 1994 to 2003. Clemons received bachelor's degrees in Business Administration and Finance from California State University, Sacramento.

Chief Workforce Officer. Gary King, since 2008, has been responsible for human resources, health and safety, organization and workforce development, and general services. Before this, Mr. King served as manager of human resource services. He joined SMUD in 1998 as supervisor for compensation and selection. Before joining SMUD, Mr. King worked as a manager of employment for the city of Palo Alto and served in senior human resource management positions for the city and county of San Francisco. Mr. King earned his master's degree in industrial/organizational psychology from the University of Maryland and his bachelor of behavioral science from Pacific Union College.

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Chief Grid Strategy & Operations Officer.

Paul Lau is responsible for grid planning and operations, including the reliability of the electric transmission and distribution systems. In addition, he oversees energy trading and contracts, energy research and development and SMUD's renewable-energy portfolio. Prior to assuming this role, Mr. Lau was assistant general manager for power supply and grid operations. Before that, he was assistant general manager for SMUD's customer, distribution and technology efforts, overseeing retail operations, customer services, energy delivery, energy efficiency, customer renewable programs, telecom and enterprise business applications. He joined SMUD in 1982. Mr. Lau received his bachelor's degree in electrical power engineering from California State University, Sacramento.

Chief Legal Officer and General Counsel.

Laura Lewis is responsible for managing and coordinating all SMUD legal matters, including litigation, contested regulatory agency proceedings, settlement discussions, and claims management. Additionally, she oversees SMUD's government affairs and reliability compliance department. In this capacity, she is responsible for management and coordination of all legislative matters and regulatory requirements affecting SMUD at the state and federal level, including the FERC-NERC electric reliability standards. Ms. Lewis also serves as the secretary to SMUD's elected Board of Directors. Ms. Lewis first joined SMUD in 1997 as a staff attorney, serving in that capacity through 1999, after which she moved to the San Francisco law firm of Davis Wright Tremaine. In 2002, she returned to SMUD as a senior attorney. She served as assistant general counsel and chief assistant general counsel, before being appointed as SMUD's Chief Legal Officer and General Counsel in 2014. Ms. Lewis received her undergraduate degree from the University of California at San Diego, and her J.D with great distinction (Order of the Coif) from McGeorge School of Law.

Chief Energy Delivery Officer.

Frankie McDermott is responsible for SMUD's power generation and energy-delivery infrastructure, including substations, line assets, telecom and metering. Most recently, Mr. McDermott was chief customer officer, responsible for SMUD's overall retail strategy. From 2010 to 2014, he served as customer services director, which included managing relationships with customer segments as SMUD moved forward with smart-grid technologies. Prior to that, he served as manager of enterprise performance and held positions in supply chain and in general services. Before joining SMUD in 2003, Mr. McDermott served in management roles in the semiconductor industry at NEC Electronics in Roseville, California and in Ireland. After engineering school in Ireland, he earned an MBA from Golden Gate University and completed the Advanced Management Program at the Haas School of Business at UC-Berkeley.

Chief Financial Officer.

Jennifer Davidson oversees SMUD's accounting and treasury departments and is also responsible for risk management, resource and strategic planning, enterprise performance, pricing, and budget development functions. Ms. Davidson joined SMUD in 2006 and previously served as director of planning, performance, and risk since 2012. Before joining SMUD, Ms. Davidson held management positions with investor-owned utility Southern California Edison and software and services provider Amdocs. She earned her Bachelor of Arts degree from UCLA.

Appendix B: Key Personnel Resumes

Victoria Zavattero

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Relevant Experience

- 1992 - present **SMUD, Sacramento, CA**
Director, Energy Research & Development
Leads a diverse team of engineers, economists and research in the following areas:
- Climate Change Strategy & Research
 - Energy Storage – utility and customer-owned distributed storage, testing storage technologies and new business models
 - Energy Efficiency – new and innovative technologies
 - Electric Transportation – research and demonstration projects to support the electrification of the Sacramento region including increased workplace charging, electrification of regional fleets, expansion of public charging and research on inductive charging
- 2009 - 2013 **SMUD, Sacramento, CA**
Manager Smart Grid
- Development and implementation of SmartSacramento
 - Deployment of smart meters, testing and deployment of energy efficiency, energy storage and distributed energy along with automation tools to improve reliability
 - Developed transparent administrative framework that included best practices for scheduling, budgeting, procurement (\$100M) and reporting
- 2004 - 2009 **SMUD, Sacramento, CA**
Sr. Project Manager
- Managed the company wide implementation of SMUD's multi-year LEEDERS (Leadership in Energy Efficiency, Demand and Environmental Resource Solutions)
 - Established Integrated Resource Planning Collaborative
 - Development of load management programs and evaluation and implementation of enabling technologies as well as time dependent rates

Education

1984 University of California, Berkeley- Berkeley, CA
B.A., Statistics

1990 University of California, Berkeley- Berkeley, CA
M.A., Economics

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Michelle Yung

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Relevant Experience

2014 - present

SMUD, Sacramento, CA

PMO Supervisor, Energy Research & Development

- Developed standard project management process and methodology, tools, and templates to enable consistent project delivery.
- Established governance policies and a decision making structure to enable better communication and coordination with internal and external stakeholders.
- Facilitate ER&D portfolio management and coordination of strategic alignment, prioritization, and resource allocation. Develop 3-5 year budget for ER&D.

2011 - 2014

SMUD, Sacramento, CA

Project Manager II, Smart Grid and Customer

- My Energy Tools Project: Planned the implementation of a suite of on online energy analysis tools for SMUD's residential and commercial customers including usage and cost charts, bill comparison, email/text alerts, end use disaggregation, and personalized energy savings tips.
- EPA Portfolio Manager Project: Technical integration of SMUD electric usage data with the Environmental Protection Agency's (EPA) Portfolio Manager application used for building energy efficiency benchmarking. Praised by California Energy Commission for the seamless integration and customer ease of use.

2006 - 2011

Wells Fargo, San Jose, CA

Project Manager

- Wachovia-Wells Fargo Merger: Managed a team of 20 cross-functional senior managers in the Business Banking Command Center during each state by state conversion of back office systems, local branch branding and equipment, and staff training. In total, 868 Wachovia locations were rebranded as Wells Fargo in the Northeast, Southeast, and Midwest regions as part of the \$15 billion merger between two of the largest financial institutions.
- Sales Platform Project: Developed a new customer relationship management (CRM) application used nationally by Business Bankers for their end-to-end sales process. Established server infrastructure, data integration between multiple systems of record, and enabled mobile device access to bankers.

Education

2010 Santa Clara University, Santa Clara Santa Clara, CA
MBA in Finance and International Business

2006 University of California, Davis Davis, CA
B.A. in Economics; minor in Managerial Economics

Jon Olson

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Relevant Experience

- 2016 - present **SMUD, Sacramento, CA**
Director, Energy Trading and Contracts
- Responsible for overall management direction for a \$500 million commodity budget that includes power, natural gas, hydro, renewable energy and carbon allowances. Develop strategies and provide direction for Commodity Contracts, Commodity Trading, System Optimization, Commodity Hedging, Mid - Long Term Commodity Contracts and System Support groups.
- 2014 - 2016 **Allegro Development, Minneapolis, MN**
Sr Solutions Consultant
- Provided Energy, Trade & Risk Management (ETRM) consulting services to organizations in the utility, agriculture and bulk commodity industries. Worked with sales to develop business opportunities for Allegro's ETRM system.
- 2009 - 2014 **MCG Energy Solutions, Minneapolis, MN**
Director, Business Development
- Direct business development for an industry leading software solutions provider. Reporting to the CEO, activities include market segmentation, strategy development, corporate presentations, product demonstrations and commercial negotiations.
- 2002 - 2009 **Great River Energy/Split Rock Energy, Minneapolis, MN**
Manager, Market Services
- Great River Energy - Lead staff of twelve traders, power marketers, schedulers and analysts in managing portfolio of coal, peaking, oil, wind and RDF generation in addition to diverse load obligations and contracts. Responsible for strategy development and implementation, financial performance and reporting. Oversight of the MISO, Independent Market Monitor and counterparty relationships.
 - Split Rock Energy - Member of leadership team providing portfolio management for two owner utilities and proprietary trading. Managed books and services in a strict risk management environment. Traded various books in MISO, PJM, NYISO, IESO, SPP and bilateral markets

Education

1991 Univ. of Minnesota, Twin Cities Minneapolis, MN
Bachelor of Science – Ag Education, Life Sciences, and Earth Science
Minors in Ag Economics and Physical Science

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Gary Lawson

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Relevant Experience

2006 - present

SMUD, Sacramento, CA

Manager, Energy Commodity Contracts/Principal Energy Commodity Contract Specialist, Energy Trading & Contracts Department

- Manage the group responsible for negotiating and administering long-term energy commodity-related contracts. Commodities is the group is responsible for procuring is electricity, natural gas, renewable electricity, renewable gas, electric transmission, gas transmission, gas storage, renewable energy credits, carbon offsets, and water supply for SMUD power plants.
- Supervise the engineering group in the Power Generation Department. The group was responsible for managing the engineering needs of SMUD's generating plants, including managing major plant overhauls and plant upgrades.
- Principal Operations Engineer in SMUD's System Operations & Reliability Department. Responsible for analyzing various aspects of the operation of SMUD's generating and power purchase resources, including the economic impacts on power operating costs due to fuel costs, hydro availability, market power costs, and transmission availability.
- Supervised group of analysts responsible for studying and evaluating the impacts and operations of SMUD's demand side management programs.

1993 - 1994

The Washington Water Power Company, Spokane, WA

Senior Demand Side Management Analyst

- Managed \$950,000 project to evaluate company demand side management programs. Participated as marketing department representative on the company's demand side management (DSM) collaborative (group of outside parties with a stake in the company's DSM programs).
- Was brought into the Company's marketing department to develop new electric and gas demand side management programs. Primary responsibilities were to assess potential for, design, and implement new demand side management marketing programs.

Education

1978 California Polytechnic State University San Luis Obispo, CA
Bachelor of Science – Mechanical Engineer
Minors in Ag Economics and Physical Science

Scott Martin

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Relevant Experience

2009 - present

SMUD, Sacramento, CA

Director, Resource Planning, Commodity Risk and Settlements

- Lead development and implementation of SMUD's long term resource plan
- Achieve SMUD and California goals for carbon reduction, renewable procurement, and reliability
- Lead regulatory filings and processes related to resource planning
- Manage, measure and monitor natural gas and electric commodity risk and cooperatively implement hedging and trading strategies
- Lead assessment of new low carbon or renewable investments, support contract negotiations or asset development and meet State and SMUD goals
- Lead development of SMUD's commodity budget and settlement processes for all commodity transactions

2004 - 2009

SMUD, Sacramento, CA

Supervising Market Analyst and Supervisor, Customer Programs

- Supervise development of annual and 3 year strategic plans for SMUD's energy efficiency, demand response, solar, special assistance (EAPR, MED and Energy Help) and revenue (Greenenergy, Home Power, Power Protection, etc.) programs as well as customer operations (residential and commercial contact centers, credit and collections, billing and payments, and field services).
- Develop and implement strategic policy to meet the Board's energy efficiency, demand response, and solar goals consistent with AB32, AB2021, and SB1
- Evaluate ISO participation, long term energy contracts, and strategic resource sales or acquisitions, including potential annexation of various cities in the Sacramento region

Education

1988 - 1991 University of California, Berkeley, Berkeley, CA
B.A. Economics
with High Distinction and Phi Beta Kappa

1995 - 1997 University of Nevada, Las Vegas, Las Vegas, NV
M.A. Economics
Thesis: "The Effects of Natural Gas Deregulation on the Structure of the Texas Natural Gas Production Industry"

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Dennis Holcomb

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Relevant Experience

- 2017- present **SMUD, Sacramento, CA**
Manager, Commodity Trading and Hedging
- Oversee SMUD's 24/7 trading operations including power, gas, financial, and environmental products with an annual budget in excess of \$450M
 - Focus trading efforts to meet customer load in the most economic manner without jeopardizing reliability. Realized savings of \$41M in 2016.
 - Ensure staff adheres to NERC/WECC reliability standards and complies with SMUD Trade and Risk guidelines. No reportable reliability or compliance events for 2016.
 - Support SMUD Merchant EIM implementation efforts.
 - Identify and implement new business opportunities. Currently in the final phase of testing for regulation sales to the CAISO, a new venture for SMUD.
- 1998 - 2017 **SMUD, Sacramento, CA**
Sr. Energy Trading Specialist / Principal Energy Trading Specialist
- Manage the mid-term power trading and financial hedging program
 - Direct staff to hedge exposure, procure resources and perform economic studies to improve portfolio efficiency
 - Negotiate and administer power, natural gas and financial and transmission contracts.
- 1992 - 1998 **SMUD, Sacramento, CA**
Resource Planner /Sr. Resource Planner
- Perform economic studies to evaluate resource options for SMUD after the closure of the 916 MW Rancho Seco nuclear generating unit. These studies resulted in the construction of the Proctor, Carson and Campbell co-generation plants and execution of the 20 year PAC exchange agreement.
- Education** 1980 CSUS, Sacramento, CA
B.A., Environmental Studies

Bryan Swann

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Relevant Experience

- 2016 - present **SMUD, Sacramento, CA**
Manager, Forecasting and Economic Analysis
- Leads a diverse team of engineers, economists and research in the following areas:
- Manages SMUD's long term integrated resource planning process and analysis.
 - Ensures SMUD's resource portfolio meets key planning objectives including environmental goals, reasonable rates, and reliable electricity.
 - Manages RPS compliance reporting/tracking and other regulatory reporting requirements that fall into the resource planning area.
 - Ensures staff review and thorough economic analysis of proposed generation resources and power contracts.
- 2014 - 2016 **SMUD, Sacramento, CA**
Manager, Commodity Risk
- Managed SMUD's energy risk plan and hedging strategy while ensuring SMUD's market exposure is within exposure limits set forth by the EROC.
 - Managed short term commodity budget analysis and reporting.
 - Acted as SMUD's primary DQIR for financial swaps it enters into as required under Dodd-Frank.
- 2010 - 2014 **SMUD, Sacramento, CA**
Senior Market Risk Specialist
- 2008 - 2010 **CAISO, Folsom, CA**
Senior Market Monitoring Analyst
- 2001 - 2008 **Global Energy Decisions/Ventyx Sacramento, CA**
Senior Project Manager (last position held)
- Managed a team of consultants in the production of Global Energy's bi-annual WECC Electricity Market Advisory forecast report and related consulting services.
 - Managed, reviewed, and presented electricity market related studies to clients including integrated resource planning studies, generation optimization, valuation, and bank lending reports, community choice aggregation studies, and other regional market studies.

Education

2000 California State University, Sacramento, CA
Bachelor of Science, Business

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Debra Warady

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Relevant Experience

- | | |
|----------------|--|
| 2016 - present | <p>SMUD, Sacramento, CA
Manager, Resource Optimization</p> <ul style="list-style-type: none">• Maintain resource optimization tool to support trading• Develop water release strategy• Coordinate generation/transmission outages |
| 2007 - 2016 | <p>SMUD, Sacramento, CA
Principal Energy Trading Specialist</p> <ul style="list-style-type: none">• Managed water releases• Identified open power/gas positions• Traded Natural Gas |
| 1998 - 2007 | <p>SMUD, Sacramento, CA
Principal Market Risk Specialist</p> <ul style="list-style-type: none">• Quantified market price exposure• Created the budget for commodity costs• Evaluated precipitation hedges to mitigate risk |
| 1989 - 1998 | <p>SMUD, Sacramento, CA
Various Planner/Analyst Positions</p> <ul style="list-style-type: none">• Traded Day Ahead Power• Developed Integrated Resource Plans• Evaluated Energy Efficiency Programs |

- Education**
- 1988-1989 University of California, Davis, CA
Master of Arts, Economics
- 1982-1986, University of Colorado
Bachelor of Arts, Economics/French

Noreen Roche-Carter

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Relevant Experience

- 2004 - present **SMUD, Sacramento, CA**
Director, Treasury
- Management of all Treasury Operations activities including Debt Management, Cash Management and Banking, Financial Planning and Forecasting, and Property and Casualty Insurance.
 - Treasurer for several Joint Powers Authorities including: Transmission Agency of Northern California, the Central Valley Financing Authority, the Sacramento Cogeneration Authority, the SMUD Financing Authority, the Sacramento Power Authority, the Northern California Gas Authority No. 1 and the Balancing Authority of Northern California.

2000 - present **Large Public Power Council, Washington, DC**
Chair of the Tax and Finance Task Force

1988 - 1999 **SMUD, Sacramento, CA**
Assistant Treasurer/Supervisor/Financial Analyst

Education

1983 University of Manitoba, Manitoba, Canada MBA
1978 University of California, Berkeley, Berkeley, CA
Bachelor of Economics

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Jennifer Restivo

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Relevant Experience

- 2013-present **SMUD, Sacramento, CA**
Acting Director, Planning, Budget, Pricing, Enterprise Performance & Risk Management
- Manage creation/approval of SMUD's \$1.6B annual budget
 - 2017 SMUD Rate Process and approval of Residential Time based Rates
 - Development of short range financial model to determine revenue requirements and impacts of financial decisions
- 2006-2013 **SMUD, Sacramento, CA**
Assistant Controller, RRS
- Coordinated and led SMUD Annual Financial Audit
 - Project manager for Business Planning and Consolidation Software Implementation
 - Development of accounting procedures AB-32, grants, and complex accounting transactions
- 2000-2006 **SMUD, Sacramento, CA**
Principal Financial Accountant – JPA's
- Prepared complete financial statements including footnotes, management discussion and analysis and cash flows for JPA's
 - Accounting for bond refunding & redemptions
 - Reviewed & analyzed contracts and official statements
- 1999-2000 **SMUD, Sacramento, CA**
Accountant
- Reconciled natural gas and power purchases and sales
 - Prepared monthly financial statements for distribution to management & Board
 - Improved efficiency of reporting

Education

2015 University of Phoenix Rancho Cordova, CA
Masters of Business Administration

1995 California State University, Sacramento Sacramento, CA
Bachelor of Science, Business Administration Concentration: Accountancy

Michael Champ

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Relevant Experience

2013-present

SMUD, Sacramento, CA

Manager, Enterprise Performance

- Created and facilitated Executive forum for quarterly review of programmatic metrics, financial position, and project performance
- Developed and deployed standardized project methodology and reporting across 5 Project Management Offices, including phase-gates, required deliverable templates, and earned value reporting
- Developed and rolled out data governance program to drive consistency in data terminology and identify and resolve data issues
- Senior Enterprise Performance Planning Coordinator
- Ran capital project portfolio management process – selection, monitoring, and governance of \$150 million project portfolio.
- Provided financial analysis supporting go/no-go decisions on major new projects

2008-2013

CalPERS, Sacramento, CA

Manager, Enterprise Strategy and Performance

- Facilitated development of 5-year Strategy and 3-year Business Plans
- Facilitated development of Strategic Performance Measures for use by Executive Staff and the Board.
- Designed pilot business intelligence reports on pension fraud risk
- Oversaw implementation of Board Governance reforms including delegations of authority.
- Risk Management & Business Planning Analyst
- Established Office of Enterprise Risk Management
- Created framework for development of an enterprise performance dashboard and measures.
- Facilitated Executive development of Business Plan strategies and coordinated implementation with budget, incentive compensation, and ongoing workload management processes.
- Developed enterprise risk dashboard and risk appetite statements for areas including asset liability management, health care, and long term care.

Education

2014 University of California, Davis-Davis, CA
MBA with focus on Statistics and Data Analytics, UC Davis

2006 University of California, Davis-Davis, CA
B.A Linguistics

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Alcides Hernandez

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Relevant Experience

2011-present

SMUD, Sacramento, CA

Rate/Pricing Advisor (2013 – Present)

- Led the 2017 public rate action, developed and gave rate presentations at public workshops, rates public hearing and Board meeting. The rate proposal was successfully approved by the Board in June 2017.
- Coordinated the development SMUD's General Manager's Report with recommendations on rates, rules and regulations released to the public in April 2015 and March 2017.
- Assisted the Pricing team and management with four public rate proceedings conducted by SMUD in years 2011, 2013, 2015 and 2017 which included analysis of the gradual elimination of residential tiers to transition to time-of-use that was successfully approved by the Board.
- Directed the development of SMUD's 2016 Marginal Cost (MC) study and Open Access Transmission Tariff update. Developed street lighting and dark fiber marginal cost models, and performed revisions to SMUD's transmission and distribution marginal cost and rates recovery models.
- Led SMUD's rates core team and performed rate design work to recommend an optional residential time-of-use rate that was approved by the Board in July 2015. Oversaw the development of the new standard residential time-of-day rate approved by the Board in June 2017.
- Developed a variety of rate recommendations, gave presentations to managers, directors and executives on key pricing issues including SolarShares, residential time-of-use, developer fees, net energy metering and pricing principles.
- Assisted Pricing team updating sections of revenue forecast model, performed campus billing analyses, rate comparisons, economic development rates studies, and developed strategic directive (SD-2) reports.

Education

2007 National University Sacramento, CA
Master of Public Administration (MPA)

2000 Universidad de El Salvador (University of El Salvador) San Salvador, El Salvador
Master Degree in Business Administration (MBA)
Specialty in Entrepreneurial Consultancy

1996 Universidad Tecnologica (Technological University) San Salvador, El Salvador
Bachelor Degree Industrial Engineering

Ron Jelicich

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Relevant Experience

- 1994-present **SMUD, Sacramento, CA**
Assistant Treasurer
- Supervise joint powers authorities' financial operations & insurance/risk management function.
 - Lead bond financing projects, negotiate bank credit facilities and derivative contracts to manage interest rate risk
 - Oversee fixed income investment portfolio
- 1990-1994 **SMUD, Sacramento, CA**
Sr. Financial Analyst/Financial Analyst
- Invest SMUD's money in fixed income securities
 - Negotiate banking agreements
- 2004-2009 **SMUD, Sacramento, CA**
Internal Auditor
- Perform financial, operational, and contract audits
- 2004-2009 **Cal-West Life Insurance Co., Sacramento, CA**
Corporate Accountant
- Prepare financial statements, financial forecasts & plans, tax returns

Education

1985 California State University, Sacramento-Sacramento, CA
Master of Business Administration
Finance emphasis

1980 California State University, Sacramento- Sacramento, CA
Bachelor of Science Business Administration

Certifications and Licenses

1982-2017 Certified Public Accountant

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Nathan Toyama

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Relevant Experience

1991-present

SMUD, Sacramento, CA

Manager, Load Research and Forecasting

- Sales and load forecast
- Load data analysis
- Interval and billing data database development
- Program evaluation

Supervisor, Rates

- Rate design and revenue allocation
- Billing analysis
- Survey research for appliance saturation studies

1985-1991

Pacific Gas and Electric

San Francisco, CA Rate Analyst

- Data analysis for GRC rate cases, Rate Design and Revenue allocation, TOU rate evaluation, Marginal cost analysis

Education

1977 UC Davis-Davis, CA
M.A. Economics

1975 San Francisco State University San Francisco, CA
B.A. Economics

Publications

Estimating Hourly Electric Load with Generalized Least Square Procedures, Energy Journal, 1986, coauthor

Service Reliability and the Optimal Interruptible Rate Option in Residential Electricity Pricing, Energy Journal, 1986, coauthor

Pareto Dominance through Self-Selecting Tariffs: The Case of TOU Electricity Rates for Agricultural Customers, Energy Journal, 1989, coauthor

Fundamental Drivers of Electricity Prices in the Pacific Northwest, Advances in Quantitative Analysis of Finance and Accounting, Volume 5, 2007, coauthor

Final Results from SMUD's SmartPricing Options Pilot, International Energy Program Evaluation Conference, 2015, Presentation, coauthor

Merit-order Effects of Renewable Energy and Price Divergence in California's Day-Ahead and Real-time Electricity Markets, Energy Policy, 2016, coauthor

Ruth Yee

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Relevant Experience

2000-present

SMUD, Sacramento, CA

Manager, RRS and Assistant Controller

- Manage the RRS work group, which includes Statements, Plant and the JPA sections
- Assist in developing strategy for RRS and the Accounting department
- Review financial statements of SMUD and the JPAs, other financial reports and reconciliations
- Manage and oversee the annual independent audit of financial statements and prepare disclosure notes for SMUD
- Principal Financial Accountant, Statements Supervisor
- Supervised the Statements work group, which included hiring, coaching and training staff
- Prepared audited financial statements for SMUD
- Reviewed SMUD monthly financial statements, other financial reports, journal vouchers, and reconciliations
- Utilized SAP for accounting, setting up general ledger accounts and orders, report maintenance, and monthly closing for SMUD

Principal Financial Accountant, JPA Supervisor

- Supervised the JPA work group, which included hiring, coaching, and training staff
- Managed the annual independent audit of financial statements for the JPAs
- Prepared audited financial statements, disclosure notes, and Management Discussion and Analysis for the JPAs
- Reviewed monthly JPA financial statements, billings, journal vouchers, reconciliations, and operational statistics
- Assisted in preparation of JPA budgets
- Utilized SAP for accounting, report maintenance, and monthly closing for one of the JPAs

Education

1998-1990 University of California, Berkeley, CA

1996-1998 Sacramento City College, Sacramento, CA

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Steve Lins

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Relevant Experience

2014-present

SMUD, Sacramento, CA

Chief Assistant General Counsel

- Oversee legal and regulatory matters related to FERC, NERC, CAISO, CPUC, CEC, CARB, wholesale markets, transmission, and power contracts.
- Direct federal and state legislative affairs.
- 2008-2014 Glendale Water & Power Glendale, CA
- Chief Assistant General Manager
- Responsible for power supply and energy generation throughout western U.S.
- Supervised the energy trading and risk management groups; directed resource planning and power portfolio management.
- Coordinated all electric regulatory and legislative issues at FERC, CPUC, CARB, CEC, Congress and the California Legislature.

1994-2008

City of Glendale, Glendale, CA

General Counsel/Assistant City Attorney/Deputy City Attorney

- Coordinated all regulatory investigations and litigation arising out of FERC and CPUC matters; participated in all regulatory and legislative matters at FERC, the CPUC, Congress and the California Legislature.
- Managed general legal transactional and litigation issues associated with operating a California municipal utility.

1989-1992

San Diego City Council, San Diego, CA

- Legislative Analyst/Council Representative
- Analyzed and developed environmental and land use legislation.
- Represented Councilmember at meetings with government officials, constituents and lobbyists.

Education

1988 Loyola Law School Los Angeles, CA
Juris Doctor

1985 U.C. San Diego La Jolla, CA
B.A., Management Science (Economics)

Certificates and Licenses

Law License, State Bar of California

Brian Stevens

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Relevant Experience

- 2017-present **SMUD, Sacramento, CA**
Strategic Planner, Distributed Energy Strategy
- Develops enterprise strategy regarding Distributed Energy Resources
 - Advises Senior Management and Executives on California community choice
- 2015-2017 **SFPUC, CleanPowerSF, San Francisco, CA**
Utility Specialist
- Led major CCE launch activities: back-office, regulatory, and technical services
 - Integrated CleanPowerSF operations into SFPUC operations
 - Led State-level regulatory advocacy and compliance
- 2011-2015 **CPUC, San Francisco, CA**
Energy Industry Advisor/PURA V
- Energy Advisor to President Michael Peevey
 - Led State response to reliability needs from San Onofre closure
 - Led major redesigns of State's Distributed Energy Resource programs
- 2009-2011 **California Energy Commission, Sacramento, CA**
Energy Analyst
- Contributed analysis that developed the Updated AB32 Economic Analysis
 - Development of portions of the California Bioenergy Action Plan
 - Conducted complex econometric analysis that led to input into the Integrated Energy Policy Report

Education

2016 University of California, Berkeley-Berkeley, CA
Master of Business Administration, Walter A. Haas School of Business
Member: Berkeley Energy Resource Collaborative

2008 Chapman University Orange, CA
Bachelor of Arts, Economics
Student Body Vice President/Senator

10. Appendices

Tracy Carlson

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Relevant Experience

- | | |
|--------------|---|
| 2016-present | SMUD, Sacramento, CA
Director, Customer Care <ul style="list-style-type: none">Consistently delivered best in class customer satisfaction scores, 96% in 2016Achieved top quartile employee engagement score of 84% in 2017Implemented process enhancements resulting in 78% improvement to customer solar interconnection cycle time, from 109 days to 23 days, and staff savings of 4 FTE |
| 2014-2016 | SMUD Sacramento, CA
Director, Customer operations <ul style="list-style-type: none">Established business continuity by deploying secondary Contact Center at SMUD's East Campus Operations CenterSuccessfully achieved PCI compliance through rigorous audit processesImproved department safety record by reducing OSHA recordable injuries from 10 to 1 |
| 2009-2014 | SMUD Sacramento, CA
Supervisor, Call Center Operations <ul style="list-style-type: none">Developed and implemented part time staffing strategy, successfully reducing monthly service level variability by more than 30%Negotiated side letter agreement with OSE to optimize CSR I, CSR II, and Senior CSR positions, aligning position with functional skills, establishing flexibility to respond to changing customer demands leading to a reduction in activity type laborSuccessfully implemented Quality Assurance Team focused on call monitoring, leading to 33% improvement in All Connect program transfer performance |

Education 1999 American River College Sacramento, CA
A.A., Liberal Arts

Certificates and Licenses DHL Express, High Performance Management Technique Training Certificate – 2008

Allen Moy

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Relevant Experience

- 2009-present **SMUD, Sacramento, CA**
Manager, Revenue Operations
- Manage billing operations meter to cash process
 - Responsible for billing data flows, meter validations, new rate installation, special rate applications, production cycle billing, and invoicing
 - Managed collection and payment operations
 - Implemented process improvements that reduced delinquent accounts and improved collections and net-write off metrics
 - Managed billing operations resources to support the implementation of smart meter deployment, commercial rate restructure, meter data management system upgrade, and meter data management unification system upgrade
 - Developed and managed operations budget and key performance revenue operations metric
- 2003-2009 **SMUD, Sacramento, CA**
Senior Revenue Analyst
- Analyzed cost/benefits for collection activities
 - Developed financial models to forecast collection metrics
 - Planned, budgeted, and forecasted cost variances and analysis
 - Developed analysis and reporting for receivables, aging, collection activities, and credit analysis
- 2002-2003 **Lodi Memorial Hospital, Lodi, CA**
Decision Support Financial Analyst
- Designed, implemented, and maintained financial reports
 - Developed financial models and revenue/expense projects to support budgeting, forecasting, and decision scenarios
 - Analyzed revenue and expenses using statistical data

Education

2001—2002
Waste Management Sacramento, CA

1992 California State University, Sacramento-Sacramento, CA
BS, Business Administration
Concentrations in Finance and Insurance

10. Appendices

Ivan Rostami

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Relevant Experience

- 2015-present **SMUD, Sacramento, CA**
Manager, Customer Operations (Contact Center)
- Managed 14 million dollar budget within 1% variance for 2015 and 2016
 - Process improvements to reduce AHT, decrease call volume while delivering best in class customer satisfaction
 - Provided consulting and best practice strategies for multiple contact centers in the state of California including DMV, CalPERS, Franchise Tax Board and Modesto Irrigation District.
- 2009-2015 **SMUD, Sacramento, CA**
Resource Management Coordinator/Customer Services Supervisor
- Manage Call routing; contact channel planning; resource forecasting and scheduling; Hiring of diverse workforce
 - Achieved Service Level Goal of 90% in 60 seconds for 1.2 mil contacts on an annual basis
 - Successful implementation of new technology for phone and workforce management (Avaya VOIP, and Verint workforce management software)
- 2000-2006 **ATT Wireless, Sacramento, CA**
National Forecasting Manager
- Managed 13 contact centers and 2 vendor sites across the United States, Canada, Mexico and India
 - Created forecasts and analysis utilizing comprehensive forecasting models to manage call volumes and budget
 - Developed forecasting models and relationships with vendor sites to ensure overflow volumes were answered within service level goals and quality assurance measurements were all being met

Education

1996 California State University, Sacramento Sacramento, CA
Bachelor of Arts, Interpersonal Communications

Suresh Kotha

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Relevant Experience

- 2015-present **SMUD, Sacramento, CA**
Director, IT Strategy & Governance and Operational Technology
- Technology governance, enterprise transformational initiatives and IT/OT convergence
 - Leads IT shared services including budget, sourcing, and contract management, strategy team, Business analytics, Mobility and Operational Technology teams
- 2015 **SMUD, Sacramento, CA**
Senior Director, Information Technology
- Managed the IT organization comprised of Information Security, IT Applications, and IT Operations
 - Ensured a seamless transition until new CIO came on board
 - Delivered projects and services to all business units
- 2010-2015 **SMUD, Sacramento, CA**
Director, IT Infrastructure & Operations
- Managed the Infrastructure and Operations group (80 people) desktop data center, infrastructure applications services, SAP security, app administration batch operations, and database systems
 - Led the enterprise architecture practice and developed IT infrastructure strategy and governance
- 2002-2009 **SMUD, Sacramento, CA**
Principal Technical Developer
- Served as a technical advisor to CIO and SR IT management
 - Helped set the IT direction and managed technical development SAP and applications administration teams

Education

1993 Jawaharlal Nehru Technological University India
M. Tech Computer Science

1989 Gulbarga University India
B. Tech Electronics and Communications Engineer

10. Appendices

Mandar Nimkar

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Relevant Experience

- 2017-present **SMUD, Sacramento, CA**
IT Business Relationship Manager, IT
- Facilitating multiyear project planning with IT directors, domain managers and SMEs, to deliver a balanced project portfolio to meet key strategic objectives
 - Conducted gap analysis by comparing current processes with desired outcome and mapping them with initiatives to align with the enterprise strategy.
 - Serving as a key liaison between IT and other business unit BRMs to align with business vision and strategy and to develop technology programs.
- 2016-2017 **SMUD, Sacramento, CA**
Customer Services Supervisor
- Analyzed operational excellence opportunities for the customer and facilitated discussion with IT to prioritize technology initiatives.
 - Demonstrated leadership by proactively driving multiple projects, engaging vendor, and developing roadmap for staffing requirements.
 - Adopted different methods of communication for conflict management and to effectively engage leadership, direct reports and vendors
- 2009-2016 **SMUD, Sacramento, CA**
Enterprise Technical Developer / Technical Lead
- Worked as a technical lead for the ESB upgrade project, evaluating RFPs, developing project plan, working on budget, coordinating for resources, and acting as a single point of contact for communication between all project stakeholders.
 - Mentored at least 5 co-workers by providing technical guidance and communicating standards which helped to keep project milestones on track.
 - Extensive experience in troubleshooting and resolving complex technical issues during various stages of product lifecycle.

Education

2015 California State University Sacramento, CA
MBA for Executives

1997 M S University of Baroda, Baroda, India
Bachelor of Science - Mathematics

Raed Samara

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Relevant Experience

- 2016-present **SMUD, Sacramento, CA**
Business Tech Program Manager
- Enterprise Mobility Manager, responsible for overall direction of all mobility issues associated with Information Technology applications, communications (voice and data), and computing services within the enterprise.
 - Responsible for developing and maintaining a comprehensive strategy and roadmap for enterprise mobility at SMUD while provide leadership, strategic direction, and technology implementation oversight for mobile-driven solutions.
- 2010-2015 **Intel, Folsom, CA**
Regional Business & Product Marketing Manager
- Responsible for Executive Accounts and Relationship Management. Defined, sourced, developed, closed and managed business relationships with strategic partners to implement solid, scalable and growing solutions that maximized the products portfolio offerings within the partners' solutions.
 - Directed strategic programs advancing the adoption of offerings and platform solutions resulting in over \$70M in sales of Classmate PCs, notebooks, and tablets over 4 years.
- 2009-2010 **Intel International Assignments**
Business Development Manager
- Responsible for new business development and ecosystem enablement. Successfully drove multifaceted go-to-market (GTM) strategies that increased demand for Intel-based solutions in Europe, Middle East, and Africa, resulting in an educational product sales increase of 40%, and high end PCs and laptops by 25% year-over-year.
- Education**
- 2008-2009 California State University Sacramento, CA
M.B.A. College of Business
- 1990-1993 California State University Sacramento, CA
B.S. Electrical and Electronics Engineering

10. Appendices

David Doll

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Relevant Experience

1998-present

SMUD, Sacramento, CA

Sr. Business Technology Analyst

- Maintain the operation of SMUD's Meter Data Management System (MDMS) and associated software in support of the collection, validation, distribution, and accuracy of settlement quality meter data.
- In support of the MDMS, design, develop, and maintain business applications as project lead or technical expert on various system platforms, feasibility studies, define functional and system requirements, codes, designs, documentation, and post implementation reviews.
- WREGIS QRE

1992-1998

SMUD Sacramento, CA

Meter Technician

- Maintain the accuracy of metering equipment used in support of Customer Operations and Energy Settlements through the installation, maintenance, testing, calibration and repair of metering systems and associated equipmen

Certificates and Licenses

State of California Certified Meter Technician, SMUD

Jessica Kasparian

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Relevant Experience

2016-present

SMUD, Sacramento, CA

Manager, Commodity Risk & Settlements

- In addition to Manager, Energy Settlements responsibilities, oversees the planning, designing and development of an innovative and comprehensive energy risk management plan to ensure that appropriate risk exposures within SMUD's \$450 million wholesale commodity portfolio are measured and evaluated against the risk limits established by management. Provides recommendations and related analysis for energy risk policy to executives.
- Supports the short and long term trading functions by providing information, analysis and support to evaluate alternatives for managing risk exposure and manages the evaluation of risk characteristics and market value of physical and financial commodity options and hedges to SMUD.
- Ensures compliance with FERC, NERC, WECC and other agencies and regulatory bodies and with new and/or existing financial standards imposed by any regulatory or legal authority or by federal/state law such as the Dodd Frank Act, Cap & Trade regulation, and CAISO markets. Stays current on new industry requirements, regulations, protocols and procedures affecting commodity transactions and middle office functionality and ensures compliance with changing regulatory environments.

2011-2016

SMUD Sacramento, CA

Manager, Energy Settlements

- Oversaw after-the-fact balancing authority and commodity settlement activities, providing direction and managing staff in the independent analysis, reconciliation, and verification of approx. \$450M annually of commodity transactions, across multiple front, middle, and back office systems and associated analytical and reporting activities ensuring integrity of data.
- Key lead for industry stakeholder initiatives impacting Energy Trading, Risk and Settlements, such as those held by the California Independent System Operator (CAISO), California Air Resources Board (CARB), and the Commodities and Futures Trading Commission (CFTC), that impacted SMUD to assist in influencing decisions to result in the best outcome for SMUD ratepayers

2005-2011

SMUD Sacramento, CA

Journey/Senior Power System Analyst

- Led SMUD's CAISO settlement efforts including statement validation, variance analysis and disputing, in addition to stakeholder initiative participation and policy development relating to Energy Settlements and Trading.
- Performed daily and monthly validation of all SMUD load, generation, and interchange data, verifying price and volume of all forward market and real-time energy trades, and reconciling this data across multiple systems to ensure accurate energy settlement.

Education

May 2000 California State University, Sacramento-Sacramento, CA
Bachelor of Arts, Economics

10. Appendices

Ed Hamzawi, P.E.

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Relevant Experience

- 2011-present **SMUD, Sacramento, CA**
Director, Customer Solutions
- Successful oversight and delivery of a full suite of utility customer programs including energy efficiency, consumer loans, renewable energy, customer assistance, revenue, carbon/green, and demand-response services and solutions.
 - Supervision and leadership of highly rated commercial account management team providing account management services and solutions to SMUDs Key, Major, and Small and Medium business electric accounts.
- 2010-2011 **SMUD Sacramento, CA**
Customer Applications Coordinator, SmartSacramento®
- Member of the core team which initiated the implementation of the \$308M Smart Grid project for SMUD. The combined budgets for the activities and projects contained within the Customer Applications umbrella were \$67.5 million or 22% of the total project budget over the 3-year project period.
- 2007-2010 **SMUD Sacramento, CA**
Process Coordinator, Program Delivery
- Supervisor in the Programs and Services group of the Customer Services Business Unit. Led and managed the implementation of SMUDs energy efficiency and consumer loan programs.

Education

1984 University of Colorado at Boulder-Boulder, CO
Master of Science, Civil Engineering

- Specialization in the area of Building Energy Engineering

1982 University of California at Davis-Davis, CA
Bachelor of Science, Civil Engineering

- Graduated with High Honors
- Lifetime member of Tau Beta Pi, National Engineering Honor Society
- Certifications and Licenses

Certificates and Licenses

Registered Professional Mechanical Engineer with the State of California, 1990; License # M27306

Obadiah Bartholomy

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Relevant Experience

- 2015-present **SMUD, Sacramento, CA**
Manager, Distributed Energy Strategy
- Manage team of 6 strategic planners, project managers, and engineers to develop an enterprise-wide strategy for Distributed Energy Resources
 - Develop recommended approach for enterprise Integrated DER planning process and initiate changes to realize this approach
- 2009-2013 **SMUD Sacramento, CA**
Supervisor, Customer Technology Strategy
- Supervise 10 project managers and planners responsible for planning SMUD's EE, PV, DR, EV and carbon programs
 - Serve as sponsor and strategic oversight function of Integrated Distributed Energy Resource analysis effort, DER planning and strategy development
 - Coordinate SMUD Clean Energy Standard Policy development and recommendations working with IOU's & LADWP
- 2004-2009 **SMUD Sacramento, CA**
Senior Project Manager, Climate Change and EE R&D Program Manager
- Managed implementation of California Cap and Trade program for SMUD
 - Manage Climate Change program - develop policy recommendations, mitigation evaluations, adaptation, long-term carbon forecasting
 - Manage emerging technology demonstration program coordinating with statewide programs and overseeing 40+ emerging technology demonstrations

Education

2002 – 2008 SMUD Sacramento, CA
Associate Mechanical Engineer – Energy R&D, Solar PV & Climate Change

2008 University of California, Davis-Davis, CA
M.S. Transportation Technology & Policy

2002 California Polytechnic State University, San Luis Obispo, CA
B.S. Mechanical Engineering

Certificates and Licenses

Board Member, Vice President – Utility Variable Generation Integration Group
Registered Professional Engineer - California

10. Appendices

Emily K. Nichols

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Relevant Experience

2015-present

SMUD, Sacramento, CA

Manager, Commercial Account Solutions

- Lead commercial customer relationships to complete segmented portfolio, targeting revenue growth, conversion, and customer satisfaction
- Deploy sales analytics tools and measurements, including CRM and product catalogue field resources

2005-2015

Pacific Gas & Electric San Francisco, CA

Manager, Customer Experience Strategy

- Deployed proactive and self-service communication for commercial and residential customers regarding payment, start/stop service, and outages, receiving Chartwell's Customer Services Best Practice Award
- Delivered 7 million dollars in operational business benefit while improving customer satisfaction by more than 10%

Manager, Customer Impact - Rates

- Managed customer satisfaction campaign targeting 1,000,000 small and medium commercial businesses, including resource allocation, project analytics, and strategy while increasing JD Power SMB customer satisfaction by 1.5 points and driving down cost per touch by \$1.70

Supervisor, Sales Operations

- Led support of large scale sales and service organization providing account management to commercial customers, ensuring delivery of portfolio targets including customer satisfaction, demand side reduction, and integrated program acceptance
- Designed and deployed various customer surveys, utilizing results to design comprehensive strategies and update operational metrics

Supervisor, Corporate and National Accounts

- Managed team of customer facing account representatives assigned to national corporate level entities across industry segments
- Implemented segmentation for national/corporate accounts, resulting in increased customer centric product offerings and a 30 gigawatt increase in participation
- Introduced and managed centralized process for connecting with SMB customers, reducing cost and increasing CX touchpoints

Education

2005 California State University Sacramento-Sacramento, CA
Bachelor of Arts, Ethnic Studies

Richard Oberg

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Relevant Experience

- 2013-present **SMUD, Sacramento, CA**
Manager, Program Delivery
- Oversee the implementation and delivery for all Distributed Energy Resource (DER) Customer Programs. DER Customer Program portfolios include: energy efficiency (EE), demand response (DR), distributed generation (DG), electric vehicle (EV) and carbon rate reduction programs. Management includes planning personnel, budget, metrics, and overall EE, DR, DG, EV and carbon rate portfolio management.
- 2008-2013 **SMUD Sacramento, CA**
Supervising Demand Side Specialist
- Planning supervisor for all energy efficiency (EE), demand response (DR), distributed generation (DG), electric vehicle (EV) and carbon programs for SMUD. Supervision includes planning personnel, budget, metrics, and overall EE and DR portfolio management.
- 2003-2008 **SMUD Sacramento, CA**
Principal Demand Side Specialist
- Program planner for commercial/industrial sector. Provided planning (budgeting, goal-setting, and plan development) and planning team member expertise for all SMUD commercial/industrial energy-efficiency programs and revenue/customer service programs. Helped facilitate transition to unit cost budgeting model.
- 2000-2003 **SMUD Sacramento, CA**
Demand Side Specialist
- Responsible for providing research and evaluation for 11 commercial/industrial conservation programs, three commercial/industrial revenue programs, two residential load management pilot programs, and four electric vehicle programs.

Education

1983 Portland State University-Portland, OR
Bachelor of Science, Mechanical Engineering

Certificates and Licenses

California Professional Mechanical Engineer, #M25542

10. Appendices

Joey Penneman

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Relevant Experience

- | | |
|--------------|---|
| 2012-present | <p>SMUD, Sacramento, CA
Strategic Account Advisor, Commercial & industrial Account Solutions</p> <ul style="list-style-type: none">• Manage Federal, State, and County customers – Represented 1st and 2nd largest customers in SMUD’s service territory.• Supported development of numerous customers/segment-specific programs, policies & pilots including: On-bill financing, SolarShares (Community Solar) Distributed Generation Interconnection to Network, Customer Greenergy Agreement, and Energy Storage.• Developed in-house and customer facing trainings for relevant issues in the electric utility industry, such as Zero Net Energy, Electric Vehicles, Life Cycle Cost Analysis and Battery Storage. |
| 2011-2012 | <p>Franklin Energy Okemo, MI
Energy Advisor II</p> <ul style="list-style-type: none">• Designed and implemented community outreach to integrate energy savings measures into multifamily facilities.• Developed training programs• Oversaw incentive research and assessment to determine eligibility and viability of customer for energy savings programs. |
| 2010-2011 | <p>Air Advice Portland, OR
Sales Engineer</p> <ul style="list-style-type: none">• Developed and executed technical training presentations resulting in the creation of a new revenue generating stream.• Designed and built industrial and residential software tools focused on aiding customers with customer equipment.• Conducted both remote and in-person energy audits on commercial facilities. |

Education

2008-2010 NW Energy Education Institute Eugene, OR
Associates Degree – Energy Management

1998-2004 Oregon State University Corvallis, OR
B.S., Business Administration, International Business

Certificates and Licenses

2016- Certified Energy Manager (CEM) Association of Engineers

Farres Everly

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Relevant Experience

- 2008-present **SMUD, Sacramento, CA**
Director, Communications, Marketing and Community Relations
- Direct a staff of 75 in marketing, market research, corporate communications, web, public affairs, social media, community relations and economic development
 - Manage a \$20M budget in development, forecasting and variance reporting
 - Launched new brand in 2011 and maintain brand standards daily
- 2001-2008 **Vision Service Plan (VSP) Rancho Cordova, CA**
Advertising and Direct Response Manager
- Developed and managed media budgets totaling over \$6 million
 - Managed all facets of B2B and B2C advertising, including two advertising agencies
 - Oversaw VSP's member and consumer website
- 1997-2000 **The Money Store, Commercial Lending West Sacramento, CA**
Assistant Vice President, Marketing
- Managed external and internal communications for \$1 billion financial corporation
 - Lead all creative development, including copywriting and design
 - Supervised graphic design, copywriting, promotions, tradeshow and public relations staff
- 1994-1996 **Sacramento Metropolitan Chamber of Commerce Sacramento, CA**
Communications Coordinator
- Managing editor for the Chamber's monthly publication, Sacramento Business
 - Designed and marketed advertising and directed all publication marketing and budgeting
 - Pitched media, wrote media releases and kits to improve media coverage and image

Education

California State University, Chico- Chico, CA
Bachelor's Degree in Journalism, concentration in Public Relations

10. Appendices

Tanya Andrews

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Relevant Experience

2014-present

SMUD, Sacramento, CA

Manager, Digital & User Experience

- Lead the strategy, execution and continuous improvement of all SMUD’s digital channels.
- Recruit, mentor and coach staff and conduct resource and capacity planning
- Work with SAS providers and internal partners to implement technology solutions

2012-2014

Paramount Equity Roseville, CA

Digital Content Manager

- Oversee all website, Intranet and email operations
- Develop and deploy lead generation search and email campaigns
- Implement and deploy Salesforce/Market to marketing automation campaigns for lead generation and transactional lifecycle for loan origination and solar construction

2008-2012

University of the Pacific Stockton, CA

Web Marketing Manager

- Lead the web communications and content marketing efforts across all digital channels.
- Plan and deploy new 10k page website redesign on enterprise CMS system
- Plan and deploy new personalized marketing automation campaign for internal employees and donors

Education

2000-2002 Bellevue University Omaha, NE
B.S., eBusiness

- Deans Scholars List, Graduation with honors cum laude

1998-2000 Hennepin Technical College Eden Prairie, MN
A.A.S, Website Design

- Graduated Deans List

Certificates and Licenses

2017 Neilson Norman Group UX Certification (UX Management) 2007 Google Analytics Individual Qualification (GAIQ)

Tom B. Jas

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Relevant Experience

1999-present

SMUD, Sacramento, CA

Manager, Marketing, Research and Data Analytics

- Oversee marketing, research and data analytics staff members
- Develop solutions for customers in the marketing channels
- Tailor products/programs/services to the customer and measure success

2005-2006

SMUD Sacramento, CA

Manager, Customer Strategy

- Oversaw a unit of 60 employees and provided job opportunities through job rotations
- Assisted with strategic directives for Customer Strategy Business Unit
- Supported LEEDERS project that reduced staff by 25% and allocated resources to meet projects and deadlines

1995-1999

American Honda Motors Corp Torrance, CA

Senior Sales and Marketing Analyst

- Assisted in U.S. corporate pricing strategies that resulted in an increase in market penetration by 15%
- Assisted on launching the Honda Odyssey and the Acura MDX
- Developed and implemented the loyalty/retention programs including a "Full Circle" program for customer leasing a car

1990-1995

Nissan Motor Acceptance Corp Torrance, CA

Senior Financial Analyst

- Supervised a staff of three analysts
- Responsible for a budget of over \$145M for 35 business units
- Analyzed the profitability and pricing strategies for seven product lines

Education

1990 West Coast University Los Angeles, CA
MBA

1985 Carroll College Helena, MT
B.A., Business Administration
Minor in Communications

10. Appendices

Erica Manuel

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Relevant Experience

- 2010-present **SMUD, Sacramento, CA**
Manager, Community, Economic Development & Education
- Direct all economic development, community engagement, volunteerism and energy education for the 6th largest utility in the nation.
 - Manage a staff of more than 25 business, community and engineering professionals responsible for educating the public, engaging stakeholders, enhancing community value and promoting economic development in the Sacramento region.
 - Facilitate participation in more than 650 events and partnerships annually with more than 250 local non-profits and community organizations. Managed program growth of more than 50 percent in the last 5 years.
- 2004-2010 **California Exposition & State Fair Sacramento, CA**
Assistant General Manager, Marketing, Public Relations & Sponsorships
- Appointed by Gov. Arnold Schwarzenegger to oversee all communications efforts for the organization including Marketing, Public Relations, Media Relations, Community Outreach and Sponsorships.
 - Supported partnership development efforts, including procurement and fulfillment of \$3 million+ annual sponsorship program.
 - Developed events and programs, and convened community advisory councils and other stakeholder groups to align with crisis and reputation management strategy.
- 1999-2004 **Edelman Sacramento, CA**
Senior Account Supervisor (Assistant Vice President)
- Developed and implemented strategic communications campaigns at the largest independent public relations firm in the nation. Clients included Fortune 1000 companies, broad-based coalitions, business associations and non-profit organizations, like Microsoft, Pearson Plc, BP and others.
 - Strategized and executed regional and national branding and crisis communications response programs related to Education, Energy, Healthcare and Technology.

Education

2000 Stanford University Palo Alto, CA
BA, Economics
Concentration in Communications

Certificates and Licenses

Graduate Certificate, Corporate Citizenship Mgmt, Boston College (2017)

Appendix C: Programs and Services

As a community-owned utility, SMUD has long offered a variety of programs and services, aimed at assisting its residents and businesses with their energy usage. Below are a variety of offerings that can be developed and modified specifically to suit VCEA.

Residential Programs

Residential Electric Vehicle (EV) Adoption

- Residential Rebates
- EV Rate Discounts
- Community Education and Outreach
- Customer EV Online Evaluation Tool

Residential Energy Efficiency

- Appliance, Pool Pump and Lighting Efficiency
- Heating, Cooling and Water Heating Efficiency
- Whole House Performance
- Lighting Incentive through Local Retailers
- Shade Trees for Residential Cooling
- Water District Efficiency

HomePower

HomePower gives customers peace of mind by offering a home maintenance service paid through a fee that is applied to their electrical bill.

Power Protection

Power Protection prevents harmful voltage surges from entering a customer's home with the meter installation of a utility-grade, whole house surge suppressor and plug-in surge protectors.

SMUD Energy Store

SMUD Energy Store is an e-commerce site hosted by Simple Energy that will launch in late 2017. The site will offer the direct online sale of LED lights, smart thermostats, connected home devices, advanced power strips, water savings products, window AC control, and outdoor living products.

Connected Homes

SMUD implements connected technology solutions that allow residents manage their electricity use while providing SMUD with assets to reduce load for economic and operational reliability.

EnergyHELP

This program facilitates community members to help others in need by administering donations via a line item on the monthly bill.

Shade Trees

For almost 30 years SMUD has been partnering with The Sacramento Tree Foundation to bring free shade trees to SMUD customers.

Community Outreach

Our staff promotes assistance programs to low-income and hard-to-reach customers at various community events and on-site visits with key community organizations throughout the year.

Residential Advisory

The Residential Advisory program develops, maintains and distributes information to help residential customers better manage their energy usage and expenses.

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Low-Income Weatherization

Weatherization provides an energy audit and one-on-one education by SMUD staff, plus installs free energy savings measures to low income homes (single-family and apartments) to help reduce electricity bills and to increase safety and comfort.

Customer Financing

The energy efficiency loan program has served SMUD customers for 38 years and lent nearly \$567 million to fund qualifying building improvements within SMUD's service territory.

Energy Education and Technology Education

SMUD promotes energy education and career awareness to students and teachers throughout the region through our Energy Education & Technology Center (EE&TC). We work closely with our education partners and community stakeholders to reach thousands of students and teachers each year. The EE&TC offers free classes to customers on a range of energy-related topics, including solar energy, energy efficiency, lighting, pool pump efficiency, electric vehicles and many others.

Commercial Programs

Commercial, Industrial and Agricultural Energy Efficiency

- Tailored Energy Reduction Incentives
- Prop 39 School Efficiency
- Prescriptive Incentives
- Third Party Comprehensive Retrofits
- New Construction Design
- Business Energy Reports
- Shade Trees for Businesses and the Community

Savings by Design Program

Savings by Design helps commercial building owners and developers incorporate high-performance design into their new construction and renovation projects.

Commercial and Industrial Account Management

SMUD's Strategic Account Advisors (SAAs) serve our commercial and industrial customers. SAAs are focused on engaging with customers to know and anticipate their needs, advise them on energy solutions that make sense for their business and deliver on that advice. Our goal is to become a trusted energy advisor – to help customers with everything energy related, from meeting their sustainability needs, piloting new technologies and helping them become more operationally efficient. If they succeed then the community succeeds and so does SMUD.

Commercial Electric Vehicle (EV)

- Fleet EV Rate Discounts
- Customer EV Online Evaluation Tool
- Multifamily Charging
- Workplace Charging
- Low Carbon Fuel Standard Compliance

Connected Businesses

SMUD implements connected technology solutions that allow non-residential customers to manage their electricity use while providing SMUD with assets to reduce load for economic and operational reliability.

Energy Research and Development

SMUD’s Energy Research and Development department job is to look ahead beyond the immediate operating and planning horizon of SMUD and examine emerging trends, business models, costs and solutions before they are needed in the next 5-15 years.

Research Area	Sample projects
Climate change	Bio-sequestration, forestry climate offset protocols, community outreach, policy analysis
Demand response	Internet-of-things technologies for managing residential electric demand and supply
Energy Efficiency	All electric new homes, indoor agriculture – lighting and HVAC, circadian lighting
Electric Transportation	Ultra-fast vehicle chargers, medium and heavy duty vehicles and fleets
Renewable Energy Integration	Integrated system modeling, hosting capacity
Biomass and Distributed Generation	Dairy digesters, renewable natural gas supply
Grid Modernization	Smart solar and battery inverters, voltage regulation, sensors, switches, and distribution system smart technology

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Climate Change

The need to address climate change is one of the most important drivers of our R&D programs. Climate change underpins all the other key research areas and issues discussed below. Our objective is to provide leadership both within the organization and externally on technical and policy issues associated with climate change and climate readiness. Our activities focus on planning for long-term attainment of SMUD's Sustainable Power Supply goals and understanding the physical impacts that projected climate changes will have on SMUD assets and operations.

Demand Response

As our greenhouse gas emission decline, our base demand and baseload supply will both change as a result increasing penetration of electric transportation and dramatically higher use of solar PV by SMUD and its customers. This will in turn require more flexibility in the system, on the supply side as well as on the demand side. Demand response could provide much needed flexibility in the system and represents a low cost option that should be compared to other types of resources such as storage and flexible generators. Our research objective is to focus on visibility, reliability, and aggregation of demand response resources in order to make them equivalent to conventional supply options with respect to cost, availability and reliability. Home energy management systems, energy storage and programmable cars all could be considered as potential future sources for demand response.

Energy Efficiency

SB 350 mandates a doubling of energy efficiency by 2030 relative to current levels. Energy efficiency is essential to provide our customers with the public service that help them optimize their electricity costs. Energy Efficiency R&D will continue to focus on a combination of supporting indoor agriculture and other emerging sources of demand, identifying means by which SB350 mandates will be met or exceeded, and identifying projects that provide value to our customers through cost savings or enhanced quality experience.

Electric Transportation

Electrification of our transportation sector will significantly contribute to achieving regional and state climate change goals. The R&D team is focusing on removing barriers for electric vehicles and performing demonstration and pilot project for applications that are underexplored or where public knowledge is lacking. Research efforts are also focused on mitigating or avoiding negative impacts to the utility of added vehicle electric demand. Current projects are focused on managed charging, developing the first super-fast charging stations in California and removing range anxiety for expanding the charging infrastructure in Sacramento.

Renewable Energy Integration

Providing cost effective grid-delivered reliability to our customers will become increasingly challenging in the future. Higher penetration of distributed intermittent renewable energy offer the double challenge of reducing electricity sales volume while at the same time increasing the need for grid support and flexible resources. ER&D's research in this area focuses on identifying and testing new and emerging technologies to improve the economics and reliability of renewable generation resources. Our research also focuses on modeling and planning that will enable SMUD to increase renewable energy penetration levels to meet the 2030 RPS requirement of 50% and that will put us on track for meeting California's and the SMUD Board's ambitions of 80% and 90% carbon emission reductions. Research on very high levels of renewable energy penetration is particularly important since we may not be in full control of the pace of renewable energy expansion – it is possible that customers adopt solar at a faster pace than expected due to rapid cost declines in behind-the-meter solar and storage applications.

Biomass and Distributed Generation

Biomass and biogas technologies are not always economically viable today. However, these technologies are among the few that can provide dispatchable and flexible renewable energy using thermal power plant technologies. Biogas also provides a potential hedge against high long term gas prices. Biomass R&D leverages external funding to support case-by-case development of projects such as dairy digesters and continue to explore new areas for cost-effective biomass applications using urban and rural biomass waste. Additional focus areas includes research on whether intermittent distributed wind and solar resources on the distribution system are capable of supporting rather than detracting from reliability.

Storage

Battery storage will likely be a critical component of our future distribution infrastructure because of its ability to provide flexible, fast capacity and its ability to absorb excess generation. As capital costs continue to decline, it will eventually be competitive with conventional resources as well as with demand response. Our research focuses on developing new and innovative modeling tools as well as identifying the key applications where storage is likely to offer the highest value for SMUD.

Grid Modernization

R&D efforts on grid modernization have three purposes: The first is to optimize grid operations of the transmission and distribution systems so as to minimize outages, increase reliability and improve customer satisfaction. The second is to reduce O&M costs by researching new technology and best practices. The third is to integrate more customer-sited renewable energy generation. Key areas of current focus for the grid modernization team include the implications of a transactive grid (peer-to-peer trading), how to better utilize smart meter and smart grid data to support operations, reduce costs, and deliver more valuable service to our customers. We have several pilot projects underway to test and validate new technology for improving the electric reliability while also maintaining low costs.

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Sacramento Municipal Utility District

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August 24, 2017

To: Board of Governors, Valley Clean Energy Alliance (VCEA)
From: RFP subcommittee of the VCEA Advisory Committee (Gerry Braun, Tom Flynn, Lorenzo Kristov, David Springer)
Subject: Recommendations regarding VCEA CCA service options

The RFP subcommittee of the VCEA Advisory Committee herein offers its recommendations regarding the Board's upcoming decision on service options for implementation and operation of the VCEA CCA. By way of background for these recommendations, in our role as the RFP subcommittee we have:

- Reviewed, evaluated and commented on all responses to the RFP for vendor services;
- Provided our recommendation to the Board for choice of a contractor for the community outreach, marketing and customer notification services;
- Reviewed and commented on SMUD's initial proposal to VCEA, and submitted questions to SMUD regarding several elements of their service proposal;
- Received and reviewed SMUD's responses to our questions, and participated in a face-to-face discussion, arranged by VCEA staff, with the SMUD team that would work with VCEA once a contract is agreed to and executed.

The RFP subcommittee recommends that the VCEA Board direct VCEA staff to:

1. Commence negotiations with SMUD for technical and energy services, data management and call center services, wholesale energy services, enterprise risk management and operational services.
2. Consult with the RFP subcommittee on an ongoing basis during the contract negotiation to obtain the subcommittee's assistance in developing contract provisions in areas that are (a) central to the original decision to implement a JPA comprised of local jurisdictions rather than join an existing CCA in another part of the state, and (b) innovative and without precedent in CCA service agreements, and therefore require the expertise the subcommittee can provide. Two examples of such areas are:
 - To provide the ability for each of the JPA member jurisdictions to develop energy programs or resources specifically tailored to the needs of energy users in their local areas; and
 - To develop a working relationship with PG&E that can enable and facilitate innovative, collaborative energy projects.

If the Board accepts these recommendations, the RFP subcommittee will inform, advise and consult with the full VCEA Advisory Committee on technical, market and policy issues that come up in contract discussions.