Staff Report Item 6

TO:	East Bay Community Energy Executive Committee
FROM:	Taj Ait-Laoussine, VP Technology & Analytics and Annie Henderson, VP Marketing & and Account Services
SUBJECT:	**Review of Technology Roadmap (Informational Item)**
DATE:	June 26, 2020

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Recommendation

Receive an update on the technology and systems roadmap plans.

Background and Discussion

Following the model laid out by other CCAs, EBCE is currently outsourcing both the data management and call center functions to a single third-party Billing and Data Management Service Provider (SMUD). Even though these two core functions don't necessarily go together naturally, they have historically been combined as they come together through a Customer Relationship Management (CRM) system that is central to both functions, and which is also outsourced to the service provider.

While this approach has enabled EBCE to deploy its services rapidly, to mitigate its execution risk, and to benefit from the expertise and capabilities of an experienced utility service provider, it has also surfaced several drawbacks:

- EBCE has limited control over the roadmap and capabilities of the technology employed. In particular, the CRM capabilities offered to EBCE (and to other CCAs for that matter) are relatively limited, and do not enable EBCE to conduct the typical customer marketing and outreach activities that are traditionally associated with CRM systems. These activities (customer communications, program enrollment, etc.) are central to the needs of our Local Development and Marketing and Account Services Teams.

- EBCE does not 'hold licenses' to the core technology that is used to manage the customer system of record. If EBCE wishes to extend the capabilities of the technology (to address the limitations noted above, for instance), it must pay additional fees to the service provider, while still not 'owning' the technology and systems and only furthering the limitation to innovation and dependence on a third party provider.

- The costs of these integrated services are quite high, and there is very little transparency on how those costs break down, opportunities for EBCE to find ways to reduce costs, or alternative options in the marketplace. The relative lack of competition probably results in higher prices than would otherwise be acceptable.

- The solutions providers currently do not offer extensive analytics and reporting capabilities, further hampering the ability of CCAs to innovate.

To address the latter point, EBCE has developed an Analytics Data Platform, built on Google Cloud technology. This system processes a significant portion of the data and transactions that are core to our operations. It provides data-driven insights and reports to the entire organization (as well as to external parties) through self-service dashboards, automated reports, and ad hoc analysis. The functions and capabilities of this system have expanded significantly since the inception of EBCE, and it now supports both short-term and long-term forecasting, regulatory compliance reporting, customer bill analysis and savings reports, complex operational models, and data exchanges with several third-party service providers. This system also captures and maintains additional data relevant to EBCE operations, such as county tax assessor data, weather data, market price and load data, solar potential, DMV records, etc.

Given these conditions and the current technology landscape at EBCE, staff has spent a significant amount of time thinking through its ideal product roadmap as it prepares to renew its contract with SMUD. Through internal needs assessments, discussions with other CCAs and technology providers, and a review of the technology solutions available in the marketplace, EBCE staff has settled on the following course of action:

1) Procure and implement a separate CRM solution to serve the needs of the programs and marketing and account services teams. Staff is currently reviewing technology options. The approve budget for fiscal year 2020/2012 includes a cost of $350K to license and implement the selected CRM. Staff expects to bring the licensing of this system for approval at the July Board Meeting.

2) Work with SMUD to enhance and strengthen the data exchanges between the SMUD system and the ECE Data Warehouse, so that it can be used as the central data repository for the CRM, thus enabling the CRM to become EBCE's system of record for all customer data.

3) Evaluate options for disaggregating and/or bringing in-house some of the functions that are currently part of the package of outsourced data management services. EBCE staff still expects to be outsourcing most if not all of these functions, but by holding the license to the central CRM, we expect to have more control over how these functions can be separated, and the option to select the best solution for each function at a lower cost.

The attached presentation contains a roadmap that shows in more detail how EBCE proposes to conduct the implementation and evaluation process over the next 18 months, along with idealized overviews of the systems landscape before and after. EBCE staff is currently actively engaged in negotiations with SMUD regarding the renewal extension of its services contract, and this roadmap has been shared with them.
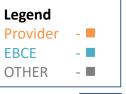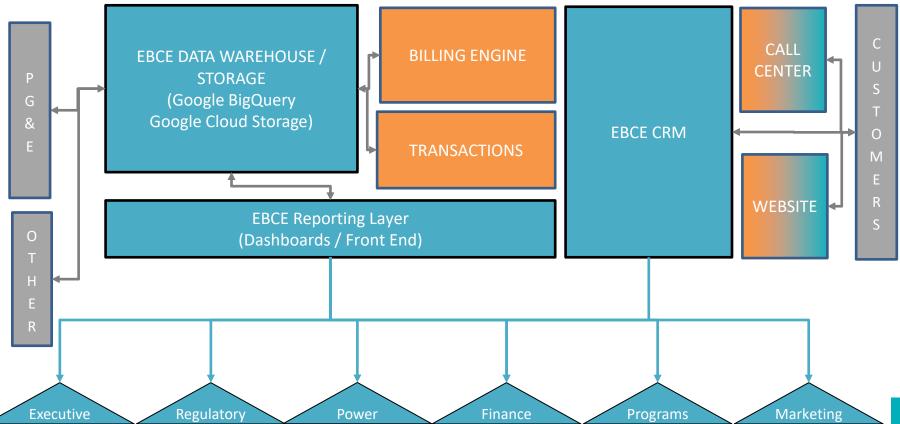
Attachment:
   A. Technology Roadmap Plan Presentation

Executive Committee Technology Roadmap

PRESENTED BY: Taj Ait-Laoussine
DATE: JUNE 26, 2020

Current Systems Map (Idealized)

Proposed Systems Map

Legend
Provider - ■ (orange)
EBCE - ■ (teal)
OTHER - ■ (gray)

PG&E

OTHER

EBCE DATA WAREHOUSE / STORAGE
(Google BigQuery
Google Cloud Storage)

BILLING ENGINE

TRANSACTIONS

EBCE Reporting Layer
(Dashboards / Front End)

EBCE CRM

CALL CENTER

WEBSITE

CUSTOMERS

Executive

Regulatory

Power

Finance

Programs

Marketing

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Project timeline (Gantt chart) spanning April 2020 to November 2021

CRM
- CRM Selection
- CRM Initial Implem...
- Billing & Usage Int...
- EDI Txs and Cust. Interactions...
- Blue Bill Integration
- Website Integration
- Call Center Integration
- Parallel Testing & Cutover

Warehouse Data Expansion
- "Harden" Existing Billing and ...
- Configure SMUD EDI Transacti...
- Configure SMUD Cust. Interac...
- Specify & Implement v2 of the Warehouse to Suppor...
- Call Center Integration
- Billing Integration (& EDI If Necessary)
- Parallel Testing & Cutover

Call Center
- Evaluate Build vs. Buy Decision
- Build – Develop Plan, Hire Manager, Implement Technology
- Buy – Develop, Issue & Evaluate RFP + Sel...
- Build – Hire & Train Operators
- Develop Policies & Procedures; Training ...
- Parallel Testing & Cutover

Billing Transactions
- Evaluate Build vs. Buy Decision
- Build – Evaluate Technology Partners, Develop Staffing Plan & Hire, Devel...
- Develop & Implement Exception Management and Bill / Cancel / ...
- Buy – Issue RFP, Evaluate & Select
- Develop Integration Specificati...
- Implement Integrate & Test
- Parallel Testing & Cutover