

Company: Southern California Gas Company (U 904 G)
Proceeding: 2024 General Rate Case
Application: A.22-05-015/-016 (cons.)
Exhibit: SCG-215-E

REBUTTAL TESTIMONY OF
BERNARDITA M. SIDES
(CUSTOMER SERVICES – OFFICE OPERATIONS)

ERRATA

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA



June 2023

TABLE OF CONTENTS

I.	SUMMARY OF DIFFERENCES	1
II.	INTRODUCTION	1
A.	CAL ADVOCATES	3
B.	TURN.....	3
C.	CLS	4
D.	SBUA.....	4
III.	REBUTTAL TO PARTIES’ O&M PROPOSALS.....	5
A.	NON-SHARED SERVICES O&M	5
1.	Customer Contact Center (CCC) Operations.....	5
2.	Customer Contact Center (CCC) Support.....	8
3.	Branch Offices	10
4.	Billing Service	13
5.	Credit & Collections	13
6.	Remittance Processing.....	16
7.	Customer Service OOO & Technology	18
B.	SHARED SERVICES O&M	20
1.	Payment Processing	20
IV.	REBUTTAL TO PARTIES’ CAPITAL PROPOSALS	22
A.	CCC MODERNIZATION CAPITAL PROJECT	22
1.	CAL ADVOCATES	22
2.	TURN.....	22
B.	ADVANCED METER HEADEND AND METER DATA MANAGEMENT NEXT- GENERATION (ACLARAONE)	24
1.	CAL ADVOCATES	24
2.	TURN.....	24
V.	CONCLUSION.....	25
	APPENDIX A – GLOSSARY OF TERMS	BMS-A-1
	APPENDIX B – DATA REQUEST RESPONSES.....	BMS-B-1

**ERRATA REBUTTAL TESTIMONY
OF BERNARDITA M. SIDES
(CUSTOMER SERVICES – OFFICE OPERATIONS)**

I. SUMMARY OF DIFFERENCES

Table BS-1

TOTAL O&M - Constant 2021 (\$000)			
	Base Year 2021	Test Year 2024	Change
SOCALGAS	83,464	88,448 ¹	4,948
CAL ADVOCATES	83,464	88,448	4,984
TURN	83,464	86,644	3,180
CLS	83,464	86,672	3,208

Note: SBUA's recommendations were made without specific dollar amounts. As such, they are not reflected in this table.

Table BS-2

TOTAL CAPITAL - Constant 2021 (\$000)					
	2022	2023	2024	Total	Difference
SOCALGAS	14,520	20,657	15,763	50,940	0
CAL ADVOCATES	14,520	20,657	15,763	50,940	0
TURN	13,267	8,145	1,616	23,028	-27,912

II. INTRODUCTION

The following rebuttal testimony regarding Southern California Gas Company's (SoCalGas's) request for Customer Services - Office Operations (CSOO) addresses the intervenor testimony of:

- Public Advocates Office of the California Public Utilities Commission (Cal Advocates) as submitted by Mariana Campbell (Exhibit (Ex.) CA-10), dated March 2023.
- The Utility Reform Network (TURN), as submitted by David Cheng (Ex. TURN-09), dated March 2023.
- Community Legal Services (CLS) as submitted by Tadashi Gondai (Ex. CLS-01), dated March 2023.

¹ A reduction to the TY 2024 forecast is being made in the amount of \$36,000 to remove costs that were identified while responding to data request CLS-004, Question 17 (See CLS-01-Appendix at 45).

- Small Business Utility Advocates (SBUA) as submitted by Richard McCann & Steven J. Moss, dated March 2023.

As a preliminary matter, the absence of a response to any particular issue in this rebuttal testimony does not imply or constitute agreement by SoCalGas with the proposal or contention made by these or other parties. The forecasts contained in SoCalGas's direct testimony, performed at the project level, are based on sound estimates of its revenue requirements at the time of testimony preparation. SoCalGas's direct testimony (Ex. SCG-15-R) supports the Test Year (TY) 2024 forecasts for operations and maintenance (O&M) costs for both non-shared and shared services, and the business justification for Information Technology (IT) capital costs for the years 2022, 2023, and 2024, associated with the Customer Services – Office Operations (CSOO) area for SoCalGas.

CSOO provides customer contact and revenue cycle services to meet the needs of SoCalGas's diverse customer base served through 5.9 million active meters. CSOO also provides shared support to San Diego Gas & Electric Company (SDG&E) for some bill delivery, payment processing and Credit & Collections functions. The Scope of CSOO activities includes the following Non-Shared services:

- Customer Contact Center (CCC) Operations & Support
- Branch Offices and Authorized Payment Locations
- Billing Services
- Measurement Data Operations
- Credit and Collections
- Remittance Processing (Bill Printing)
- Postage
- Customer Services Other Office Operations (OOO) Technology & Support
- Uncollectible Rate
- Business Justification for IT Capital Projects that support Customer Services - Office Operations areas.

In addition, CSOO has the following Shared Services:

- Payment Processing CC 2200-0355
- Manager of Remittance Processing CC 2200-2247

1 SoCalGas's cost forecasts support the Company's goal of providing safe, secure, reliable,
2 and efficient gas service to customers, as well as complying with all federal, state local and
3 California Public Utilities Commission (CPUC or Commission) regulations. The CSOO cost
4 forecasts also support SoCalGas's focus on continuous improvement from a safety, reliability,
5 security, cost efficiency, and customer experience perspective.

6 CSOO provides rebuttal testimony to address issues, positions and recommendations
7 raised by the following parties:

8 **A. CAL ADVOCATES**

9 Below is a summary of Cal Advocates' position(s) on CSOO TY 2024 forecast:²

- 10 • Cal Advocates does not take issue with SoCalGas's O&M forecast
11 for Customer Services - Office Operations.

12 **B. TURN**

13 Below is a summary of TURN's position(s) on the following workpaper groups:³

- 14 • Branch Offices: SoCalGas's TY 2024 request is \$12.246 million.
15 TURN recommended the reduction of \$1.334 million, challenging
16 SoCalGas's BY2021 Forecast Methodology
- 17 • Credit and Collections: SoCalGas's TY 2024 request is \$5.934
18 million TURN recommended the reduction of \$0.470 million and
19 is challenging SoCalGas's BY2021 Forecast Methodology
- 20 • CCC Technology Modernization: TURN is challenging
21 SoCalGas's business justification claiming no business case, no
22 cost-benefit analysis, and no quantification of potential benefits.
- 23 • Advanced Meter and HeadEnd and Meter Data Management Next
24 Generation (AclaraOne): TURN is challenging SoCalGas's

² March 27, 2023, Public Advocates Office Report on the Results of Operations for San Diego Gas & Electric Company, Southern California Gas Company, Test Year 2024, General Rate Case, Exhibit CA-10 (Campbell).

³ March 27, 2023, Prepared Direct Testimony of David Cheng Addressing Customer Services for Southern California Gas Company, on behalf of TURN, Ex. TURN-09 (Cheng).

business justification claiming no business case, no cost-benefit analysis, and no quantification of potential benefits.

C. CLS

Below is a summary of CLS's position(s) on the following workpaper groups:⁴

- CCC Operations – CLS is challenging SoCalGas's methodology of choosing in-house language support.
- Branch Offices – CLS is challenging SoCalGas's non-labor costs of replacing the Payment Entry Processing units and recommended a lower cost option.
- Billing Services – CLS agrees with the revised calculation.
- Remittance Processing – CLS is challenging our labor forecast methodology.
- Remittance Processing – CLS is challenging SoCalGas's non-labor spending per the Memorandum of Understanding (MOU) with the Center for Accessibility Technology (CforAT).
- Cust Service Other Office Ops & Tech – CLS is challenging SoCalGas's forecast for the three requested incremental Full Time Equivalents (FTEs).
- Payment Processing – CLS is challenging SoCalGas's request for two incremental FTEs and requesting a reduction of \$171,000.

D. SBUA

Below is a summary of SBUA's position(s) on the following matter:⁵

- SBUA is challenging SoCalGas's request to innovate the contact methods that SoCalGas provides to meet the needs of its diverse customer base.

⁴ March 2023, CLS Prepared testimony of Tadashi Gondai on the 2024 general rate case applications of Southern California Gas Company and San Diego Gas & Electric Company, Ex. CLS-01.

⁵ March 2023, Direct Testimony of Small Business Utility Advocates (SBUA) as submitted by Richard McCann & Steven J. Moss, Ex. SUBA.

- SBUA is challenging the forecasted call volume received at the CCC & Safety work orders.

III. REBUTTAL TO PARTIES' O&M PROPOSALS

A. NON-SHARED SERVICES O&M

Table BS-3

NON-SHARED O&M - Constant 2021 (\$000)			
	Base Year 2021	Test Year 2024	Change
SOCALGAS	79,118	83,892 ⁶	4,774
CAL ADVOCATES	79,118	83,892	4,774
TURN	79,118	82,088	2,970
PARTY X	79,118	85,497	6,379

Note: SBUA's recommendations were made without specific dollar amounts. As such, they are not reflected in this table.

1. Customer Contact Center (CCC) Operations

a. Cal Advocates

Cal Advocates does not take issue with the Test Year O&M forecast for CCC Operations.⁷ The Commission should adopt SoCalGas's forecast as reasonable.

b. CLS

CLS takes issue with the languages SoCalGas supports in-house (English, Spanish, Cantonese, Korean, Mandarin and Vietnamese). CLS states that SoCalGas needs to evaluate demographic data and support the most prevalent languages spoken in SoCalGas's service territory. CLS proposes that the Commission require SoCalGas to file testimony in its next General Rate Case (GRC) on efforts taken to identify and meet ongoing language support needs, specifying how many representatives SoCalGas had each year that spoke these languages, and what steps SoCalGas will take to maintain appropriate in-house staffing and to identify and meet ongoing and changing language support needs.⁸ No specific dollar request was made.⁹

⁶ A reduction to the TY 2024 forecast is being made in the amount of \$36,000 to correct an error that was identified while responding to data request CLS-004, question 17.

⁷ Ex. CA-10 (Campbell) at 41:14-16.

⁸ Ex. CLS-01 (Gondai) at 42.

⁹ *Id.*

1 CLS proposes that “specific languages supported by in-house customer service
2 representatives should reflect the most prevalent languages spoken in SoCalGas service
3 territory.” In D.20-03-004, the Commission defined a language as “prevalent” if it is spoken by
4 1,000 or more persons in the Investor-Owned Utilities (IOUs) territory.¹⁰ In D.21-06-034, the
5 Commission directed the electric IOUs “to rely on the definition of “prevalent” languages in
6 D.20-03-004 regarding education and outreach performed in connection with PSPS events.”¹¹
7 CLS’s proposal incorrectly attempts to create a “prevalent” language legal standard for
8 SoCalGas’s call centers based on a Commission directive for Public Safety Power Shut Off
9 events. SoCalGas is not required to service prevalent languages by in-house Customer Service
10 Representatives (CSRs) and CLS’s proposal to service prevalent languages improperly creates a
11 legal requirement based on a directive not even applicable to a natural gas IOU.

12 CLS states, “Data on SoCalGas language call volume is also of limited value, as
13 customers that speak other languages not supported by in-house representatives will be dissuaded
14 from calling in the first place.”¹² As stated in SoCalGas’s direct testimony (Ex. SCG-15-R)
15 SoCalGas has in-house support for the most common languages, English, Spanish, Cantonese,
16 Korean, Mandarin, Vietnamese and utilizes Language Line for all other languages.¹³ SoCalGas
17 views the services provided by the Language Line Services as an effective way of supporting the
18 diverse communities SoCalGas serves now and into the future. As provided in response to data
19 request CLS-004,¹⁴ the data aligns with the in-house languages SoCalGas currently provides.
20 The US Census data that CLS cites in its intervenor testimony¹⁵ also aligns with the in-house
21 languages that SoCalGas supports, as seen in Table BS-4 below.

¹⁰ D.20-03-004 at 9.

¹¹ D.21-06-034 at 97.

¹² Ex. CLS-01 (Gondai) at 41:1-3.

¹³ Ex. SCG-15-R at 10:23-25.

¹⁴ Ex. CLS-01-Appendix at 35.

¹⁵ Ex. CLS-01 (Gondai) at 42.

Table BS-4

US CENSUS HOUSEHOLD LIMITED ENGLISH-SPEAKING DATA (Los Angeles, Orange, Riverside and San Bernardino County)		
Label	Estimate	Percentage
Total:	5,894,382	100.0%
English	5,310,547	81.8%
Spanish	307,346	5.2%
Chinese (incl. Mandarin, Cantonese):	82,831	1.4%
Other Indo-European languages:	48,553	0.8%
Korean:	44,347	0.8%
Vietnamese:	29,556	0.5%
Other Asian and Pacific Island languages:	22,844	0.4%
Tagalog (incl. Filipino):	13,768	0.2%
Other and unspecified languages:	12,252	0.2%
Russian, Polish, or other Slavic languages:	12,120	0.2%
Arabic:	7,103	0.1%
German or other West Germanic languages:	1,564	0.0%
French, Haitian, or Cajun:	1,551	0.0%

CLs states, “According to the 2021 American Community Survey data, additional languages are also very prevalent in major counties within SoCalGas’s territory, including Tagalog, Arabic, Russian and other Slavic languages, and other Asian and Pacific Island languages. Each language is spoken by well over 40,000 households in SoCalGas’s territory”.¹⁶ CLs incorrectly states that each language is spoken by well over 40,000 households in SoCalGas’s territory.¹⁷ Based on census data referenced by CLs, reproduced in Table BS-4 above, there are: 22,844 limited English households that speak other Asian and Pacific Island languages. Only 13,768 limited English households speak Tagalog; 12,210 limited English households speak Russian, Polish and other Slavic language; and 7,103 limited English households speaks Arabic in the four counties that CLs identified.

Because there is no way to predict when prevalent language calls will come in, providing in-house support for prevalent languages is not realistic. Finding and hiring CSRs who are multilingual in the multitude of non-English languages (even the top five or ten) is impractical

¹⁶ Ex. CLS-01 (Gondai) at 40.

¹⁷ *Id.*

1 and problematic. Furthermore, having all the multilingual CSRs available during and after CCC
2 business hours for emergency calls would not be cost effective. CLS provided no data or
3 evidence for their opinion that SoCalGas Language Line services are a deterrent to customers
4 contacting SoCalGas. SoCalGas has reviewed, and will continue to review, the demographic
5 data when considering in-house language support. Therefore, the Commission should reject
6 CLS's recommendation that SoCalGas is required to file testimony in the next GRC on the
7 evaluation SoCalGas performed and the criteria used to identify in-house language to support
8 needs in the Company's territory.

9 **2. Customer Contact Center (CCC) Support**

10 **a. Cal Advocates**

11 Cal Advocates does not take issue with the Test Year O&M forecast for CCC Support.¹⁸
12 SoCalGas has demonstrated that its forecasting assumptions are reasonable and justified. The
13 Commission should adopt SoCalGas's forecast as reasonable.

14 **b. SBUA**

15 SBUA takes issue with SoCalGas's Test Year 2024 O&M forecast for CCC Support.
16 SBUA states that "a budget decrease in these elements is merited based on improvements the
17 utility has apparently made in addressing the cause of emergency calls and safety-related
18 orders."¹⁹ No specific dollar amount was recommended by SBUA. SoCalGas disagrees with
19 SBUA as their proposal utilizes flawed analysis and mischaracterizes SoCalGas's testimony and
20 data request responses. SoCalGas's testimony supporting O&M never mentioned that the
21 technology improvements will address "the cause of emergency calls and safety-related
22 orders."²⁰

23 SBUA states, "Electronic bill paying has been available to customers in most industries
24 for at least 20 years, while voice technology has existing (sic) for more than thrice that long.
25 Artificial Intelligence (AI) is fast overtaking basic Interactive Recognition channels. These are

¹⁸ Ex. CA-10 (Campbell) at 41:14-16.

¹⁹ Ex. SBUA (McCann/Moss) at 35:3-4.

²⁰ Ex. SCG-15-R (Sides) at BMS-iv.

1 hardly new ways to meet evolving customer preferences and expectations, nor have they
2 emerged as a response to increasing customer diversity.”²¹

3 SoCalGas disagrees with SBUA’s statement and opinion because market research and a
4 summary of customer survey responses were previously provided to SBUA.²² The data reflects
5 customers’ interest in interacting with the companies they do business with using the channel
6 that works best for them and with low effort. Interactive Voice Response (IVR) systems have
7 been around for quite some time, and this is the reason SoCalGas is looking to move towards a
8 more conversational Artificial Intelligence IVR so that the Company can improve interactions
9 with SoCalGas’s customers to meet their needs. The focus for the technology improvements is
10 to provide customers with more options to resolve their concerns quickly and efficiently by
11 providing them multiple ways to interact with SoCalGas on their terms. Therefore, SBUA’s
12 proposal to reject SoCalGas’s request for funding would put SoCalGas behind on AI technology,
13 which by SBUA’s own testimony, claims “is fast overtaking basic Interactive Recognition
14 channels.”²³

15 SBUA also states, “Both recorded volume of emergency calls and safety related orders
16 have steeply declined over the past several years. Yet for both services SoCalGas predicts a
17 ‘dead cat bounce’ to higher demand levels.”²⁴

18 Regarding the higher demand level of emergency call volume forecast in Figures SBUA-
19 10, a Base Year (BY) forecasting methodology was applied to project CCC Support O&M
20 costs.²⁵ SoCalGas assumed similar CSR calls and average handle time (AHT) for 2023 and
21 2024, as 2019 actuals was the last completed year prior to the pandemic. The COVID-19
22 pandemic had a significant impact on overall CSR calls. The 2022 forecast assumes a slow
23 ramp-up in overall calls.

24 Regarding the higher forecasted demand level (2022-2024) compared to 2020 and 2021
25 of Safety Related Orders in Figures SBUA-11, SoCalGas performed a review of historical order
26 volumes and chose the method that best represents future activity. COVID-19-impacted orders

²¹ Ex. SBUA (McCann/Moss) at 33.

²² See Appendix B starting at BMS-B-3 for SBUA-SCG-002, Questions 3, 4, and 6.

²³ *Id.*

²⁴ Ex. SBUA (McCann/Moss) at 33-34.

²⁵ 25 Ex. SCG-15-R (Sides) at BMS-14.

1 were forecasted using 2019 historical order volumes. Non-COVID-19-impacted orders were
2 forecasted using BY 2021 historical order volumes. A description of each order type and
3 whether the order type was COVID-19-impacted can be found in the Revised Direct Testimony
4 of Dan Rendler, Appendix C (Ex. SCG-14-R).

5 For these reasons, the Commission should reject SBUA's recommendation in its entirety.

6 **3. Branch Offices**

7 **a. Cal Advocates**

8 Cal Advocates does not take issue with the Test Year O&M forecast for Branch
9 Offices.²⁶ The Commission should adopt SoCalGas's forecast as reasonable.

10 **b. CLS**

11 CLS takes issue with the Test Year O&M forecast for total cost of \$307,000 to replace
12 the Payment Entry Processing (PEP) scanners and printers, but because it is a one-time cost,
13 SoCalGas "normalizes" the expense over the four years of the GRC period and adds \$77,000 to
14 2024 non-labor costs.²⁷ CLS states that the Commission should reject the \$50,000
15 "implementation fee" and adopt a revised forecast cost for PEP units of \$206,000, a reduction of
16 \$101,000. Normalized over 4 years, this adds a \$51,500 adjustment over BY2021 branch office
17 costs to 2024, a \$25,500 reduction from SoCalGas request of \$77,000.²⁸

18 SoCalGas disagrees with CLS's recommendation to reduce this cost. CLS fails to
19 provide prudent business practices in their analysis. The process to obtain printers and scanners
20 for 43 branch offices requires due diligence rather than logging on to a mass market website.
21 SoCalGas made the decision based on an approved list of vendors and in close consultation with
22 SoCalGas's banking partners.

23 The intervenor recommended scanners: RDM EC9703 AF100, RDM EC9703 AF50, and
24 the EC9607f,²⁹ which are not compatible with our existing banking partner's requirements.
25 SoCalGas chose the compatible PEP unit based on the requirements of SoCalGas's banking
26 partner and the Company's operational needs.

²⁶ Ex. CA-10 (Campbell) at 41:14-16.

²⁷ Ex. CLS-01 (Gondai) at 43.

²⁸ *Id.* at 47.

²⁹ *Id.* at 46.

1 The SoCalGas unit price of \$1,300 for the PEP includes print cartridges, extended
2 warranty, and desktop support for the installation of hardware across 43 branch offices. The
3 recommended units from CLS only included the unit cost and does not include the
4 aforementioned costs.

5 The implementation fee of \$50,000 is for system programing and testing for
6 compatibility with SoCalGas's internal systems.

7 The Commission should reject CLS's recommendation in its entirety as it does not meet
8 the requirements of SoCalGas's banking partner and the Company's operational needs, nor do
9 they consider the necessary additional costs.

10 **c. TURN**

11 TURN takes issue with the Test Year O&M forecast for an increase of \$2.52 million in
12 the Branch Offices. TURN believes that the most appropriate forecast would be a historical
13 average.³⁰

14 SoCalGas disagrees with TURN's recommendations regarding Branch Office's forecast.
15 TURN's proposed reduction suffers from flawed analysis and mischaracterization of SoCalGas's
16 testimony. Specifically, TURN's proposed reduction in Branch Offices was based upon
17 SoCalGas's adjusted recorded actuals from 2018-2022, which ignores the fact that 2022 actuals
18 were not available for forecasting purposes at the time my testimony was developed.
19 Furthermore, avoided costs were included in the company's regulatory balancing account for
20 CEMA recovery as described in more detail below.

21 The 2019 GRC authorized funding for full-service processing of customer payments at
22 the SoCalGas Branch Offices, including employees for front-office interface with walk-in
23 customers and weekly and bi-weekly armored car transport of customer payments. To prevent
24 the spread of COVID-19 at its facilities and to protect the safety of its customers and employees,
25 SoCalGas temporarily modified full-service processing of customer payments at the branch
26 offices, accepting payments only through the Company drop boxes and not in-person. The
27 modification was made during the period from March 23, 2020, through July 6, 2021. Due to the
28 modification, SoCalGas reduced working hours for part-time employees and delayed filling
29 vacant full-time positions at the branch offices. Additionally, armored transport of cash

³⁰ Ex. TURN-09 (Cheng) at 11-12.

1 payments was reduced to twice a month. The temporary change in branch office operations
2 resulted in cost avoidance over the modification period.

3 SoCalGas recognized that these costs were avoided due to the COVID-19 pandemic and
4 during the period described above. Requests for recovery of incremental costs incurred because
5 of the pandemic and recorded to SoCalGas's Catastrophic Event Memorandum Account
6 (CEMA) are considered in a separate application that the company plans to file later this year.
7 SoCalGas used the avoided costs as an offset to any incremental costs incurred relative to the
8 COVID-19 pandemic. As a result, the avoided costs were included in the company's regulatory
9 balancing account for CEMA recovery in 2020 and 2021, thereby reducing SoCalGas's request
10 for CEMA recovery. Avoided costs were not considered in earnings but were used to offset
11 incremental costs incurred by the COVID-19 pandemic.

12 Finally, on the notion of SoCalGas not being allowed to consider COVID-19 impacts,
13 SoCalGas believes TURN has erred in its argument. TURN states the "Commission should
14 reject SoCalGas's COVID-19 argument because during the pandemic, it pocketed the reduced
15 O&M costs as earnings for shareholders, which allowed Sempra to achieve record profits."
16 Using a historical average forecast method TURN proposes a disallowance of \$1.334 million.
17 TURN fails to understand if SoCalGas spends less than the GRC-authorized amount for a certain
18 activity, that does not necessarily mean that the difference is "earnings for shareholders." GRC
19 authorized O&M funding can also be reprioritized to fund other company activities unless they
20 are required to be tracked separately in a regulatory account and used for a specific purpose.

21 TURN states, "PG&E has already proposed to permanently close all of its Branch Offices
22 which is further evidence that increased funding for Branch Offices is not necessary."³¹ As long
23 as the branch offices remain open, SoCalGas has requested funding sufficient to operate and
24 provide the required services. SoCalGas acknowledges that Pacific Gas and Electric Company
25 has proposed to close its offices, and Southern California Edison Company has already closed its
26 offices. TURN's recommendation to underfund currently open branch offices is without
27 justification. SoCalGas's branch office decision D.16-06-046 currently governs the process for

³¹ Ex. TURN-09 (Cheng) at 11.

1 branch office closures. If the branch offices should be closed in future, per D.16-06-046, the
2 revenue requirement will be adjusted.³²

3 The Commission should reject TURN's recommendation of using a five-year average in
4 its entirety as SoCalGas is filing a CEMA application, which includes the cost avoidance over
5 the modification period.

6 **4. Billing Service**

7 **a. Cal Advocates**

8 Cal Advocates does not take issue with the Test Year O&M forecast for Billing
9 Services.³³ SoCalGas has demonstrated that its forecasting assumptions are reasonable and
10 justified. The Commission should adopt SoCalGas's forecast as reasonable.

11 **b. CLS**

12 CLS does not take issue with the Test Year O&M forecast for Billing Services, assuming
13 the \$36,000 correction identified in response to data request CLS-004 is accepted.³⁴ SoCalGas
14 has demonstrated that its forecasting assumptions are reasonable and justified. The Commission
15 should adopt SoCalGas's forecast as reasonable.

16 **5. Credit & Collections**

17 **a. Cal Advocates**

18 Cal Advocates does not take issue with the Test Year O&M forecast for Credit and
19 Collections.³⁵ SoCalGas has demonstrated that its forecasting assumptions are reasonable and
20 justified. The Commission should adopt SoCalGas's forecast as reasonable.

21 **b. TURN**

22 TURN takes issue with the Test Year O&M forecast for a \$1.15 million increase in
23 Credit and Collections. TURN states, "The Commission should reject SoCalGas's COVID-19
24 argument because during the pandemic, it pocketed the reduced O&M costs as earnings for

³² D.16-06-046 at 48.

³³ Ex. CA-10 (Campbell) at 41:14-16.

³⁴ Ex. CLS-01 (Gondai) at 49.

³⁵ Ex. CA-10 (Campbell) at 41:14-16.

1 shareholders, which allowed Sempra to achieve record profits.”³⁶ TURN believes that the most
2 appropriate forecast would be a five-year historical average.³⁷

3 SoCalGas disagrees with TURN’s assertion regarding Credit and Collection’s forecast.
4 As previously stated, TURN’s proposed reduction suffers from flawed analysis and
5 mischaracterization of SoCalGas’s testimony. To start, TURN’s proposed reduction in Credit
6 and Collections was based upon SoCalGas’s adjusted recorded actuals from 2018-2022, which
7 ignores the fact that 2022 actuals were not available for forecasting purposes at the time my
8 testimony was developed. TURN also included pandemic years when collection activities did
9 not take place because of a CPUC mandated disconnection moratorium and customer
10 protections³⁸ that were just lifted at the end of February 2023.³⁹ TURN’s labor recommendation
11 of leveraging a 5-year average forecast methodology is a dubious proposal as it introduces
12 inconsistent forecasting methodologies across Customer Service Office Operations.

13 Secondly, SoCalGas asserts that not funding the full-year effect due to partial-year
14 vacancies discounts the realities of business operations and is inconsistent with past GRC
15 treatment. These positions have been backfilled and roles are currently occupied now that
16 SoCalGas will be resuming its collections practices again with the end to the CPUC mandated
17 emergency COVID-19 customer protections.⁴⁰

18 In addition, if the Commission accepts TURN’s argument and reduces SoCalGas’s
19 forecast, SoCalGas’s use of third-party collection agencies would be the first cost to be cut,
20 which would harm ratepayers by reducing the recovery of bad debt and increasing uncollectible
21 expenses that would be passed onto ratepayers. SoCalGas stopped collection activities for
22 residential and small business customers during the COVID-19 pandemic as mandated by the
23 CPUC.⁴¹ The CPUC COVID-19 disconnection protections ended in April 2021, however
24 SoCalGas extended the disconnection moratorium through the peak winter season in 2022 and

³⁶ Ex. TURN-09 (Cheng) at 10.

³⁷ *Id.* at 12.

³⁸ Resolution M-4842 and D.19-07-015.

³⁹ Executive Department State of California, *A Proclamation by the Governor of the State of California Terminating State of Emergency* (February 28, 2023), available at: <https://www.gov.ca.gov/wp-content/uploads/2023/02/COVID-SOE-Termination-Proclamation-2.28.23.pdf?emrc=1db54f>.

⁴⁰ Resolution M-4842 and D.19-07-015.

⁴¹ *Id.*

1 has not yet resumed disconnections.⁴² During this time, arrearages have continued to grow.
2 TURN's argument does not recognize that reducing bad debt expense benefits the ratepayer
3 because SoCalGas recovers uncollectible expense through rates. For example, if it costs
4 \$1,000,000 for collection agency fees and SoCalGas recovers \$3,000,000 in bad debt, there is a
5 benefit of \$2,000,000 to ratepayers that does not need to be recovered through rates. Therefore,
6 TURN's recommendation to reduce SoCalGas's forecast will cut the use of collection agencies,
7 resulting in ratepayers absorbing extra costs due to uncollectible expenses.

8 Finally, on the notion of SoCalGas not being allowed to consider COVID-19 impacts,
9 SoCalGas believes TURN has erred in its argument. TURN fails to understand if SoCalGas
10 spends less than the GRC-authorized amount for a certain activity, that does not necessarily
11 mean that the difference is "earnings for shareholders." GRC authorized O&M funding can also
12 be reprioritized to fund other company activities unless they are required to be tracked separately
13 in a regulatory account and used for a specific purpose. Further, the GRC process does not
14 account for year-over-year variability, hence years where SoCalGas eclipses its O&M funding, it
15 gets offset in years funding is not fully utilized. Additionally, SoCalGas asserts active attempts
16 were made to manage vacancies and the impacts of COVID-19. This is evidenced by job
17 postings throughout the pandemic timeframe.

18 Furthermore, prior to 2021, the Major Market Credit and Collections group was a shared
19 service utilized by several departments at both SoCalGas and SDG&E. Starting in 2021, the
20 group stopped all support of SDG&E activities and became a non-shared cost center supporting
21 only SoCalGas activities. In anticipation of this change, the group reduced its staff of Credit and
22 Collections Analysts by 50% in 2020. This included reductions in the Senior Credit and
23 Collection Analyst and Principal Credit and Collection Analyst positions from 8 to 4 and a
24 reduction in Principal Credit and Collection Analyst positions from 2 to 1.

25 The Major Markets Credit and Collections group requested an incremental \$116,000 to
26 account for positions that incurred as partial year recorded expenses in BY 2021 because of
27 temporary vacancies. These positions include the Major Markets Credit and Collections
28 Manager and a Senior Credit and Collections Analyst. These positions were impacted by
29 employee movement that left the positions temporarily vacant during the base year for this

⁴² Ex. SCG-15-S (Sides) at BMS-5-6.

1 group. The Mass Market Credit and Collections forecast was based on a point in time under the
2 assumption that SoCalGas will restart collection activities. If SoCalGas reduced the forecast,
3 SoCalGas would not be able to perform the collection activities in TY2024 and the Post Test
4 Year which will have an adverse impact on SoCalGas's ratepayers as mentioned above.

5 Therefore, TURN's recommendation that Credit and Collection costs should follow a
6 five-year historical average from 2018 to 2022 is flawed and not appropriate for the Credit and
7 Collections work group.

8 **6. Remittance Processing**

9 **a. Cal Advocates**

10 Cal Advocates does not take issue with the Test Year O&M forecast for Remittance
11 Processing Labor and Non-labor costs.⁴³ The Commission should adopt SoCalGas's forecast as
12 reasonable.

13 **b. CLS – Labor Cost**

14 CLS takes issue with the Test Year O&M forecast for a total increase of 10.5 FTEs above
15 2021 levels in 2024 for an additional \$956,000 in labor costs. CLS recommends that the
16 Commission reject the incremental \$671,000 requested for 7.5 FTEs to "fill vacancies."⁴⁴

17 SoCalGas disagrees with CLS's recommendation because of its misunderstanding and
18 mischaracterization of SoCalGas's request, which will be described with further clarity.
19 SoCalGas would also like to add further clarity and correct an inaccuracy discovered in work
20 paper (WP) 200005.000.

21 The ADA Coordination Program Manager⁴⁵ is a position created and approved as a part
22 of the Joint Accessibility Proposal in the 2019 GRC.⁴⁶

23 The Bill Delivery & Payment Processing Operations Manager is one FTE, the Senior
24 Admin Clerk-5 Knowledge Typing is one FTE, and the Project Specialist is one FTE. These

⁴³ Ex. CA-10 (Campbell) at 41:14-16.

⁴⁴ Ex. CLS-01 (Gondai) at 2.

⁴⁵ *Id.* at 51.

⁴⁶ D.19-09-051 at 724.

1 positions were not incremental in 2021 and 2022. SoCalGas provided this information in an
2 amended response to a data request from CLS.⁴⁷

3 SoCalGas would like to point out an error in WP 200005.000, which states 5.4 FTEs for
4 \$442,000 using the average pay for a Payment Entry Clerk Level-3.⁴⁸ This should have stated,
5 “Mail Equipment Operator Level-2,” which is responsible for bill insertions. The average pay
6 provided in the WP of \$39.17/hour is accurate.

7 SoCalGas is requesting only three incremental positions, one non-management Lead
8 Computer Operator Level-4 and two management Advisor positions.⁴⁹

9 SoCalGas is also requesting a return to full complement of existing positions. Of the 7.5
10 FTEs, 2.1 management FTEs were partially assigned to the SDG&E Envision CIS replacement
11 capital project and includes a partial Long-Term Disability (LTD) leave. The remaining 5.4 non-
12 management FTEs are a combination of employees' intermittent LTD time off and a delay in
13 filling vacancies.

14 SoCalGas's request to return to full complement of positions to be effective in its
15 operations⁵⁰ is reasonable and therefore the Commission should reject CLS's recommendation
16 and adopt SoCalGas's forecast as reasonable.

17 **c. CLS – Non-Labor Cost**

18 CLS states, “It is not clear how SoCalGas concluded in data responses that they only
19 spent \$140,000 on accessibility improvements in 2021, while their annual report indicates
20 \$1,744,136.”⁵¹ CLS recommends that “SoCalGas enter into another MOU with interested parties
21 and commit to utilizing their requested \$610,000 on accessibility improvements for the 2024
22 GRC period.”⁵²

23 SoCalGas disagrees with CLS's statements because it lacks additional context and
24 information.

⁴⁷ See Appendix B starting at BMS-B-30 for Amended response to CLS-004 Q33a.

⁴⁸ Ex. SCG-15-WP (Sides) at 66-67.

⁴⁹ Ex. SCG-15-R (Sides) at BMS-32.

⁵⁰ *Id.*

⁵¹ Ex. CLS-01 (Gondai) at 55.

⁵² *Id.* at 57.

1 SoCalGas met the overall compliance goal found in the Joint Accessibility Proposal
2 (JAP).⁵³ The JAP does not specify spending sources and is not limited to O&M expenditures.
3 Therefore, SoCalGas spent \$1.774 million, which included automatic door openers at the Branch
4 Office locations under capital projects in 2021. For O&M, in 2021, SoCalGas spent \$140,000
5 and only spent this amount because planned programming resources to implement the Web
6 Accessible Bill project were reallocated to implement priority pandemic related customer
7 assistance projects, such as Arrearage Management Payment Plan (AMP) and Percentage of
8 Income Payment Plan (PIPP).

9 Although SoCalGas only spent \$140,000 for O&M in 2021 as explained above, the Web
10 Accessible Bill Project was completed in 2022. SoCalGas spent a total of \$920,047 in 2022
11 O&M which included: Web Accessible Bill (updates were made to the IVR, enhancements were
12 made to bill delivery & presentment options to disabled community) and improvements were
13 made to mailed inserts, large print bills for visually impaired customers.

14 SoCalGas intends to continue the activities provided in the Memorandum of
15 Understanding with the Center for Accessible Technology⁵⁴ to support SoCalGas's ADA
16 customers and as such, included the BY 2021 associated cost in its TY 2024 forecast. While the
17 current JAP will expire in December 2023, SoCalGas remains open to entering into another JAP
18 with interested parties. Therefore, the Commission should reject CLS's recommendation in its
19 entirety.

20 **7. Customer Service OOO & Technology**

21 **a. Cal Advocates**

22 Cal Advocates does not take issue with the Test Year O&M forecast for Customer
23 Service OOO & Technology.⁵⁵ SoCalGas has demonstrated that its forecasting assumptions are
24 reasonable and justified. The Commission should adopt SoCalGas's forecast as reasonable.

⁵³ See A. 17-10-007/008, Prepared Direct Testimony of Melissa W. Kasnitz and Charles R. Manzuk
Developed Jointly by the Center for Accessible Technology, San Diego Gas & Electric Company, and
Southern California Gas Company, Ex. SCG/SDG&E/CforAT Joint-01 (May 14, 2018), available at
https://www.socalgas.com/regulatory/documents/a-17-10-008/A_17-10-007_008_MKasnitz_CManzuk_Joint_Prepared_Direct_Testimony.pdf.

⁵⁴ See A. 10-12-005, Joint Motion for Adoption of Settlement (February 24, 2012), available at:
<https://docs.cpuc.ca.gov/PublishedDocs/EFIL/MOTION/160618.PDF>.

⁵⁵ Ex. CA-10 (Campbell) at 41:14-16.

1 **b. CLs**

2 CLs takes issue with the Test Year O&M forecast for three additional FTEs due to
3 additional regulatory reporting requirements.⁵⁶ CLs recommends reducing SoCalGas Customer
4 Service Other Office Ops and Technology labor forecast by \$262,000, removing the funding for
5 the additional full year analyst, and two Senior Business Analysts for the financial analyst group.
6 SoCalGas disagrees with CLs's recommendations for CSOOO & Tech TY 2024 forecast.

7 CLs states, "The support group for regulatory and financial performance measurement
8 did not even exist before 2019, yet there is no indication that SoCalGas was unable to
9 appropriately meet their regulatory and financial commitments prior to that time. There is even
10 less evidence of the need to double the labor resources directed toward those purposes now."⁵⁷

11 CLs wrongly compares TY2024 forecast to 2019. SoCalGas used a base year forecast
12 methodology and SoCalGas's forecast did not double the size from base year 2021. The group
13 was created in 2019 to centralize all existing customer service regulatory activities including the
14 General Rate Case to facilitate the business units to operate more effectively.

15 CLs also states, "the function of the financial analyst group is described as supporting
16 regulatory proceedings and filings and financial performance activities. These activities further
17 shareholder interests over ratepayer interests."⁵⁸

18 SoCalGas disagrees with CLs's unfounded and baseless opinion. The additional
19 regulatory requirements related to Risk Assessment and Mitigation Phase (RAMP) and Risk
20 Spending Accountability Report (RSAR) reporting has gradually increased since 2019. The
21 Commission has amplified the RAMP and RSAR level of granularity in cost and unit
22 requirements. To meet these requirements, SoCalGas must follow a detailed approach to review
23 and analyze the data to ensure spending in the appropriate authorized activity. It also required
24 enhancing SoCalGas processes to align the data to the requested level of granularity. The
25 increased FTE will enable alignment of the reporting function for RAMP and RSAR with
26 regulatory requirements. Therefore, this group's function is to ensure the accuracy of spending to
27 the funding compared to what was authorized, which benefits the ratepayers, not shareholders.

⁵⁶ Ex. CLS-01 (Gondai) at 60.

⁵⁷ *Id.*

⁵⁸ *Id.* at 61.

1 In summary, CLS's testimony fails to provide any information to determine whether the
2 level of funding recommended by CLS is reasonable and sufficient for SoCalGas to comply with
3 regulations. Therefore, the Commission should reject CLS's recommendation in its entirety and
4 adopt SoCalGas's forecast as reasonable.

5 **B. SHARED SERVICES O&M**

6 **Table BS-5**

SHARED O&M - Constant 2021 (\$000)			
	Base Year 2021	Test Year 2024	Change
SOCALGAS	4,346	4,556	210
CAL ADVOCATES	4,346	4,556	210
CLS	4346	4385	39

7 **1. Payment Processing**

8 **a. Cal Advocates**

9 Cal Advocates does not take issue with the Test Year O&M forecast for Shared O&M
10 expenses.⁵⁹ SoCalGas has demonstrated that its forecasting assumptions are reasonable and
11 justified. The Commission should adopt SoCalGas's forecast as reasonable.

12 **b. CLS**

13 CLS takes issue with the Test Year O&M forecast for \$171,000 labor increase for two
14 Payment Control Clerk Level-4 positions. CLS states, "SoCalGas does not provide support for
15 their claims that the complexity of administering electronic payments is increasing [...] therefore
16 the Commission should reduce their labor forecast by \$171,000."⁶⁰

17 SoCalGas disagrees with CLS's assertion and recommendation to reduce labor forecasts
18 because CLS's argument is based on a mischaracterization of the data. For example, CLS states
19 that "FTE count has actually increased since 2017 from 37.2 to 38.5."⁶¹ This is an inaccurate
20 statement. The fluctuation in FTEs was not due to incremental labor added but due to the

⁵⁹ Ex. CA-10 (Campbell) at 43:2-4.

⁶⁰ Ex. CLS-01 (Gondai) at 62.

⁶¹ *Id.* at 63.

1 Voluntary Retirement Enhancement Program (VREP) in 2017 and due to employees on Long
2 Term Disability (LTD). There were no incremental FTEs added from 2017 – 2021.

3 CLS has incorrectly compared TY 2024 forecast to 2017 historical data. SoCalGas uses
4 Base year 2021 as the forecast methodology. SoCalGas is requesting 0.5 FTEs to bring back a
5 full complement of 39 FTEs.

6 SoCalGas is requesting two incremental FTEs to address increased complexity in the
7 administration of electronic payments. The administration of the electronic payments function
8 was previously handled by 0.5 FTE. As customers continue to migrate to this channel and
9 change residency, they are neglecting to update their new gas account number in their home
10 banking payment systems, resulting in the need for SoCalGas to do additional research. CLS
11 issued a data request on February 2, 2023, to which SoCalGas responded on February 16, 2023,
12 providing all necessary calculations of volumes and the amount of time required for the two
13 incremental FTEs.⁶²

14 Moreover, due to the COVID-19 pandemic, customers migrated from in-person to
15 electronic payment channels, which resulted in further increases to the number of unposted
16 payments, un-intended payment amounts being received (*e.g.*, customers intended to pay \$90 but
17 entered \$900 causing immediate financial hardship), incorrect amounts being submitted and
18 customer requests for payment refunds or reversals. Additional analysis and time are required to
19 perform all of the inquiries described.

20 SoCalGas is requesting two incremental FTEs to address the increased number of
21 inquiries and ensure customer payments are posted timely and accurately. Timely responses to
22 inquiries are needed to minimize financial hardship and service disconnection for SoCalGas's
23 impacted customers. For this reason, the Commission should reject CLS's recommendation,
24 which would adversely affect customers.

⁶² *Id.*, Appendix at 70.

1 **IV. REBUTTAL TO PARTIES' CAPITAL PROPOSALS**

2 **Table BS-6**

TOTAL CAPITAL - Constant 2021 (\$000)					
	2022	2023	2024	Total	Difference
SOCALGAS	14,520	20,657	15,763	50,940	0
CAL ADVOCATES	14,520	20,657	15,763	50,940	0
TURN	13,267	8,145	1,616	23,028	-27,912

3 **A. CCC MODERNIZATION CAPITAL PROJECT**

4 **1. CAL ADVOCATES**

5 Cal Advocates does not take issue with the capital forecast for SoCalGas's CCC
6 Modernization Capital Project.⁶³ SoCalGas has demonstrated that its forecasting assumptions
7 are reasonable and justified. The Commission should adopt SoCalGas's forecast as reasonable.

8 **2. TURN**

9 TURN takes issue with SoCalGas's business justification for the CCC Modernization
10 Project. TURN claims that "There is no business case, no cost-benefit analysis, and no
11 quantification of potential benefits." TURN requests that "the Commission should reject the
12 proposed CCC Modernization Project, and the associated capital dollars should be removed from
13 the GRC -- \$1.253 million in 2022, \$12.512 million in 2023, and \$2.141 million in 2024."⁶⁴
14 SoCalGas submits, as a matter of prudence, the deliberations regarding the CCC Modernization
15 Project are fundamental to daily SoCalGas customer operations. The current CCC mainframe is
16 10-years old and is reaching (or has reached) end of life. The purpose of the CCC Modernization
17 project is to replace the on-premise contact center technology platform with a cloud solution to
18 reduce technology complexity and improve maintainability and reliability.⁶⁵ The CCC
19 Modernization project will implement Cloud-based "Contact Center of the future" capability and
20 will be achieved through a comprehensive multi-year roadmap that addresses current service
21 delivery challenges, enables new capabilities and delivers enhanced customer experiences.

⁶³ Ex. CA-10 (Campbell) at 46:2-4.

⁶⁴ Ex. TURN-09 (Cheng) at 14.

⁶⁵ Ex. SCG-15-R (Sides) at BMS-48.

1 TURN submitted a data request to SoCalGas on March 23, 2023, seeking SoCalGas's
2 Business Case in support of the CCC Modernization Project. SoCalGas responded on April 6,
3 2023, providing the Business Case which contains the Cost-Benefit Analysis, Portfolio
4 Governance Committee presentation and project approvals, and Work Order Authorization
5 detailing the estimates and funding approvals.⁶⁶ As such, SoCalGas believes it has met the
6 burden of proof for the CCC Modernization Project to ensure the utility can provide a clear and
7 holistic view of customer data across the company, advance analytic capabilities to support
8 major initiatives, centralize, standardize, automate, and secure data access and other requests,
9 streamline CPUC, audit, and California Consumer Privacy Act (CCPA) responses, confirm
10 customer data transfers to authorized third parties comply with all privacy, cybersecurity and
11 CCPA requirements, including maintaining records of all customer data transferred for audit and
12 CCPA response purposes. At risk if the CCC Modernization Project is not funded are impacts to
13 SoCalGas's ability to serve its customers. If the CCC Modernization Project were not available,
14 the current CCC technologies would be inadequate to meet key business requirements around
15 resiliency, agility and support for new capabilities. There also remains a large technical debt that
16 is becoming difficult to sustain, with some vendors identifying end-of-life support for solutions
17 with a push towards the cloud and others that are struggling to stay in business.

18 TURN states, "some of the benefits asserted by SoCalGas should result in operational
19 efficiencies and savings (improved maintainability and reliability, enable and simplify
20 deployment and support for work-at-home agents), yet SoCalGas did not account for any
21 operational savings in this GRC."⁶⁷ SoCalGas disagrees with TURN's statement. TURN
22 undermines the value of the CCC Modernization capital project to SoCalGas's customers and
23 operational cost savings. The benefit has been accounted for.⁶⁸

24 SoCalGas urges the Commission to consider the facts regarding the CCC Modernization
25 Project designed to update a system that is over 10 years old and reaching obsolescence, and the
26 value of the CCC Modernization capital project to SoCalGas's customers. SoCalGas requests

⁶⁶ See Appendix B starting at BMS-B-34 for TURN-SEU-064, response to question 1b.

⁶⁷ Ex. TURN-09 (Cheng) at 14.

⁶⁸ Ex. SCG-15-R (Sides) at 15, CCC-Operation Supplemental WP at line 14.

1 that the Commission reject TURN's recommendation and adopt SoCalGas's forecast associated
2 with the CCC Modernization Project.

3 **B. ADVANCED METER HEADEND AND METER DATA MANAGEMENT**
4 **NEXT- GENERATION (ACLARAONE)**

5 **1. CAL ADVOCATES**

6 Cal Advocates does not take issue with the capital forecast for SoCalGas Advanced
7 Meter HeadEnd and Meter Data Management Next-Generation (AclaraOne) capital project.⁶⁹
8 SoCalGas has demonstrated that its forecasting assumptions are reasonable and justified. The
9 Commission should adopt SoCalGas's forecast as reasonable.

10 **2. TURN**

11 TURN states, "SoCalGas requests nearly \$50 million of capital for its Advanced Meter
12 HeadEnd and Meter Data Management Next-Generation (AclaraOne) project between 2024 and
13 2027 (\$12.006 million in 2024 plus attrition years)." TURN recommends that the Commission
14 should reject the proposed Advanced Meter HeadEnd and Meter Data Management Next-
15 Generation (AclaraOne) project, and the associated capital dollars should be removed from the
16 GRC -- \$12.06 million in 2024.⁷⁰

17 SoCalGas disagrees with TURN's statement because it incorrectly states SoCalGas's cost
18 is nearly \$50 million from 2024 plus attrition years for the Advanced Meter HeadEnd and Meter
19 Data Management Next-Generation (AclaraOne) Project. SoCalGas's requested cost of \$12
20 million is clearly cited in both SoCalGas's direct testimony (Ex. SCG-15-R)⁷¹ and capital WP
21 (00754T - RAMP - Advanced Meter HeadEnd and Meter Data Management System Next-
22 Generation from 2022 to 2024. Furthermore, the submitted forecast is based on the concept
23 phase of the project. SoCalGas reiterates that the submitted forecast reflected here is an estimate
24 and subject to change as the company goes through business case development and a more
25 detailed financial impact assessment.

⁶⁹ Ex. CA-10 (Campbell) at 46:2-4.

⁷⁰ Ex. TURN-09 (Cheng) at 14.

⁷¹ Ex. SCG-15-R (Sides) at BMS-49.

1 TURN states, “There is no business case, no cost-benefit analysis, and no quantification
2 of potential benefits”.⁷² TURN wrongly contends SoCalGas’s forecasts do not include sufficient
3 supporting material. TURN submitted a data request to SoCalGas on March 23, 2023, seeking
4 SoCalGas’s Business Case in support of the Advanced Meter HeadEnd and Meter Data
5 Management Next-Generation (AclaraOne) Project. SoCalGas responded on April 6, 2023,
6 providing the Concept Document which contains the Cost-Benefit Analysis, and financial
7 documentation analyzing the costs and estimates.⁷³ As such, SoCalGas believes it has met the
8 burden of proof for the AclaraOne Project.

9 TURN states, “some of the benefits asserted by SoCalGas should result in operational
10 efficiencies and savings (meet future business demands, mitigate interruption of billing
11 processes), yet SoCalGas did not account for any operational savings in this GRC”.⁷⁴ In its
12 response to TURN’s data request⁷⁵, SoCalGas cited the benefits. As stated, the Advanced Meter
13 HeadEnd and Meter Data Management Next-Generation (AclaraOne) project is in the concept
14 phase. All IT project funding gets approved as part of the IT capital planning and business case
15 governance process; hence the operational savings will be considered then. This project’s start
16 date is in 2024 and the planned business case development and submission for approval will not
17 start until mid-end of 2023.

18 Therefore, the Commission should reject TURN’s recommendation to remove
19 SoCalGas’s proposed Advanced Meter HeadEnd and Meter Data Management Next-Generation
20 AclaraOne Project due to the benefits stated in response to TURN’s data request, and adopt
21 SoCalGas’s forecast associated with the AclaraOne Project.

22 **V. CONCLUSION**

23 To summarize, for the reasons described above, the intervening parties (TURN, CLS and
24 SBUA) have failed to show their proposals are valid or are superior recommendations that
25 should be adopted by the Commission. Any reduction to SoCalGas’s TY 2024 forecast for
26 Customer Services – Office Operations is unwarranted and should be rejected. SoCalGas has

⁷² Ex. TURN-09 (Cheng) at 15.

⁷³ See Appendix B starting at BMS-B-37 for TURN-SEU-064 response to Question 2b.

⁷⁴ Ex. TURN-09 (Cheng) at 15.

⁷⁵ See Appendix B starting at BMS-B-37 for TURN-SEU-064 response to Question 2b.

1 addressed the proposed disallowances presented by TURN, CLS and SBUA. SoCalGas provided
2 facts to demonstrate their proposals are not warranted. TURN, CLS and SBUA were selective,
3 used flawed analysis, and provided little evidence to justify their proposed disallowances.
4 Customer Services - Office Operations (CSOO) O&M and Capital project business justifications
5 were carefully developed and reviewed and represent a projection of the level of funding
6 necessary to support SoCalGas's customer service and safety focus for the GRC term. These
7 forecasts reflect sound judgment to continuously support and enhance the safe, secure, reliable,
8 and efficient operation of the SoCalGas CSOO business units at a reasonable cost. SoCalGas has
9 documented both efficiencies and incremental expenses in prepared direct testimony,
10 workpapers, rebuttal testimony and responses to data requests. Accordingly, SoCalGas's
11 estimated expenses for CSOO should be adopted.

12 This concludes my prepared rebuttal testimony.

APPENDIX A
GLOSSARY OF TERMS

APPENDIX A
GLOSSARY OF TERMS

<u>ACRONYM</u>	<u>DEFINITION</u>
Aclara One	Advanced Meter HeadEnd and Meter Data Management Next-Generation
AHT	Average Handle Time
AI	Artificial Intelligence
ADA	Americans with Disability Act
AMP	Arrearage Management Payment Plan
BY	Base Year
Cal Advocates	Public Advocates Office of the California Public Utilities Commission
CCC	Customer Contact Center
CCPA	California Consumer Privacy Act
CEMA	Catastrophic Event Memorandum Account
CforAT	Center for Accessibility Technology
CLS	Community Legal Services
CPUC or Commission	California Public Utilities Commission
CSOO	Customer Services – Office Operation
CSR	Customer Service Representative
D	Decision
EX	Exhibit
FTE	Full Time Equivalent
GRC	General Rate Case
IOU	Investor-Owned Utilities
IT	Information Technology
IVR	Interactive Voice Response
JAP	Joint Accessibility Proposal
LTD	Long Term Disability
MOU	Memorandum of Understanding
O&M	Operations & Maintenance
OOO	Other Office Operations
PEP	Payment Entry Processing
PG&E	Pacific Gas and Electric Company
PIPP	Percentage of Income Payment Plan
RAMP	Risk Assessment and Mitigation Phase
SBUA	Small Business Utility Advocates
SDG&E	San Diego Gas & Electric Company
SoCalGas or SCG	Southern California Gas Company
TURN	The Utility Reform Network
TY	Test year
WP	Work Paper

Appendix B - SoCalGas Response to Data Requests

Appendix B - SoCalGas Response to SBUA-SCG-002
Questions 3, 4, and 6.

Data Request Number: SBUA-SCG-002

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Small Business Utility Advocates

Date Received: 10/27/2022

Date Responded: 11/4/2022

3. At BMS-iv, bullet five states, “Increased responsiveness to customer feedback and improved service levels.” Please provide support for these asserted outcomes.

SoCalGas Response 3: SoCalGas is implementing various new interaction channels as well as self-service channels in order to continue to improve service levels.

Follow-up: Does SoCalGas systematically track customer feedback? If so, please provide a description of feedback it has received from commercial class customers. If not, how does the utility know it is being responsive?

SoCalGas Response 3:

For purposes of responding to this question, SoCalGas does not distinguish its customer classes according to SBUA’s classification “commercial class customers”. Accordingly, in this response, SoCalGas distinguishes “small/medium business customers” as core customers taking service on a non-residential core rate schedule. Based on the foregoing, SoCalGas provides the following:

Yes, SoCalGas tracks feedback from small/medium business customers through the Touchpoint Action Program (TAP), which is a survey research-based customer experience feedback program that tracks ongoing service delivery. SoCalGas employs a proportional, random sampling methodology of the previous day’s completed transactions on Business My Account and invites customers to provide feedback on their interaction with the website. Small/Medium business customer feedback about the My Account self-service channel includes the following:

- A majority of customers are satisfied overall with the website.
- Customers are nearly twice as likely to state the website is easy to navigate and understand.
- Customers are satisfied with the ease of paying their bill online.
- Customers do encounter some issues with initial account set-up and login, although they appreciate the security features to keep their account information safe.

Data Request Number: SBUA-SCG-002

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Small Business Utility Advocates

Date Received: 10/27/2022

Date Responded: 11/4/2022

4. At BMS-v, the testimony outline discusses "...business justification for Information Technology (IT) Capital projects that deliver an improved customer experience..." a. How are improvements in customer experience measured? b. How have small businesses benefitted from these capital projects?

At this stage, small businesses have not received a benefit from these future IT capital projects. Once implemented, small businesses will benefit from IT capital projects by being offered additional channels to contact and communicate with SoCalGas.

Follow-up: Please provide supporting information that commercial class customers want the additional channels being developed through the capital projects.

SoCalGas Response 4:

For purposes of responding to this question, SoCalGas does not distinguish its customer classes according to SBUA's classification "commercial class customers". Accordingly, in this response, SoCalGas distinguishes "small/medium business customers" as core customers taking service on a non-residential core rate schedule. Based on the foregoing, SoCalGas provides the following:

SoCalGas has no specific supporting information from research or surveys with SoCalGas's small/medium business customers regarding additional channels. However, SoCalGas subscribes to E-source, a subscription-based research, consulting, and data science firm that serves the utility industry. Based on survey data E-source obtained from small/medium business customers nationwide, the surveys indicate that small/medium business customers are busy. Consequently, it is important to make interactions easy for these customers and providing access to low effort interactions through digital channels improves customer satisfaction. (Source: E Source - Supporting SMBs with Personal Relationships and Strong Customer Service, January 31 2022). Please see separate attachment titled "SBUA-SCG-002_ATTACH_Q4.pdf."

Data Request Number: SBUA-SCG-002

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Small Business Utility Advocates

Date Received: 10/27/2022

Date Responded: 11/4/2022

6. Referring to BMS-v, please explain specific improvements to Customer Contact Center Support that are intended to benefit small businesses.

To support the needs of a small business customer base, SoCalGas is implementing new technologies expanding and enhancing interaction channels (i.e., Conversational Interactive Voice Recognition) to meet the needs of evolving customer preferences.

Follow-up: Please provide supporting information that commercial class customers view Conversational Interactive Voice Recognition as an improvement.

SoCalGas Response 6:

For purposes of responding to this question, SoCalGas does not distinguish its customer classes according to SBUA's classification "commercial class customers". Accordingly, in this response, SoCalGas distinguishes "small/medium business customers" as core customers taking service on a non-residential core rate schedule. Based on the foregoing, SoCalGas provides the following:

SoCalGas has no specific supporting information from research or surveys with SoCalGas's small/medium business customers that view Conversational Interactive Voice Recognition as an improvement. However, SoCalGas subscribes to E-source, a subscription-based research, consulting, and data science firm that serves the utility industry. Based on survey data E-source obtained from residential customers nationwide, the surveys indicate that residential customers are familiar with the Interactive Voice Recognition devices, have had positive experiences with the devices, and want to interact with their utilities via this channel. While these results are based on residential customers' responses, proprietary SoCalGas customer research shows that the small/medium business customers have similar preferences to residential customers when it comes to utility contact and interaction preferences. (Sources - E Source; Voice Control Changes Everything: Why utilities should care about virtual assistants, August 20, 2018). Please see separate attachment titled "SBUA-SDGE-002_ATTACH_Q6.pdf."



Supporting SMBs with personal relationships and strong customer service

By Miriam Stein, Sarah Baker, Erica Bishop

January 31, 2022

Key takeaways

- Small and midsize business (SMB) customers needed more support from their utilities even before COVID-19. The pandemic exacerbated their challenges—especially for minority-owned SMBs.
- Utilities have risen to the challenge of supporting SMBs through strengthening relationships with these customers and providing assistance.
- Reach out to your SMB customers and make messaging personal. Use digital channels and get involved in the community to improve your relationship with SMBs.

Contents

[In what areas can utilities improve their service for SMB customers?](#)

[Make interactions proactive and personal](#)

[Use digital channels](#)

[Get involved in the community](#)

SMBs are an important customer segment. Facilities with under 1,000 megawatt-hours of annual consumption account for 40%–50% of total commercial energy consumption, according to the ACEEE report [Small and Medium Sized Business Customers: Proactive Services to Increase the Installation Rate of Efficiency Upgrades](#) (PDF). Yet SMBs have historically had fraught relationships with their utilities.

Our 2021 study on SMB customer satisfaction found they don't believe their utility works to keep energy

prices down or communicates effectively during energy emergencies. As they sink deeper into COVID-related debt and fear the financial effects of power outages, SMBs need their utilities to step up.

SMB customers are struggling with debts accumulated before and during the pandemic. Fed Small Business, a collaboration among the 12 Reserve Banks of the Federal Reserve System, reported an increase in the number of SMBs with outstanding debt and an increase in the amount of debt owed by those businesses. The organization's research, shared in its [2021 Report on Employer Firms Based on the Small Business Credit Survey](#), also found large disparities in business financial health by the race of business owners:

While 57% of firms overall characterized their financial condition as 'fair' or 'poor,' this figure jumped to 79% for Asian-owned firms, 77% for Black-owned firms, and 66% for Latinx-owned firms.

Keep these disparities in mind when doing outreach to and designing programs for SMBs to make sure those efforts will help your customers most impacted by the pandemic. Our report [How to engage minority-owned small businesses](#) shares our recommendations for engaging this segment of your business customers.

In what areas can utilities improve their service for SMB customers?

In the E Source [2021 Small and Midsize Business Customer Satisfaction Study](#), we asked SMBs how they feel about their utility. Some areas where utilities didn't meet customer expectations were:

- Working to keep energy prices down
- Being easy to do business with
- Effectively communicating during energy emergencies

SMBs also believed their account reps and business customer reps needed to:

- Be easier to reach
- Understand the needs and challenges of their business
- Resolve their issues on first contact
- Effectively communicate during energy emergencies

As SMBs continue to face challenges during COVID-19, you'll need to understand how easy or difficult it is for them to interact with your utility. And think of how you can keep offering the services they need to stay in business.

Make interactions proactive and personal

SMB customers' biggest challenges often extend beyond energy issues. Broadly, these customers are dealing with cash flow, employee recruitment and retention, and marketing and advertising difficulties. Specifically,

SMB customers have problems related to their unique business. So get to know them. Ask:

- How they make money
- What their budget is
- How they make energy-related decisions

Speak your SMB customers' language in formal and informal communications with them. They want to feel that you treat them differently than residential customers (**figure 1**).

Figure 1: SMB owners want to have a personal relationship

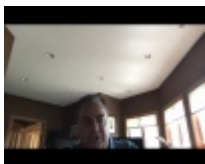
The E Source [E Design 2020](#) project included interviews with SMB owners to help utilities develop a deeper understanding of the SMB sector and develop more-effective methods to engage them.



Have dedicated business customer reps for SMBs so they know who to reach out to for help (**figure 2**). Business customers want to talk to someone who understands their business and their concerns, rather than speaking with an agent who primarily serves residential customers. In our report [SMB customers' ratings of their utility and utility representatives](#), SMB customers showed some frustration with business customer reps in understanding their business. They had suggestions such as "Train them to actually listen to the concerns customers have instead of reading off a script."

Figure 2: SMBs want a dedicated representative to make communication easier

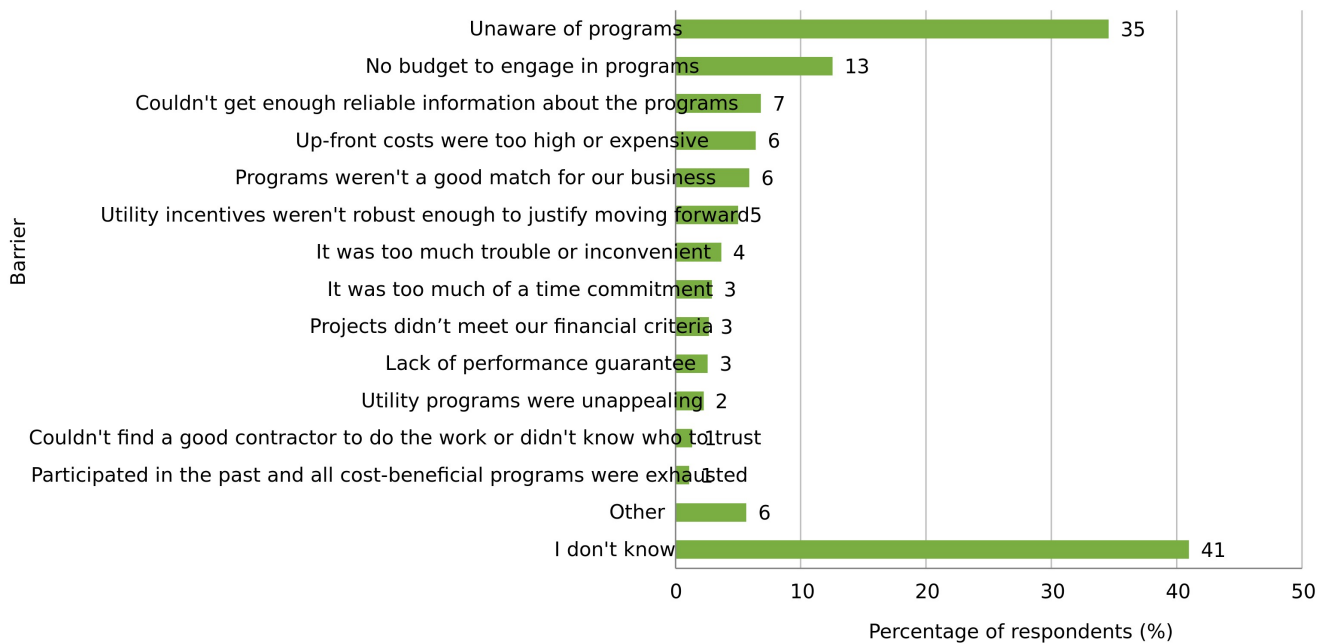
SMB customers who want one representative to contact get frustrated when they don't have such an option. Whether the utility rep can solve all their problems is less important than having someone who can guide them and direct their questions to the right utility employee. This sentiment appeared in the customer interviews of our E Design 2020 project.



Another challenge in working with SMB customers is their awareness of utility programs. In the 2021 Small and Midsize Business Customer Satisfaction Study, we found that 35% of SMB customers didn't participate in an energy-efficiency program because they didn't know such programs existed (**figure 3**). SMB customers are busy running their businesses, so you need to be proactive with reaching out to them and enrolling them in programs. See the report [SMB customers' communication preferences and interest in utility offerings](#) for more on customer needs and energy-related goals.

Figure 3: Why SMBs don't participate in utility offerings

Over one-third of SMB customers (35%) are unaware of the energy-efficiency programs their utility offers. Work on reaching these customers and providing them with program information relevant to their business.



Base: Small and midsize business customers included in the 2021 study. **Question 5:** What were the barriers, if any, to participating in, purchasing, or leasing a program, product, or service through your utility in the past 12 months? (Select up to three) (2021 Small and Midsize Business Customer Satisfaction Study)

A session at E Source Forum 2021, [What COVID taught us about the needs of small and midsize businesses](#), featured Jennifer Collins Ramos, senior account executive at Tacoma Public Utilities (TPU).

When the pandemic hit, account executives at the utility picked up the phone to check in with business customers and see how they were doing (**figure 4**). They shared how they'd pivoted to be "here to help" for their business customers. TPU also made industry-specific calls to help the utility forecast energy usage and receivables and to bring stories to the teams looking at those numbers.

Figure 4: SMB owners appreciated Tacoma Public Utilities' calls to check in

Personal calls from the utility made business owners feel important and cared for. These calls went a long way in strengthening the utility's relationships with businesses.



During the pandemic, TPU had a rate increase. Throughout the process, the utility used transparent and consistent communications to business customers. It shared why it needed the increase and communicated preliminary amounts with the business community. In community meetings, TPU reps presented on the proposed rate increase and encouraged business customers to participate in the discussions.

In 2020, despite the rate increase, TPU saw its satisfaction scores rise.

Use digital channels

SMB customers have a lot on their plates, so it's important to make interactions easy for them. Low-effort interactions increase customer loyalty, according to *The Effortless Experience* by Matthew Dixon, Nick Toman, and Rick DeLisi. And the connection between effort and customer loyalty is stronger than the connection between customer satisfaction and loyalty. Digital and self-service channels are the key to easy experiences for your SMB customers.

At Forum 2021, the session [When life hands you lemons, create customer advocates](#) explored how to use digital channels to make interactions with SMBs as easy as possible. Jennifer Weedon, strategic account supervisor at SMUD, shared how the utility had moved offerings for SMB customers online. Watch the recording of this session to learn more about taking a proactive approach to serving SMB customers.

In response to COVID-19, SMUD pioneered new digital channels to better serve its SMB customers and to increase SMB customer awareness of its strategic account advisers (SAAs). Before 2020, SMUD had limited self-service channels for business customers, and SAAs conducted in-person visits to conduct free energy assessments for businesses. The utility successfully switched this offering to a digital channel: SMB customers can participate in a 30-to-60-minute virtual meeting on their smartphone and walk through their establishment with the SAA (**figure 5**).

Figure 5: SMUD uses a video to announce its virtual audits

SMUD emphasizes that it has always supported its business customers through energy audits and shares how it's adapting to current times to continue this support safely. The video focuses on the benefits to customers and the ease of participating.

SMUD also created a [Business resources](#) web page so SMB customers would have one centralized place to visit for COVID-19 updates, information on accessing grants, and digital tools. The web page includes videos on how to use the self-service channels for bill pay, which SMUD says reduced call volume.

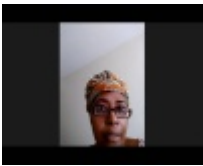
SMUD's easy-to-navigate digital channels helped SMB customers through the pandemic, and they created an overall positive customer experience that made life easier for customers and the utility.

Get involved in the community

SMB customers appreciate it when you're visible and active in their communities, showing you care about what's important to them (**figure 6**).

Figure 6: SMB owners care that their utility is community minded

An SMB customer explains the importance of community involvement in our E Design 2020 research.



Consider partnering with local community-based and regional organizations, sponsoring community events, or engaging local school students. Our Ask E Source answer [What are the best ways to reach business customers through community-based marketing and events?](#) shares other recommendations for community-based marketing.

Think about ways you can support the SMBs in your service territory as well as their customers and community. Los Angeles Department of Water and Power (LADWP) partnered with a community-based organization and Los Angeles County to administer the Healthy Stores Refrigerator Program (HSRP).

HSRP is a free program that serves corner stores and small independent grocery stores in neighborhoods with low access to healthy food in Los Angeles County. Eligible businesses can get free upgrades to more-efficient refrigerators. LADWP's community organization partner, [The Energy Coalition](#), installs the new refrigerators, walks the customers through the recycling process for the old equipment, and provides education and outreach for the program. Besides helping businesses save money on energy bills and leave a smaller carbon footprint, the program reduces food insecurity and provides local, healthy food options. HSRP reps provide free education and training to the local businesses on how to source, market, and sell healthy foods.

An article on the website of Hilda L. Solis, chair of the Los Angeles County Board of Supervisors, [Los Angeles County Healthy Stores Refrigeration Program Promotes Healthy Food Options in LA Food Deserts](#), shares how the program has helped the community. Andrew McDowell, a participant and owner of With Love Market, said, "We increased our refrigerated vegetable selection by 50% because of the [HSRP] program. In my opinion, it's the best program I've experienced from the County."

LADWP uses the connection the HSRP provides with businesses to engage those customers in the utility's other energy- and water-saving programs and rebates. When new refrigerators are installed, the customers get flyers and handouts on energy- and water-conservation rebates.



Voice control changes everything: Why utilities should care about virtual assistants

By Essie Snell

August 20, 2018

Contents

[The time to engage is now](#)

[What should a utility skill or action do?](#)

[What we've learned](#)

[What's next?](#)

[Acknowledgments](#)

When Amazon released the first voice-controlled smart speaker—the Amazon Echo—to a limited number of customers in 2014, few could have predicted how popular it would become. Device sales have skyrocketed, with shipments now in the tens of millions per year, and it has spawned competing devices from companies like Google and Apple. Because virtual assistant platforms are so popular, they're quickly becoming a key interface for a range of smart home systems and devices. Market research from the [E Source Residential Utility Customer Survey](#) and ethnographic research completed for [E Source E Design 2020](#) reveal that customers across the US are familiar with these devices, have had positive experiences with them, and even want to interact with their utilities via this channel. Additionally, new data from manufacturer Ecobee suggests that even with devices like thermostats, customers are using voice-control functionality in unique, creative, and unexpected ways.

For utilities, voice-control devices are worth paying attention to because of the smart home interconnectivity

they enable as well as the unique marketing and communications opportunities they provide. For example, these devices could help you:

- Share relevant information with customers
- Offer automation across connected devices to improve efficiency or manage demand
- Promote trade allies
- Allow customers to pay bills
- Enroll customers in utility programs
- Help reduce call volumes in contact centers

Although relatively few utilities have taken advantage of voice-control technology to date, we expect to see more engagement going forward given the unique and exciting opportunities it offers.

The time to engage is now

Sales of stand-alone smart speakers such as the Amazon Echo and Google Home are exploding. According to Internet of Things market research and consulting firm Parks Associates, 55% of US broadband households will likely have a smart speaker with a voice-based personal assistant by 2021. For utilities, these devices represent an important new way to engage with customers, empower them with relevant information, and help them create smart home systems that can successfully manage their energy use. Particularly in deregulated markets, utilities that quickly and effectively leverage virtual assistants will create a unique competitive differentiator that promotes a positive brand image and directly helps customers.

E Source research shows that 60% of smart speaker owners said they're "probably" or "definitely" interested in a utility app that makes use of voice-activated skills.

The E Source report [Which Customers Are Interested in Smart Speakers, and How Do You Reach Them?](#) based on data from the Residential Utility Customer Survey, highlights how much of the market has already adopted virtual assistants and identifies opportunities smart speakers present for utilities. Of particular interest, 27% of US respondents said they currently own a smart speaker, and 60% of smart speaker owners said they're "probably" or "definitely" interested in a utility app that makes use of voice-activated skills.

According to the market study [Smart Audio Report, Spring 2018](#) (PDF) from National Public Radio (NPR) and Edison Research, ownership of smart speakers is fairly evenly distributed across genders and age groups (suggesting a wide potential audience). The researchers found that 32% of smart speaker owners have controlled household devices with a smart speaker in the past week (primarily lighting, thermostats, or appliances) and that 59% have encouraged a friend to get a smart speaker. Moreover, 44% of the survey respondents indicated that time spent with smart speakers replaced time previously spent with radio, and

35% reported offsetting time spent with their smartphones—two major channels utilities rely on for communications and marketing.

These statistics suggest that virtual assistants are gaining impressive market share and becoming an essential part of customers' lives, and that they're likely to influence customers' expectations about how they get information from their utility. And although smart speakers are the most prominent smart home devices using virtual assistants, they aren't alone: Many smart home manufacturers are beginning to incorporate these interfaces directly into their products (**Figure 1**). In terms of energy management, Ecobee was one of the first manufacturers to add a virtual assistant into its products with the introduction of the Ecobee4 smart thermostat (which features Amazon's Alexa), and other smart devices are now following suit. For example, Google Assistant is now included on more than 500 million devices (including smartphones) across 450 brands. Still other voice control-capable devices are designed to work with smart speakers even if the devices don't include a virtual assistant interface.

Figure 1: A handful of devices with built-in virtual assistants

Manufacturers are putting virtual assistants like Amazon Alexa and the Google Assistant into a mind-boggling array of new products, including smart speakers, thermostats, security cameras, cars, smartphones, lamps, home appliances, bathroom mirrors, and even toilets.

Amazon Echo Plus and Echo Dot smart speakers (Alexa)



Source: Amazon

From left to right: Google Home Mini, Google Home, and Google Home Max smart speakers (Google Assistant)



Source: Google

Ecobee4 smart thermostat (Alexa)



Source: Ecobee

Nest Cam IQ indoor camera (Google Assistant)



Source: Nest

Ecobee Switch+ smart light switch (Alexa)



Source: Ecobee

Google Pixel 2 smartphone (Google Assistant and Alexa)



Source: Google

C by GE Sol smart lamp (Alexa)



Source: GE

Kohler Verdera Voice Lighted Mirror (Alexa)



Source: Kohler

2019 Nissan Altima (Alexa and the Google Assistant)



Source: Nissan

LG InstaView Fridge (Alexa)



Source: LG

Kohler Numi intelligent toilet (Alexa)



Source: Kohler

At present, Amazon and Google dominate the smart home virtual assistant market and provide open-platform systems that make them well suited to utility needs. Alexa and the Google Assistant can each control more than 5,000 smart home devices from thousands of brands, and the number of supported languages and features offered is continually expanding. Other platforms and virtual assistants also exist—including Apple’s Siri, Microsoft’s Cortana, and IBM’s Watson—but these currently lack the level of home penetration, support for device interconnectivity, and flexibility for third parties that the Amazon and Google platforms offer.

The good news is that creating a skill or action isn’t difficult, and there are resources available to help you take the next step.

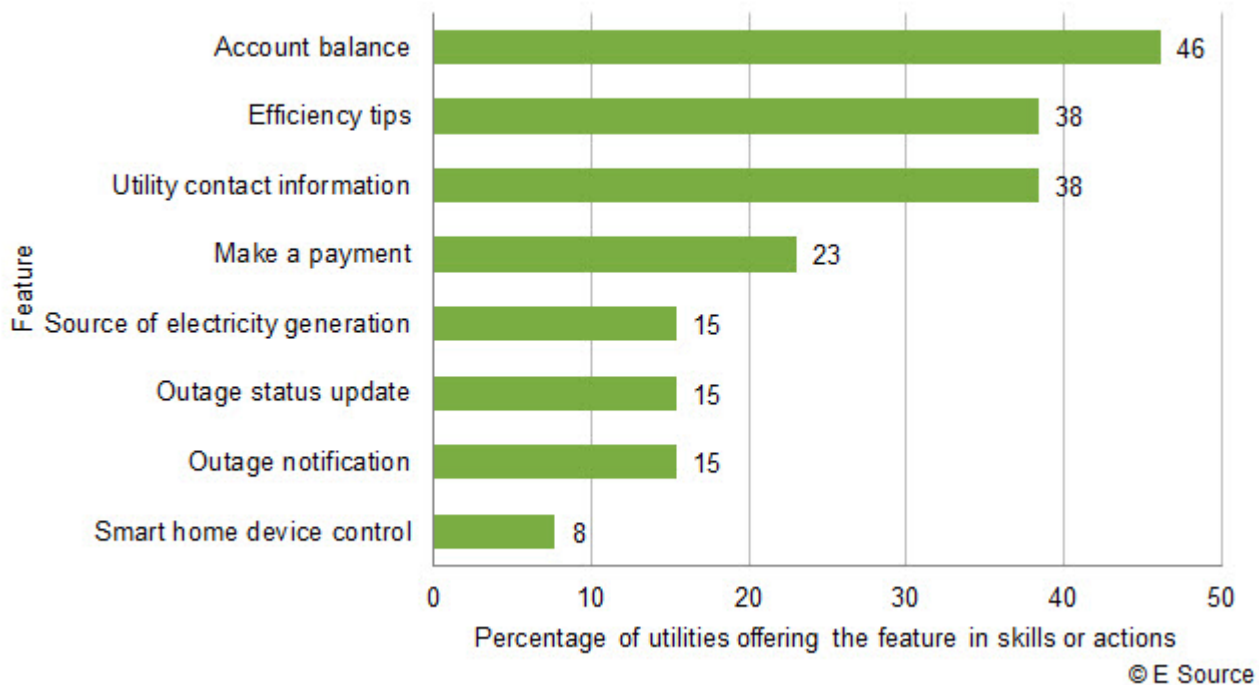
To get the most out of virtual assistants, you’ll need to build skills (for Alexa) or actions (for the Google Assistant). The good news is that creating a skill or action isn’t difficult, and there are resources available to help you take the next step. Foremost of these are Amazon’s guide to [Designing for Voice](#) and Google’s overview of [Actions on Google](#), both of which describe the process of designing for these platforms and offer specific advice to help you succeed. And while many utilities will be able to build skills or actions in-house, there are also hundreds of third-party development agencies that can help.

What should a utility skill or action do?

To date, only a dozen utilities in the US and Canada have created skills or actions, and most of the functionality relates to customer education, including account balance and generic energy-efficiency tips (**Figure 2**).

Figure 2: What features do utility skills and actions currently provide?

Although many utility skills or actions allow users to hear their account balance, less than a quarter allow customers to pay their bill using voice. Similarly, most skills or actions provide generic energy-saving advice, but none tie that advice to a customer's actual energy use. We found only one skill that enables smart home device control that could directly let customers better manage their consumption.



These features are a step in the right direction, but utilities have only scratched the surface of what's possible. We've compiled a handful of ideas for functionality that expand on what utilities' current skills or actions provide and may help you better achieve your utility's goals—from engaging customers around demand-side management (DSM) programs or new rate structures to providing a better customer experience and reducing call volumes.

Share information and connect customers with utility programs. Because smart speakers are inherently responsive devices (they wait until you talk to them, rather than proactively talking to you), they aren't as suited to traditional marketing strategies as other channels. One way to promote your utility offerings is to allow customers to ask about your current rebates, efficiency programs, or other services

through a skill or action. But a potentially more effective approach is to fold utility information into the daily tasks that customers perform with virtual assistants to make the material more relevant and appealing and to create a deeper customer connection. **Fold utility information into the daily tasks that customers perform with virtual assistants to make the material more relevant and appealing and to create a deeper customer connection.** For example, you could create snippets of information to include in customers' daily news summary or "flash briefings." This might be a notification that the customer is on track to have a particularly high or low energy bill this month, seasonal efficiency tips, a short explanation of the effect of current weather on the customer's bill, or context-relevant information on efficiency or demand-response (DR) programs. Additionally, by allowing customers to enroll in DSM and DR programs directly from their smart speaker, you could streamline the process for customers (particularly if the smart speaker is already connected to a smart thermostat or other smart device), while potentially reducing the cost of acquisition for programs. Similarly, promoting revenue-generating services directly related to customers' interests and activity could help increase uptake and make it easier for customers to participate.

Help customers understand time-variant rates and energy generation. As utilities increasingly shift toward providing dynamic and time-of-use (TOU) rate structures, it's more important than ever to ensure that customers feel supported and empowered to make the best decisions for their energy needs. Beyond online portals and mobile apps, virtual assistants can provide another way to educate customers about how their rate structure affects their bill and what they can do to take charge of their energy use. This can help them make effective choices and reduce dissatisfaction with rate changes. Additionally, ethnographic research performed for the E Source E Design 2020 project suggests that utility customers are increasingly looking for clean, local energy solutions, opening up the possibility of sharing real-time information on generation sources to help customers better understand where the energy they use comes from.

Help customers control smart devices. Smart speakers offer an intuitive user interface and are compatible with an array of connected home products. As a result, there's potential to enable customers to set up energy-efficient home modes (adjusting settings across multiple devices to promote efficiency), to help customers turn off or adjust device settings during DR events, and to dynamically adjust power draw in response to TOU rates. Although some customers—particularly early adopters—will want to learn all the intricacies of their connected home system and tinker with it, these preset modes could be especially appealing to users who just want lower energy bills or to be more eco-friendly.

Virtual assistants can help promote your trade allies and make it easier for customers to take advantage of your efficiency offerings.

Walk customers through a home energy audit. Skills and actions could be well suited to guiding customers through their home in a simple do-it-yourself energy audit. By taking a step-by-step approach,

asking simple questions, and providing immediate feedback, this functionality could help customers learn about some of the biggest efficiency opportunities in their home, while also promoting available utility DSM incentives.

Promote trade allies. By allowing customers to ask for suggestions on trusted local contractors for energy-efficient home upgrades or maintenance, you can promote your trade allies and make it easier for customers to take advantage of your efficiency offerings. Additionally, tying in smart devices (like smart thermostats) that can facilitate remote diagnostics could make this approach even more effective. For example, a virtual assistant could alert customers to failing equipment and provide suggestions for local contractors who can fix the problem and information on available utility rebates.

Expand educational campaigns. According to NPR's Spring 2018 Smart Audio Report, children are using smart speakers in 73% of homes that have these devices. Among other things, they're using smart speakers to answer questions, help with homework, read short stories and audiobooks, and play games. Many utilities offer educational resources to children and educators via online tools, lesson plans, games, and coloring books, so smart speakers could provide a fun and interactive new channel to teach kids about safety and energy efficiency.

By diverting even a small percentage of customer care calls away from the call center, utility skills or actions could quickly pay for themselves and help improve the bottom line.

Improve the customer experience and reduce call volumes. Unlike many utility interactive voice response systems, websites, and even mobile apps, smart speakers and virtual assistants are hands-free, intuitive, and simple to use. As a result, smart speakers are an ideal platform for communicating with customers—particularly around frequently requested information—and they could reduce the volume of calls to a utility's contact center. By diverting even a small percentage of customer care calls away from the call center, utility skills or actions could quickly pay for themselves and help improve the bottom line. And because customers are excited about and engaged with this channel, smart speakers can also promote a positive utility brand image.

What we've learned

It's early days for utility skills and actions, but we've already learned several lessons from early-adopter utilities, customer reviews, and data from companies such as Google and Ecobee.

Users want the virtual assistant to tie the advice back to their utility

account so they'll be assured that the suggestions are relevant for them and have some idea of how much money or energy they'll save.

Customers prefer specific efficiency tips to generic ones. In reading customer reviews on Amazon, we see that users want customized energy-efficiency tips from their utility that will help them save money. Ideally, users want the virtual assistant to tie the advice back to their utility account so they'll be assured that the suggestions are relevant for them and have some idea of how much money or energy they'll save. For example, one customer complained, "Energy tips are generic ... What's the point of the [skill] if it does not link into my [utility] account?" We recommend providing tailored energy-efficiency tips through a skill or action based on customers' unique home characteristics and energy consumption patterns.

Customers want the ability to pay their power bill. In addition to checking their account balance, users have expressed a desire to pay their bill via a utility skill or action. Only providing balance information—and then forcing customers to go to a different platform to pay their bill—can result in negative customer experiences and strong pushback. TXU Energy's skill, which offers both of these features, has received positive feedback from customers. Comments include: "Love it love it love it. Love it now i dont have to get out my laptop or call to make a payment love it" and "Works like a charm! ... Quick setup and I'm able to check my balance, make a payment, etc. great skill!"

Carefully test skills and actions before releasing them and vet supported devices to ensure that they deliver a positive customer experience before pushing out functionality via a skill or action.

Reliability and robustness are critical. Customers expect robust and trustworthy features from third-party skills or actions, and they'll get frustrated if the feature doesn't work smoothly or as expected. We recommend carefully testing skills and actions before releasing them and vetting supported devices to ensure that they can deliver a positive customer experience before pushing out functionality via a skill or action.

Customers use different interfaces for different purposes. Manufacturers such as Ecobee are finding that customer interactions for virtual assistant-enabled smart home products like smart thermostats aren't limited to device control. In fact, customers like to play music, control other smart home devices, ask trivia questions, and perform other activities not immediately associated with a device like a thermostat. Inside the home, voice control offers an easy and streamlined smart home control interface, but web portals and mobile apps can be especially helpful when customers want to control their devices remotely.

Customers need more education about outage notifications. Many utility skills or actions allow customers to report outages or get outage notifications. Because smart speakers (and other plugged-in smart

devices with built-in virtual assistants) will turn off during outages, customers don't understand the benefits of this feature. As one review says, "Let me hook my generator up to my [smart speaker], router, and cable modem so I can report an outage!!! Haha." For the most part, this feature is intended for customers who use virtual assistants on their smartphones (which are likely to be functional during an outage), and you should clearly explain this in the description of your skill or action to avoid confusion and negative experiences.

What's next?

There are strong indications that virtual assistants aren't just a passing fad and that they'll flourish in the coming years. For example, major electronics manufacturers seem to be in it for the long run. Google has repeatedly expressed its confidence in so-called "ambient computing" as the future of search and digital interaction. Amazon is working directly with new-home builders across the country to integrate Alexa into homes, making it a part of future occupants' lives from day one. And other smart device manufacturers are incorporating virtual assistants into their new products (for example, the 2018 Consumer Electronics Show—which is a good representation of industry trends—was inundated by such devices).

As skills and actions become standard ways to interact with companies, customers will expect their utilities to offer this functionality.

As skills and actions become standard ways to interact with companies, customers will expect their utilities to offer this functionality. Utilities that stay on the leading edge of this trend have the opportunity to demonstrate leadership, innovation, and care for their customers. By embracing virtual assistants, you can help temper the effects of a rapidly changing DSM landscape—one in which increased efficiency standards and adoption of efficient equipment are making it difficult for utilities to meet their efficiency goals, and where demand management is becoming more important than ever. Virtual assistants can also mitigate the risk of third-party companies coming between you and your customers, boost engagement, and provide more-effective customer support. We expect that virtual assistants will have a vital role to play in the emerging and evolving utility business model.

Acknowledgments

We would like to recognize and thank everyone who contributed to this report by providing external review, offering input, and sharing data. In particular, we would like to thank Sarah Colvin at Ecobee, Brian Kirchman at ComEd, and staff from Google and Amazon.

Appendix B - SoCalGas Amended Response to CLS-004

Question 33a

Data Request Number: CLS-004

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: Community Legal Services (CommLegal)

Date Received: 2/2/2023

Date Responded: 2/16/2023

Date Amended: 2/23/2023, 3/3/2023, 4/14/2023

33. For Customer Service Office Operations Remittance Processing (“RP”), under a section entitled “Staffing at full complement”, SoCalGas requests an increase of \$671,000 for 7.5 FTEs and states that they are “a combination of employees' intermittent (Long-Term Disability) LTD time off, temporarily assigned to capital projects, and delay in filling vacancies.” (SCG-15-R at BMS-32).

a. Identify all FTE positions in RP from 2017 to 2024 with title, salary, and job description.

SoCalGas Amended Response 33a:

Please see the separately attached file titled “CLS-004_ATTACH_Q33a_Amended.xlsx.”

In determining compensation for a specific job title, SoCalGas uses a market-based analysis, which levels jobs based on pay for similar jobs as determined by the competitive labor market and with Market Reference Ranges (MRRs), which are assigned to each job title.

		2017		2018		2019		2020		2021		2022	
Job Title	Job Description: Primary Purpose	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
Cust Remittance Procg Supv	Supervises Payment Processing personnel and oversees all activities related to the processing of traditional mailed check payments for SCG and SDG&E as well as multiple electronic payment streams for SCG.	\$74,700.00	\$112,100.00	\$76,300.00	\$114,500.00	\$77,800.00	\$116,700.00	\$79,700.00	\$119,600.00	\$81,500.00	\$122,300.00	\$83,500.00	\$136,500.00
Data Dist Clerk-3	Provides clerical support to Data Distribution activities requiring advanced clerical skills.	\$30.55	\$33.98	\$31.47	\$35.00	\$32.49	\$36.14	\$33.47	\$37.23	\$34.47	\$38.34	\$35.51	\$39.49
Data Dist Supv	Supervises Data Distribution/Bill Delivery personnel and oversees all activities related to the bill print and insertion processing ensuring the preparation of approximately 63 million pieces of mail (bills, required notices and letters) annually for both SCG and SDG&E for delivery to the United States Post Office (USPS).	\$74,700.00	\$112,100.00	\$76,300.00	\$114,500.00	\$77,800.00	\$116,700.00	\$79,700.00	\$119,600.00	\$81,500.00	\$122,300.00	\$83,500.00	\$136,500.00
Ld Computer Opr-4	Acts in aLead capacity in monitoring and controlling maintenance on computers and peripheral equipment in Data Distribution.	\$32.60	\$36.27	\$33.58	\$37.35	\$34.67	\$38.57	\$35.71	\$39.73	\$36.78	\$40.92	\$37.89	\$42.15
Ld Mail Equip Opr-4	Operates electronic mail equipment to process outgoing customer bills, reminder notices, legal notices and various advertising inserts for postal delivery; trains new Mail Equipment Operators and implements work priorities .	\$32.60	\$36.27	\$33.58	\$37.35	\$34.67	\$38.57	\$35.71	\$39.73	\$36.78	\$40.92	\$37.89	\$42.15
Mail Equip Opr-2	Using electronic mail equipment, processes outgoing customer bills, reminder notices, legal notices and various advertising inserts for postal delivery.	\$28.49	\$31.67	\$29.35	\$32.63	\$30.30	\$33.69	\$31.21	\$34.70	\$32.15	\$35.74	\$33.11	\$36.81
Proj Mgr - II - PT	Manage and direct large-scale, major projects within the department or business unit. Responsible for the development of work scope, budget, schedule, and resource requirements. Prepare, negotiate and approve contracts for contractors or consultants.	\$92,300.00	\$138,500.00	\$94,200.00	\$141,300.00	\$96,100.00	\$144,200.00	\$98,500.00	\$147,800.00	\$100,800.00	\$151,200.00	\$103,200.00	\$154,800.00
Sr Data Ctrl Clerk-5	Trains new operators on specialized input equipment and provides follow-up training for all operators on new or revised job procedures.	\$35.03	\$38.99	\$36.08	\$40.16	\$37.25	\$41.47	\$38.37	\$42.71	\$39.52	\$44.00	\$40.71	\$45.32
Techl Advr - II	This position provides support to Bill Delivery and Payment Processing and is a lead role that represents the organization for key Company and department initiatives that require technical or procedural solutions.	\$81,500.00	\$122,300.00	\$83,200.00	\$124,800.00	\$84,900.00	\$127,400.00	\$87,000.00	\$130,500.00	\$89,000.00	\$133,500.00	\$91,100.00	\$136,700.00
ADA Coordn Prgm Mgr	The position is responsible for coordinating and shaping accessibility improvements and compliance strategies at SoCalGas (e.g. access for people with disabilities or special needs). Accountable for initiating and coordinating ongoing reviews, planning, and discussions with key stakeholders across all customer-interfacing lines of business to improve the accessibility of customer.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	\$89,000.00	\$133,500.00	\$91,100.00	\$136,700.00
Bill Del & Pmt Procg Ops Mgr	This position manages the operations of the bill print and mailing and remittance processing channels in Monterey Park. Ensures that customer service levels and cost performance targets are met. Continuously re-evaluates existing practices of these operations and implements process improvement techniques to maximize customer value, enhance our competitive position, maintain compliance with CPUC mandates and to support Company strategy.	\$105,400.00	\$158,100.00	\$107,600.00	\$161,400.00	\$109,800.00	\$164,700.00	\$112,500.00	\$168,800.00	\$115,100.00	\$172,700.00	\$117,900.00	\$176,900.00
Sr Admin Clk - 5 - Know Typ	Performs a wide range of clerical functions, independently and as a member of a team.	\$35.03	\$38.99	\$36.08	\$40.16	\$37.25	\$41.47	\$38.37	\$42.71	\$39.52	\$44.00	\$40.71	\$45.32
Proj Spec	Manages small-scale department projects. Provides support as needed to large-scale projects.	\$62,700.00	\$94,100.00	\$64,000.00	\$96,000.00	\$65,300.00	\$98,000.00	\$66,900.00	\$100,400.00	\$68,400.00	\$102,600.00	\$70,000.00	\$105,000.00

Appendix B - SoCalGas Public Response to TURN- SEU-064 Questions 1b and 1c

Data Request Number: TURN-SEU-064

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: The Utility Reform Network

Date Received: 3/23/2023

Date Responded: 4/06/2023

Question 1-Continued

b. Please identify each level of SoCalGas management review and approval obtained for the project and associated costs, the job title of each person whose approval or review was obtained in the management approval process, and the date on which each approval was provided.

SoCalGas Response 1b:

SoCalGas objects to this request pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that the request is not relevant to the subject matter involved in the pending proceeding and therefore, the burden, expense and intrusiveness of this request outweighs the likelihood that the information sought will lead to the discovery of relevant and admissible evidence. In particular, this request seeks information regarding each person whose approval or review was obtained in the management approval process. Knowing who approved or reviewed the project and associated costs is not probative of whether the request is reasonable. Under the GRC procedures, the process allows the company to sponsor a witness to answer questions about the project request and does not allow for non-sponsoring witnesses to be called in for cross-examination. Therefore, each person who approved and reviewed the project and associated costs is not relevant and has no probative value. Notwithstanding the foregoing objection, SoCalGas responds as follows:

The following information lays out the SoCalGas capital planning process and provides more details on the Agile methodology, which informs the specific responses contained herein. The response and supporting documents provided in this data request were provided by the IT Capital Witness (Ex. SCG-21, Ch.2).

Before an IT capital project is funded and moves into development, it must go through SoCalGas's IT capital project approval process, and is referenced in SoCalGas's Rate Base testimony of Patrick D. Moersen (Ex. SCG-31-2R, pages PDM-2 and PDM-3), and has the following distinct stages as described in SoCalGas Testimony of Tia L. Ballard and William J. Exon (Ex. SCG-21, pages TLB/WJE-24 and TLB/WJE-25):

1. IT Division Capital Plan Development: In this stage a proposed set of capital projects for the upcoming year is identified. IT and business unit teams develop a project Concept that is used to prioritize and approve projects to move to Business Case development.
2. Concepts: Concepts are high-level assessments developed for review during the capital planning process.
3. Project Prioritization and Approval: In this stage the concepts are prioritized through a ranking process, which occurs annually. Concepts are reviewed and scored by a Council

Data Request Number: TURN-SEU-064

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: The Utility Reform Network

Date Received: 3/23/2023

Date Responded: 4/06/2023

SoCalGas Response 1b Continued:

that is pre-selected and is representative of both business and technology groups. After scoring, all projects are prioritized and ranked. A recommended list of concepts is then reviewed with Directors and Vice Presidents (VPs) for approval. The approvers include but are not limited to: Director of Customer Contact Centers, Director of Customer Operations, Director of Customer Service Staff & Continuous Improvement, Director of Gas Control & Systems Planning, Director of Remittance, Director of Strategic Communication & Engagement, Director of Vista Program, and Director of Customer Legacy Systems. The Vice Presidents include but are not limited to: VP of Communications, LD Government & Comm. Affairs, VP of Customer Services, Vice President of Transmission & Storage, and VP of Customer Solutions, and Senior VP of System & Technology & Chief Diversity Officer of Administrative and Diversity.

The final list of proposed projects is sent to the Capital Planning Committee (CPC) for review, approval and submission to the Executive Finance Committee (EFC). The capital planning committee allocates budgets to the IT portfolio for each business unit.

4. Business Case: In this stage, a business case for the approved concepts is developed jointly by the IT department and the sponsoring business department. Business and IT project sponsors approve business cases before they are reviewed and approved by the Portfolio Governance Committee (PGC). The Business and IT projects sponsors include: Director of Customer Operations, Director of Customer Contact Center, Director of IT Call Center Applications and VPs are: Senior VP, Sys & Tech & Chief Diversity Officer, Vice President of Customer Service, and Senior Vice President & Chief Customer Officer - Customer Services. The PGC includes the following roles: Director of Digital Workspace & Automation, Director of Enterprise Services, Director of Digital & SoCalGas Customer, Director of Systems & Technology, Director of Innovation & End User Experience, Director of Utility Operations, Director of Network & Cyber Technology Services, Director of Customer Legacy Systems, and Director of Performance Management and Organizational Strategy. There are also proxies who attend to approve should the directors not be available. Approvals occur verbally during the meeting and are reflected on the Notes slide of the presentation, which precedes the cover slide. Approval must occur before work begins.

5. Work Order Authorization (WOA): At the WOA stage, there are approvals for the estimated project costs from the IT Portfolio Managers, Director, and the Senior Vice President, Chief Information Officer & Chief Digital Officer. Additional approvals would be received when SCG has formalized contracts for the project.

Data Request Number: TURN-SEU-064

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: The Utility Reform Network

Date Received: 3/23/2023

Date Responded: 4/06/2023

The CCC Technology Modernization project has completed the capital approval process stages and the project is currently in an active Request for Proposal (RFP) process. Estimates are based on cost data at the time we created the business case and market data analysis and is subject to change as project matures and products are being procured See the following attachments used to justify the business need and the approvals.

Please see the following documents which contain Confidential and Protected Materials which are provided pursuant to PUC Section 583, D.21-09-020 and GO 66-D (Revision (Rev.) 2) and/or an executed Non-Disclosure Agreement for this Proceeding:

TURN-SEU-064_ATTACH_1B CONFIDENTIAL.pdf [BUSINESS CASE DOC]

TURN-SEU-064_ATTACH_1B PUBLIC.pdf [BUSINESS CASE DOC]

TURN-SEU-064_ATTACH_1B_2 CONFIDENTIAL.pdf [PGC DECK]

TURN-SEU-064_ATTACH_1B_2 PUBLIC.pdf [PGC DECK]

TURN-SEU-064_ATTACH_1B_3 CONFIDENTIAL.pdf [WOA]

TURN-SEU-064_ATTACH_1B_3 PUBLIC.pdf [WOA]

SoCalGas qualifies that an identified project may not commence execution or achieve completion or may be deferred for various reasons after a Business Case has been approved. Those reasons include, but are not limited to, other competing business priorities, system vulnerabilities, scope changes, internal and vendor resources availability, and management discretion. In addition, submitted budget documentation to the PGC and in the WOA is different from the GRC request as the financial computations included in the attachments and the GRC forecasts in this proceeding are not calculated the same. GRC capital requests include labor and non-labor in direct dollars, and GRC Vacation and Sick (V&S) on internal labor only. The WOA forms include, but are not limited to; directs, indirects, overheads and AFUDC.

Data Request Number: TURN-SEU-064

Proceeding Name: A2205015_016 - SoCalGas and SDGE 2024 GRC

Publish To: The Utility Reform Network

Date Received: 3/23/2023

Date Responded: 4/06/2023

Question 2-Continued

b. Please identify each level of SoCalGas management review and approval obtained for the project and associated costs, the job title of each person whose approval or review was obtained in the management approval process, and the date on which each approval was provided.

SoCalGas Response 2b:

SoCalGas objects to this request pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that the request is not relevant to the subject matter involved in the pending proceeding and therefore, the burden, expense and intrusiveness of this request outweighs the likelihood that the information sought will lead to the discovery of relevant and admissible evidence. In particular, this request seeks information regarding each person whose approval or review was obtained in the management approval process. Knowing who approved or reviewed the project and associated costs is not probative of whether the request is reasonable. Under the GRC procedures, the process allows the company to sponsor a witness to answer questions about the project request and does not allow for non-sponsoring witnesses to be called in for cross-examination. Therefore, each person who approved and reviewed the project and associated costs is not relevant and has no probative value. Notwithstanding the foregoing objection, SoCalGas responds as follows:

Please refer to explanation of the IT capital project approval process described in response to Question 1b, and attachments provided in response to Question 1b. The Advanced Meter HeadEnd and Meter Data Management Next-Generation (AclaraOne) is at the concept level of the capital approval process; therefore, there is no Portfolio Governance Committee deck or WOA. Currently, the project is in concept phase and the estimates are based on point in time. Cost data that we created for concept document and is subject to change as project goes through business case development and approvals.

Please see the following document which contains Confidential and Protected Materials which are provided pursuant to PUC Section 583, D.21-09-020 and GO 66-D (Revision (Rev.) 2) and/or an executed Non-Disclosure Agreement for this Proceeding:

TURN-SEU-064_ATTACH_2B CONFIDENTIAL.pdf [CONCEPT DOC]

TURN-SEU-064_ATTACH_2B PUBLIC.pdf [CONCEPT DOC]

TURN-SEU-064_ATTACH_2B_2 CONFIDENTIAL.pdf [FINANCIAL DOC]

TURN-SEU-064_ATTACH_2B_2 PUBLIC.pdf [FINANCIAL DOC]

A nighttime photograph of a city skyline with several illuminated skyscrapers and palm trees. In the foreground, a highway overpass is visible with long-exposure light trails from cars in yellow and red. A large blue triangle is overlaid on the right side of the image, containing the title text.

SoCalGas CCC Modernization Project - Business Case – VP Approval 11/18/2022

Table of Contents

Description	Page #
Key Project Goals/Objectives	3
Executive Summary	4
Business Benefits	5
Technical, Strategic Benefits	5-7
Executive Summary - Financials	9-11
Project Timeline	11-12
Implementation Approach	18
Scope	16-17
Project Risks	20
Major VISTA Dependencies	21
Operational Impact	22
Conceptual Architecture	24-27
Appendix	19
A – Business Case Contributors	29
B – Approval Matrix	30
C – Business Benefit Estimate Details	32
D – CCAAS Technology Assessment and Recommendation	36-38
E – Billing & Collections Cost Allocation	40

Key Project Goals/Objectives

Our goal is to build a “Contact Center of the future” capability. We will achieve this goal through a comprehensive multi-year roadmap that addresses current service delivery challenges, enables new capabilities and delivers enhanced personalized experiences.



Channels

- Create Omnichannel environment and customer experience across IVR, Web, Chabot, CSR etc.
- Optimize existing channels:
 - Increase IVR containment: NLP/Conversational, predictive, additional self-service capabilities
 - Leverage My Account assets for creating Multimodal experience and improve self-service capabilities
- Increase personalized and pro-active and/or preemptive outbound communications



Operations

- Improve AHT and LOS by reducing call volume and/or optimize staffing/resource model
- Transition to better integrated and optimized workforce Forecasting & Scheduling to minimize variances and reduce Shrinkage
- Enhanced Quality Assurance and Performance Management



Analytics

- Optimize digital analytics to better understand customer behavior
- Introduce predictive customer & channel analytics w/ customer segmentation to derive actionable and proactive insights
- Leverage speech analytics for better insights on call intents, customer sentiment, and automated QA
- Align existing channel (digital + IVR) analytics to create a comprehensive 360-degree view of the customer



- Using Cloud as foundation, improve reliability, scalability and security
- Increase responsiveness to business needs through standardization and simplified architecture
- Increase business agility and faster time to market while reducing maintenance effort

Executive Summary

Project Name	SoCalGas CCC Modernization Project			Project ID	TBD
IT Project Manager	TBD	IT Portfolio Manager	████████	IT Director Sponsor	████████
Business Project Manager	TBD	Business Director Sponsor	████████	Business VP Sponsor	Jennifer Walker, Jeff Walker
Current State	<p>Our Customer Contact Center (CCC) is the hub of SoCalGas customer interactions and engagement. Currently, CCC handles over 7M calls annually and its core operations run on multiple technologies/systems from different vendors with complex integration and support requirements. Many of these technologies (e.g., ██████, ██████ On-Prem) are 10+ years old and approaching obsolescence which in recent years has been further accelerated due to a major increase in Cloud migration trend.</p> <p>The current CCC technologies are inadequate towards meeting key business requirements around resiliency, agility and support for new capabilities. There also remains a large technical debt that is becoming difficult to sustain, with some vendors identify end-of-life support for solution with a push towards the cloud and others that are struggling to stay in business.</p> <p>Being able to innovate and rapidly redesign interactions and journeys that support evolving customer preferences and expectations will be key to meeting our company's strategic objectives and goals around customer service and experience success.</p>				
Project Description	<p>Based on ██████ Cloud CX platform, this project will deliver "Contact Center of the future" capability that addresses current service delivery challenges using one standard platform, enables new business capabilities and delivers enhanced personalized experiences. Key deliverables in the following areas:</p> <ul style="list-style-type: none"> ▪ Transition to ██████ Cloud: Using ██████ Cloud as foundation, improve reliability, scalability and security. Increase responsiveness to business needs through standardization and simplified architecture. Increased business agility and faster time to market while reducing maintenance effort ▪ Channel Enhancements & Optimization: Conversational IVR with increased containment through AI, Natural Language Processing (NLP), predictive interactions, additional self-service capabilities and Omni-Channel support ▪ Operational Improvements: Improve AHT and LOS by reducing call volumes optimizing staffing/resource model. Improve Quality Assurance and Performance Management through automation ▪ Forecasting Process Enhancements: Transition the forecasting process into a fully-integrated WFM platform and enhance forecasting processes to minimize forecast variances. ▪ Process & Real-Time Adherence: Optimize scheduling and leverage enhanced RTA capabilities to manage deviations from defined schedules proactively. ▪ Customer Analytics: Develop dedicated customer and journey-centric analytic models to provide a complete view of the customer experience to enable segmentation, propensity modeling, personalization, and performance analytics. 				
Regulatory Mandates	None				

Executive Summary

Benefits Summary

1) Cost Savings (hard):

This project will achieve **net cost savings of \$7.8M over 5 years** based on \$25M in business benefits and \$17.2M in new Cloud subscription related costs

Business Cost Savings (Details in Appendix)

No	Category		Post Project	Benefit	Total Cost Savings	
		Avg 2019-2021			Annual	5 Years
1	IVR Containment	49%	53%	4% increase	\$1.3M	\$6.5M
2	Average Handle Time (AHT)	252 Sec	248 Sec	4 sec decrease	\$0.4M	\$1.9M
3	Agent Shrinkage	45%	43%	2% decrease	\$0.7M	\$3.6M
Total:					\$2.4M	\$12.0M

Note: Utilized 2019-2021 data to determine projected savings benefits. The above table is meant to represent the percentage and seconds saved which will be measured against current

Technology - Cost Savings/Avoided Costs

No	Category	SoCalGas			Total Cost Savings	
		CCC	Billing & Collections		Annual	5 Years
1		\$555,781	\$97,482		\$653,263	\$3,266,315
2		\$503,732	\$85,683		\$589,415	\$2,947,075
3			\$21,304		\$21,304	\$106,520
4		\$142,574	\$54,306		\$196,880	\$984,400
5		\$521,584			\$521,584	\$2,607,920
6						
7			\$12,931		\$12,931	\$64,655
8		\$403,000			\$403,000	\$2,015,000
9		\$66,309			\$66,309	\$331,545
10		\$130,012			\$130,012	\$650,060
Total:					\$2,594,698	\$12,973,490

Executive Summary

Benefits Summary

2) Other Avoided Costs (soft)

- a) **Estimated avoided cost of \$1.5M** in reduced capital funding requirements for performing the following legacy system upgrades if not replaced as part of this project

Technology	Estimated Upgrade Cost
	\$750,000
	\$269,592
	\$269,592
	\$100,000
	\$85,000
Total	\$1,474,183

b) **Reduced CCC Outages**

- Estimated annual avoided cost of \$75K due to IVR self-service impact (based on one outage/year)
- Estimated annual avoided cost of \$150K in lost CCC productivity (based on one incident per year)

Executive Summary (Continued)

Benefits Summary

3) Strategic Benefits

- **Improve Customer Service** – Sustain self-service rates while providing a modernized platform to help achieve company self-service goals thru value-based governance, customer analytics, conversational IVR, program enrollment optimization, forecast process enhancements, scheduling and real-time enhancements, model agent reinforcement and knowledge management.
- **Enhance Customer Experience through use of innovative techniques and technologies** – Increase customer satisfaction by enabling omni-channel experience. Leverage advanced data analytics and AI to predict/anticipate customer needs and provide personalized web experience
- **Improve Business Agility and Responsiveness** – Better support for on-going business needs. Reducing application maintenance overhead while improving performance/availability, security and data privacy.
- **Improve Technology Reliability & Viability** - Replace obsolete technology stack and end of service life components and help us meet performance goals (e.g., CX) by reducing the risk of unplanned downtime, availability issues and no vendor support or expertise on legacy components/parts.
- **Expand Stakeholder Education & Engagement** - Increase engagement beyond customer base to better attract, educate and retain all stakeholders, including current and future investors, policy makers, regulators and local leaders. Bring awareness to our strategic initiatives and goals (Aspire 2045, etc.) and advance our company mission.

Project Financials

Cost & Benefits Summary

No	Category		2022	2023	2024	2025	2026	2027	2028	2029	2030
A)	Project Cost (Capital)										
	Implementation Cost	\$24,506,425	\$60,028	\$6,393,871	\$12,567,757	\$5,484,769					
	AFUDC	\$2,426,750									
	Total Capital	\$26,933,175	\$60,028	\$6,393,871	\$12,567,757	\$5,484,769					
B)	Project Cost (O&M) - RFP, Training, Data Conversion										
		\$588,500	\$26,750	\$133,750	\$214,000	\$214,000					
C)	Post-Project Ongoing O&M										
	Cloud Subscription and Support Fees	\$16,601,000				\$1,881,000	\$3,680,000	\$3,680,000	\$3,680,000	\$3,680,000	
	Labor (1 FTE CCC, 1 FTE Technology)	\$1,300,000					\$260,000	\$260,000	\$260,000	\$260,000	\$260,000
D)	Hard Benefits / Cost Savings										
	Business Cost Savings										
	Shrinkage Improvements	\$3,608,000					\$604,000	\$751,000	\$751,000	\$751,000	\$751,000
	IVR Containment	\$6,473,000					\$1,101,000	\$1,343,000	\$1,343,000	\$1,343,000	\$1,343,000
	AHT Improvements	\$1,955,000					\$327,000	\$407,000	\$407,000	\$407,000	\$407,000
	Legacy Technology (Avoided Cost)	\$12,973,490					\$2,594,698	\$2,594,698	\$2,594,698	\$2,594,698	\$2,594,698
	Total Hard Benefits / Cost Savings	\$25,009,490					\$4,626,698	\$5,095,698	\$5,095,698	\$5,095,698	\$5,095,698

Executive Summary - Financials

TURN-SEU-064_ATTACH_1B

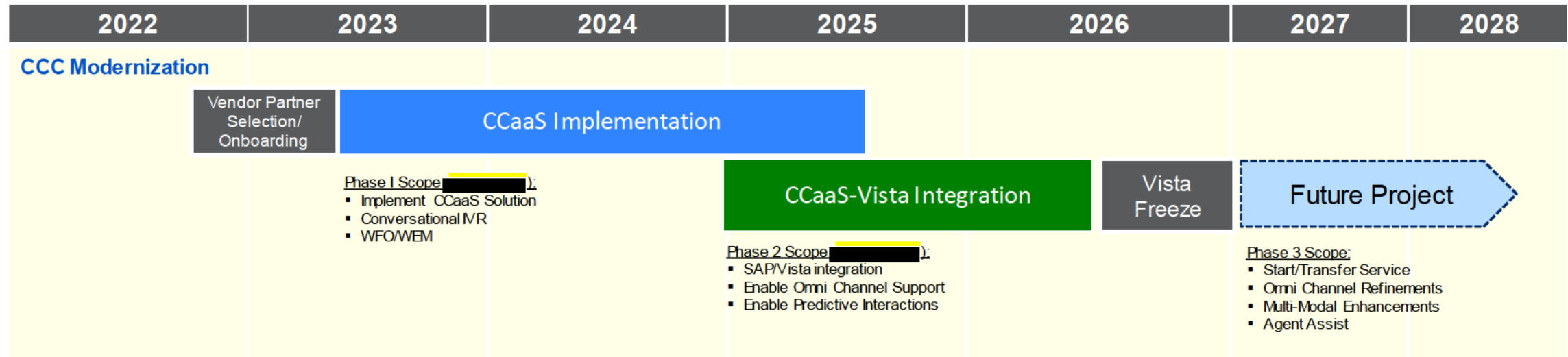
Project Costs									
Project Totals		Project Capital - On-premise SW/HW* (Rounded in Thousands)			Project Capital -SaaS/IaaS/PaaS Implementation (Rounded in Thousands)				
		(Loaded)	(Unloaded)		(Loaded)		(Unloaded)		
Internal Labor		\$0	\$0		\$3,616		\$1,952		
Contract Labor		\$0	\$0		\$12,975		\$12,880		
Hardware		\$0	\$0		\$0		\$0		
Software & SW Maintenance		\$0	\$0		\$0		\$0		
Vendor Services		\$0	\$0		\$6,914		\$6,863		
Other (Incidentals)		\$0	\$0		\$0		\$0		
Administrative & General Loader		\$0	N/A		\$1,001		N/A		
SubTotal Estimate		\$0	\$0		\$24,506		\$21,695		
AFUDC		\$2,427	Start Date:		12/1/22	Completion Date:		8/30/25	
Capital Total Estimate + AFUDC		\$26,933	In Service Date:		7/30/25	Payback Calc (in yrs):		15.3	
Project Totals		Project O&M*** (Rounded in Thousands)			SaaS/IaaS/PaaS Subscription Cost** (Rounded in Thousands)				
		(Loaded)	(Unloaded)		(Loaded)		(Unloaded)		
Internal Labor		N/A	\$0		N/A			\$0	
Contract Labor			\$0					\$0	
Hardware Maintenance			\$0					\$0	
Software & SW Maintenance			\$0					\$937	
Vendor Services			\$589					\$0	
Other (Incidentals)			\$0					\$0	
Administrative & General Loader			N/A					N/A	
SubTotal Estimate		\$0	\$589		\$0		\$937		
Annual Totals (Rounded in Thousands)		2022	2023	2024	2025	2026	Remaining Years Total	Total	
SaaS/IaaS/PaaS Subscription Cost		\$0	\$0	\$0	\$937	\$0	\$0	\$937	
Project O&M (Unloaded+Congtingency, no A&G, no AFUDC)		\$27	\$134	\$214	\$214	\$0	\$0	\$589	
Self Dev Software (Loaded+A&G+Contingency,no AFUDC)		\$0	\$2,350	\$2,765	\$2,118	\$0	\$0	\$7,232	
Project Capital (Loaded+A&G,no contingency,no AFUDC)		\$56	\$5,976	\$11,746	\$5,126	\$0	\$0	\$22,903	
Capital Contingency (Loaded, no AFUDC)		\$4	\$418	\$822	\$359	\$0	\$0	\$1,603	
Capital Contingency % (as a % of Project Capital)		7.00%	7.00%	7.00%	7.00%	0.00%	0.00%	7.00%	
Project Capital + Capital Contingency Total		\$60	\$6,394	\$12,568	\$5,485	\$0	\$0	\$24,506	
Post Project Annual Hard / Avoided Cost Benefits and O&M Cost									
Annual Totals (Rounded In Thousands)		Functional Area / Cost Center(s) \$	2025	2026	2027	2028	2029	No O&M or Benefit Est.	Total
O&M Cost (Unloaded, no A&G, no AFUDC)	Business	Labor	2200-0400, 2200-2395	\$0	\$260	\$260	\$260	\$260	\$1,300
		Non Labor	2200-0400	\$1,881	\$3,680	\$3,680	\$3,680	\$3,680	\$16,601
	IT	Labor		\$0	\$0	\$0	\$0	\$0	\$0
		NL - Other		\$0	\$0	\$0	\$0	\$0	\$0
Benefits (Unloaded, no A&G, no AFUDC)	Business	Labor		\$0	\$0	\$0	\$0	\$0	\$0
		Non Labor	2200-0400	\$0	\$4,627	\$5,096	\$5,096	\$5,096	\$25,009
	IT	Labor		\$0	\$0	\$0	\$0	\$0	\$0
		Non Labor		\$0	\$0	\$0	\$0	\$0	\$0
Asset Life (in yrs):								5	

Executive Summary - Financials

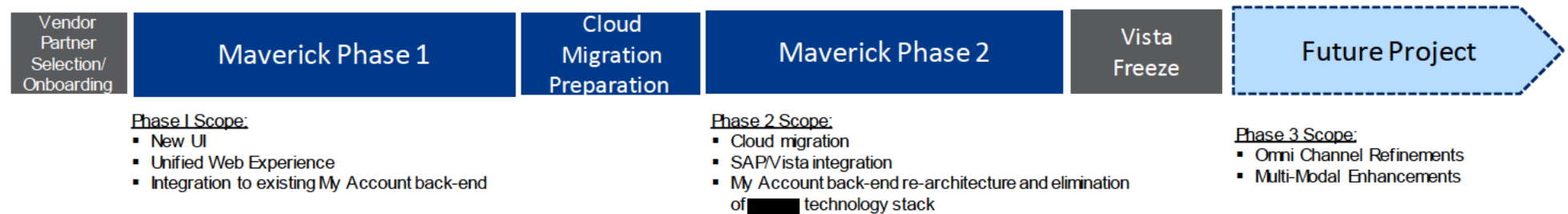
Financial Estimation Template Executive Summary										Version 5.4		
Project Name:		SoCalGas Contact Center Technology Modernization					Prepared By:		A Aslam, A Garyali, H Sun			
Funding, Loaders & Contingency												
Primary Funding Source:		CPUC GRC SCG			Loader Scenario:		SCG		SDGE		SCG	
Asset Allocation:		SDGE		0%		Total Costs:		5%		95%		
		SCG		100%		Labor Loader:						
		Corp		0%		Non-Labor Loader:						
		Total		100%		Admin & General Loader:						
						AFUDC:						
Asset Allocation Method			Application Users									
Asset Allocation Explanation & Contact			The applications will be used by SoCalGas Contact Center users, and users from Billing, Credit and Collections departments									
Contingency for New and Change (Business)		Internal Labor %:		3.50%		Contingency For Growth (Technology)		Internal Labor %:		3.50%		
		Non Labor %:		3.50%				Non Labor %:		3.50%		
		Capital \$ (loaded,thousands):		\$802				Capital \$ (loaded,thousands):				

Project Timeline

Overall Project Timeline



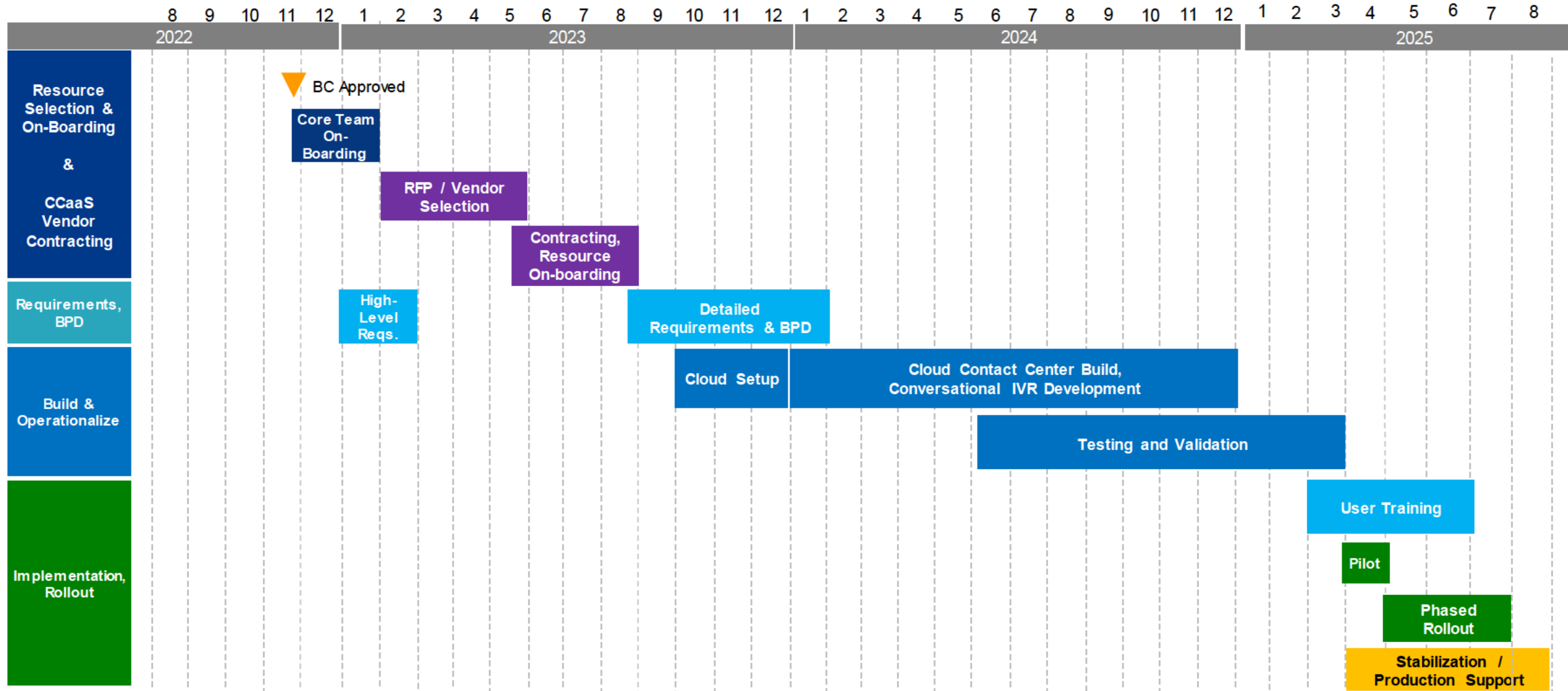
Maverick (Digital Channel Re-Architecture)



VISTA



CCaaS Implementation Timeline



Scope, Implementation Approach

Project Scope Summary

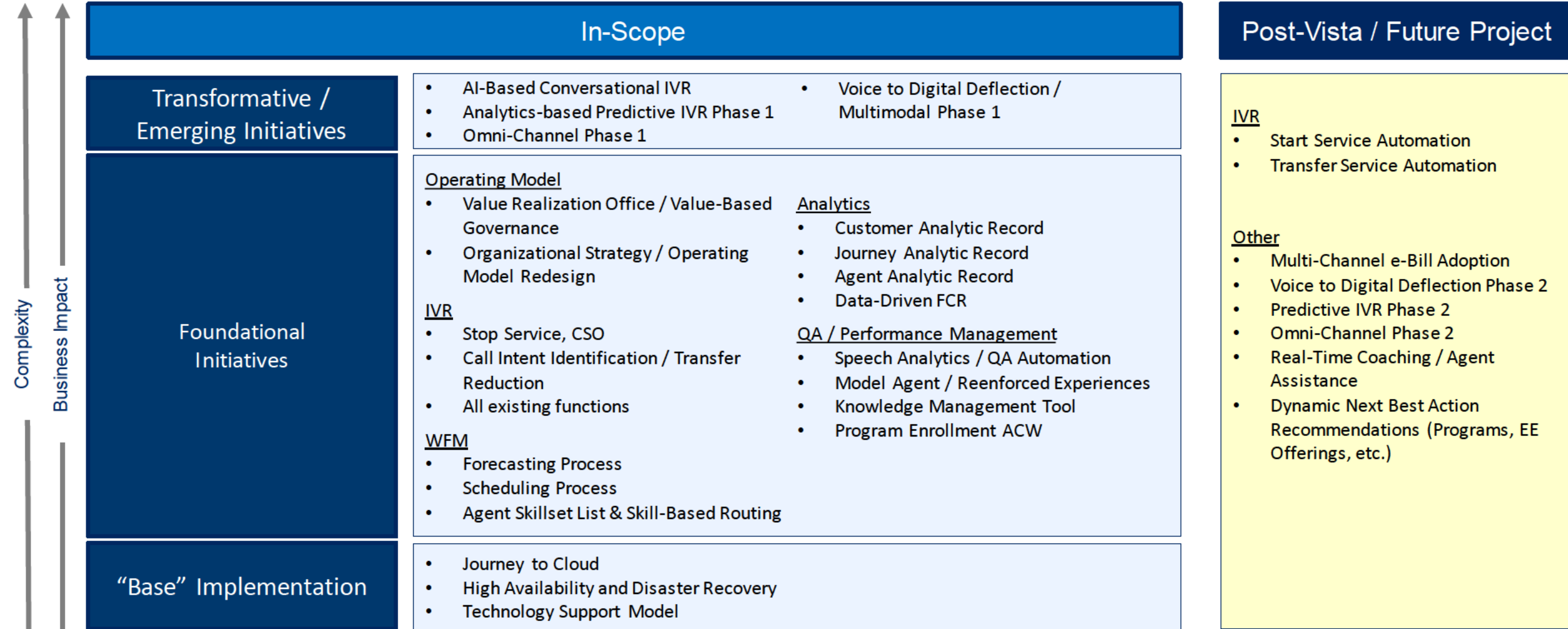
There are nine (9) core initiatives that would be undertaken to **Transform SCG CCC to Enable a Reimagined Customer Experience** They are:

Functionality	Current State	Future State
1 - Journey to Cloud	On premise technology offers less platform stability/resiliency, complex/costly maintenance requirements, and fails to offer straightforward incorporation of new and emerging technologies over cloud	<ul style="list-style-type: none"> ▪ Build foundational cloud capabilities including AS-IS capabilities plus services that are not available in the current state such AI/cognitive services e.g., Voice Bots ▪ Achieve higher platform stability/resiliency, simplified maintenance requirements, and facilitates more straightforward incorporation of new and emerging technologies
2 - Value Based Governance	Does not exist	<ul style="list-style-type: none"> ▪ A Value Realization capability, responsible for guiding work stream strategy, scoping/investment decisions, monitoring ongoing program performance
3 - Customer Analytics	Lack of a consolidated, dedicated view of the customer and their experiences	<ul style="list-style-type: none"> ▪ Develop dedicated customer and journey-centric analytic models to provide a complete view of the customer experience to enable segmentation, propensity modeling, personalization, and performance analytics
4 - Conversational IVR	On-prem, touch-tone IVR with complex menus and difficult navigation. Current IVR containment is generally driven by two call types (Payments & Manage Accounts).	<ul style="list-style-type: none"> ▪ Cloud-based conversational IVR that directly speaks to customers to better understand and support their needs ▪ Conversational menus can facilitate easier collection of customer data inputs, allowing complex transaction types to be partially automated. ▪ The integrated IVR development tools will allow for the configuration of new call intent flows. A dedicated experience design effort ensures a coherent CX across all channels

Project Scope Summary

Functionality	Current State	Future State
5 - Forecasting & Scheduling Process Enhancements	The existing forecasting process is conducted manually using offline Microsoft Excel spreadsheets, introducing potential for inconsistency and human error into a core operational process	<ul style="list-style-type: none"> The WFM process will be enhanced to ensure that the new forecasting processes can be fully completed without the need for offline spreadsheets
6 - Program Enrollment ACW Optimization	The program enrollments call type has an average of 30s of after-call work for agents (5x the ACW of any other call type). Streamlining the process and data/technology requirements can recapture time on 200k+ calls per year	<ul style="list-style-type: none"> Based on detailed process analysis, implemented enhancements to the ACW process (e.g., enrollment process, data input requirements, agent desktop additions) to improve efficiencies
7 - Scheduling Process and Real-time Adherence	Shrinkage is a core measurement of contact center efficiency and is currently sitting at 46% (compared to the industry avg of 28%)	<ul style="list-style-type: none"> Implementation of new WFM processes and RTA capabilities to recover productive agent time New scheduling and RTA processes will be redesigned and supported with rigorous performance management processes to improve shrinkage
8 - Model Agent / Reinforced Experience	Opportunities for improving agent performance through leveraging best practices, agent assist tools and other technologies	<ul style="list-style-type: none"> Increase consistency of agent performance to deliver more predictive, efficient scheduling process
9 - Knowledge Management (Journey Analytic Record)	Several call types (e.g., Program Enrollments) have high hold time. Part of this non-value-add time can be recovered by actively presenting the agents with relevant information in real-time	<ul style="list-style-type: none"> Refresh the existing knowledge base articles and enables functionality that presents relevant articles to agents in real-time Prioritize existing knowledge articles and rewrite/clarify entries where necessary. Align taxonomy with call types and search terms. To help identify relevant content that can be presented to the agent while taking the call

Project Scope - Implementation Approach



Project Risks, Organizational Impact

Project Risks & Mitigation

Project Execution and Benefit Realization Risks	Mitigation Plan
1) <u>Vista Timeline dependency</u> - CCaaS implementation must go live ahead of VISTA allowing enough time for: <ul style="list-style-type: none"> VISTA-CCaaS integration Absorb impact of VISTA driven business process changes 	<ul style="list-style-type: none"> Early engagement, close coordination and collaboration between this project and VISTA teams Create a governance model to closely monitor and report on project progress and dependencies
2) <u>Lack of internal resources</u> (Technology and CCC) – Internal resources to fill key roles on this business-critical initiative may not be available. Examples of key roles: Program / Project Management, CCaaS Architect, CCC Change Management Lead.	<ul style="list-style-type: none"> Request allocation of internal resources and/or approval for new positions Engage resources from vendor partners. Due to schedule constraints, fast track partner selection and on-boarding Engage vendors with successful track record SoCalGas partnership
3) <u>Vista Architecture</u> : Key new capabilities such as Omni-Channel have a major technical dependency on accessing the “360-degree view” of customer and account data from the new Vista owned SAP-centric CIS data model and data source, which will be significantly different than the Legacy CIS data model.	<ul style="list-style-type: none"> Based on phased approach, pursue foundational capabilities as part of this project. Build upon them in post-Vista phases (new projects) Close coordination and collaboration between this project and VISTA teams Create a governance process to closely monitor and report on project progress and dependencies
4) Global shortage of technology resources – this may drive up costs and have impact on schedule.	<ul style="list-style-type: none"> Build in contingencies into the plan. Plan longer lead times Fast track SI partner selection and on-boarding, engage known vendor partners/entities
5) Dependencies on Maverick for implementing Omni-Channel and Multi-Modal related capabilities.	<ul style="list-style-type: none"> Based on phased approach, pursue foundational capabilities as part of this project. Build upon them in post-Vista phases (new projects) Close coordination and collaboration between this project and Maverick teams Create a governance process to closely monitor and report on project progress and dependencies
6) Overall/Sempra-level impact of SDG&E remaining on legacy platform after SoCalGas CCaaS implementation/migration.	<ul style="list-style-type: none"> Upfront impact analysis and mitigation Close coordination with SDG&E
7) Potential gaps between Genesys platform functionality (e.g., WFM) and SoCalGas detailed business requirements.	<ul style="list-style-type: none"> Budget contingency included in BC Work closely with Genesys to influence product roadmap and future direction Establish upfront change management process and leverage to evaluate gap/options/mitigation

Major VISTA Dependencies

1)	Knowledge Base and Online Forms
2)	Multiple IVR self-service integration points via Web Services
3)	Inbound interaction screen pop in SAP C4C
4)	Outbound campaign data integrations

Operational Impacts

IT Impact

+	Describe Change/Impact	Solution
IT Operations	New/revised support requirements	Communication, Training
Cyber Security	New/revised support requirements	Communication, Training
CCC Tech Team	New skills required to support Cloud-based Genesys platform	Team training, augment skill set through vendor partners
SDGE	Shared infrastructure and technologies	Moving forward, we will work closely on contract renewals and adjust shared licensing benefits with either utility moving first
VISTA	Technology integrations with Cloud-based Genesys platform	Given we will be integrating with CIS initially, we will continue our open dialogue and close coordination with VISTA team to identify necessary integrations to SAP

Client Impact – Communication or Training Requirements

Client Classification	Describe Change/Impact	Solution
<ul style="list-style-type: none"> CCC Billing & Collections 	Business process changes and adoption of new Genesys Cloud based systems/tools to support them	<ul style="list-style-type: none"> Carefully planned business process design and change management Well planned training ahead of rolling out business process changes
<ul style="list-style-type: none"> COT/Privacy Marketing Team 	New screen designs/workflows/data repositories/integrations	<ul style="list-style-type: none"> Communication, Training Continue to work closely with COT/Privacy/Marketing teams on new technology to identify areas of impact and remediation plans
PMOS (Channel Analytics)	Update analytics tools to track cross-channel performance	<ul style="list-style-type: none"> Continue to work closely with PMOS team on new technology to identify areas of impact and remediation plans

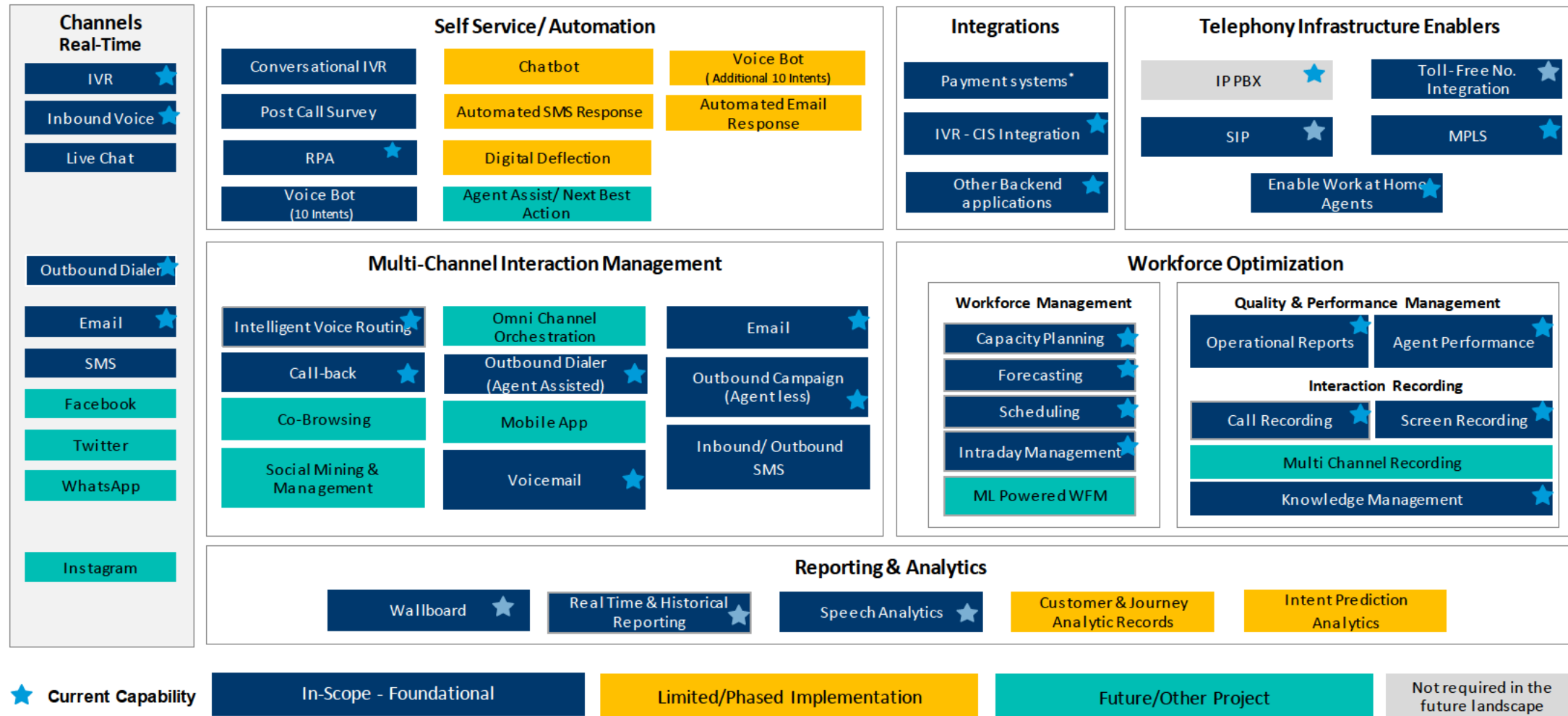
Facilities – Incremental Space Requirements

Location	Describe Change/Impact	Solution	Start Date	End Date
N/A				

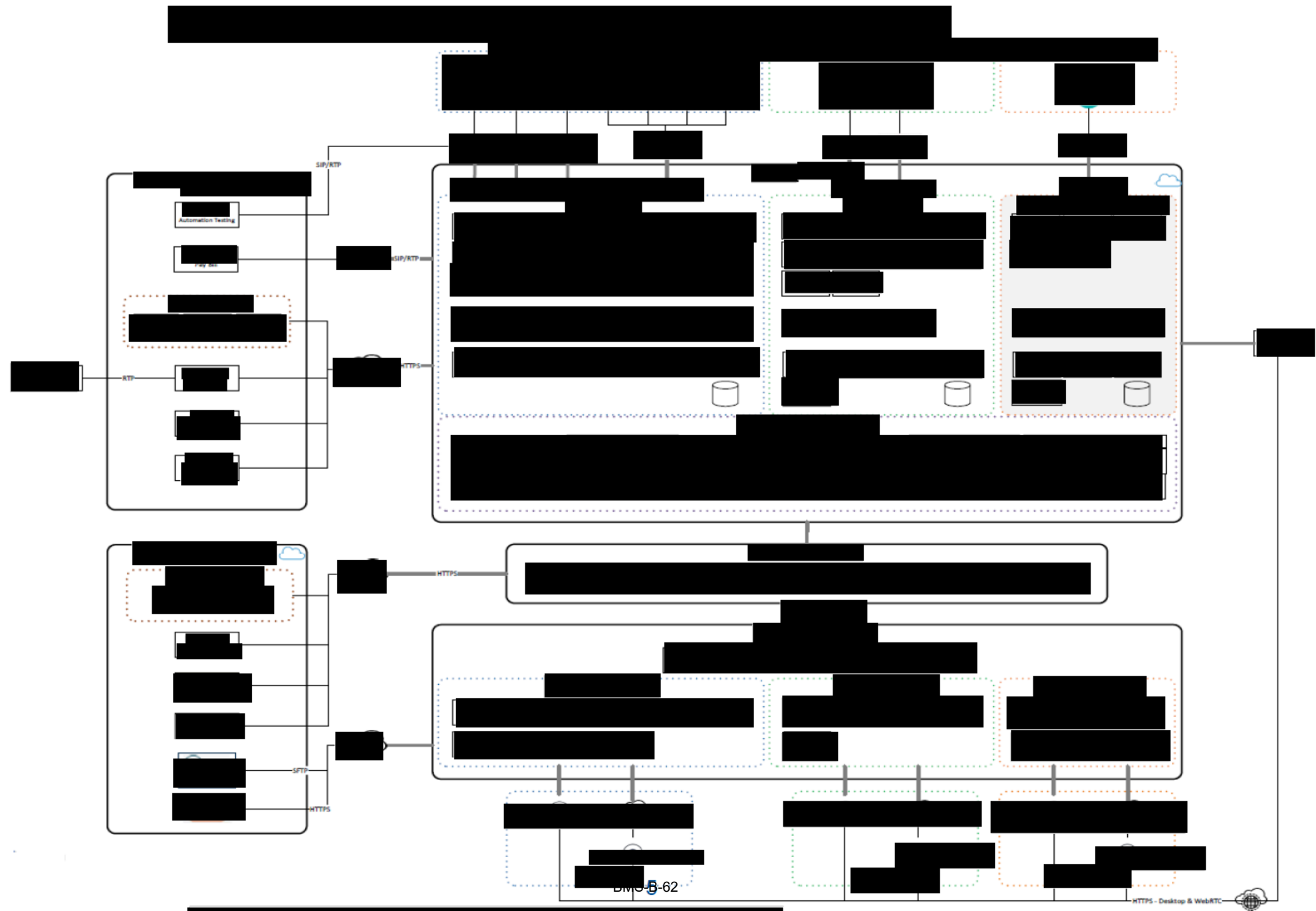
Future State Capabilities & Architecture

CCC Capabilities - Future Landscape

Target state contact center capabilities considered for the cloud transformation are divided into phases/categories

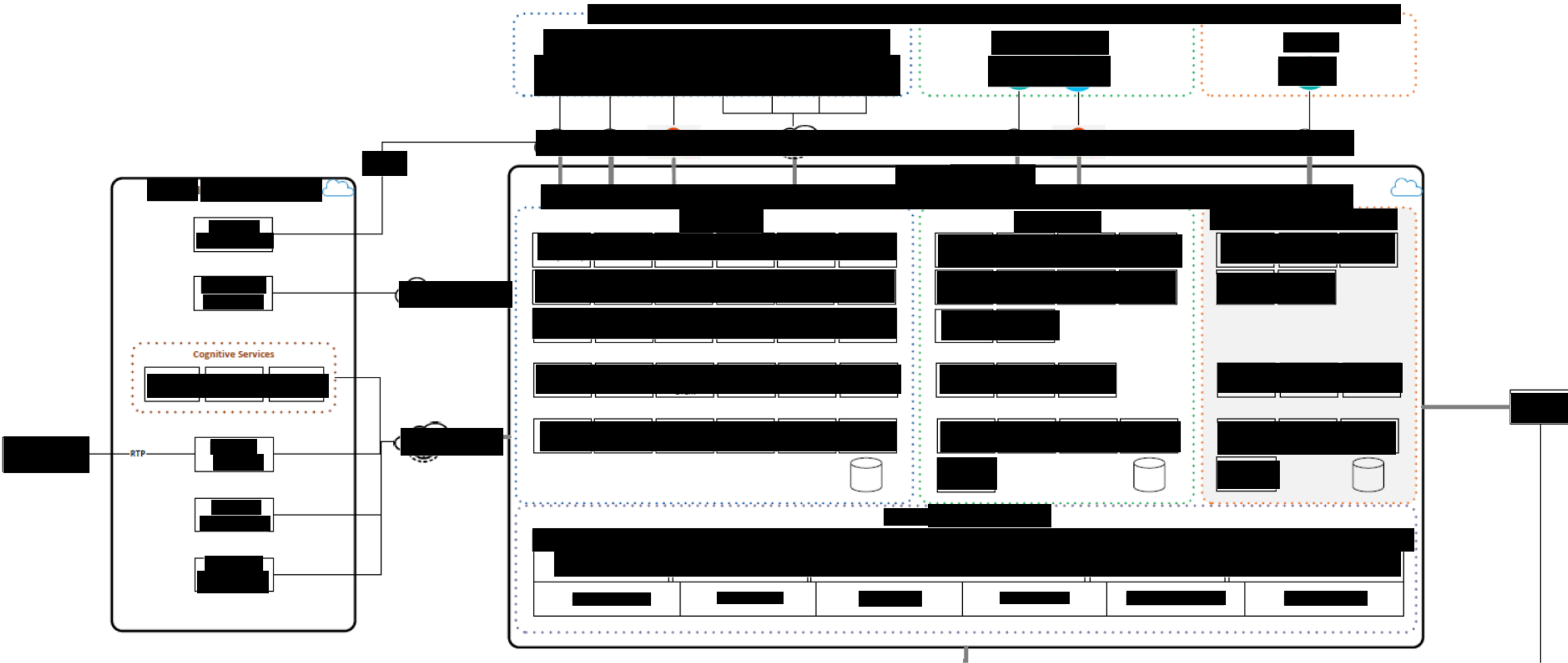


* Explore if Bill Matrix has API's to consume to collect payment details on IVR



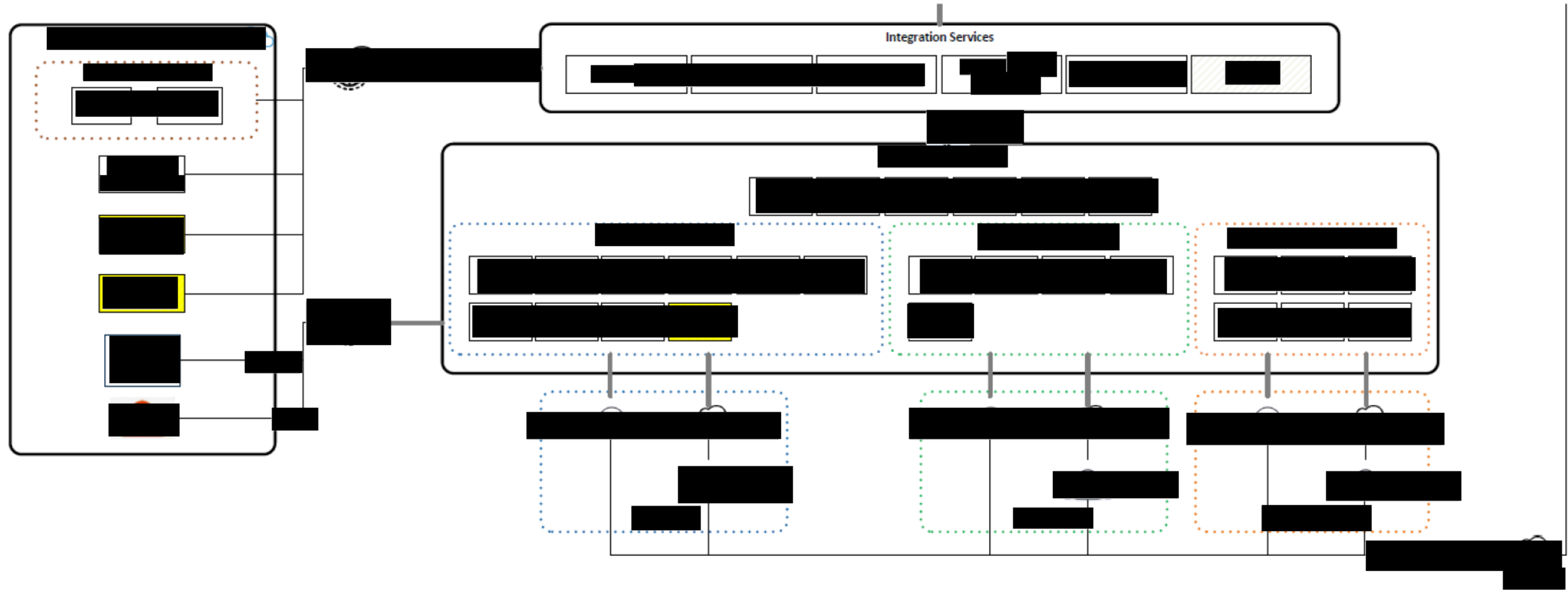
TARGET State CCC Technology Reference Architecture - Channels

TURN SEU-064 ATTACH 1B



TURN-SEU-064 ATTACH 1B

TARGET State CCC Technology Reference Architecture – Backend & Integrations



Appendix

Appendix A: Business Case Contributors

Business/IT	Role	Department	Resource
Business	Business Manager	Customer Contact Center	██████████
Business	Business Manager	Customer Contact Center	██████████
Business	Business Lead	Customer Contact Center	██████████
Business	Business Manager/SME	Customer Contact Center	██████████████████
Business	Business Manager/SME	Customer Contact Center	██████████████████████
Business	Business Manager	Customer Operations	██████████
Business	Business Manager	Customer Operations	██████████████
Information Technology	Application Manager	SCG Applications Services	██████████
Information Technology	Program Manager	Project Management Office	██████████████████
Information Technology	Strategy & Ops Manager	Cloud & Automation	██████████n
Information Technology	Team Lead	SCG Application Services	██████████
Information Technology	Enterprise Architect	Cloud & Automation	██████████
Information Technology	ITQA Lead	Cloud & Automation	██████████
Information Technology	Voice Architect	Network & Cyber Tech	██████████
██████████	Engagement Lead	Consultant	██████████████
██████████	Consultants/leads	Consultant	██████████████████████
██████████	Consultant Architect	Consultant	██████████████████

Appendix B: Approval Matrix

IT Traditional Waterfall Methodology								
	Product Phase							
				Iterative Phases				
Organization/Role	Concept	Business Case	Project Preparation	Reqmnts.	Design	Construct /Build	Test / Production Implementation	Production STORM Exit (Review)
Approvals Required								
*Business VP Sponsor		Jennifer Walker						
Business Director Sponsor(s)								
* IT VP		Jeff Walker						
IT Director Owner								
IT Director PMO								
IT Production Support Line Manager(s)								
Review / Contribute								
Business Program Manager		TBD					TBD	
Business Functional Manager(s)								
IT Program Manager		TBD					TBD	
Business Planning & Budgets Manager		TBD						

Appendix C: Business Benefits Details

Business Benefits - Conversational IVR

What it is...

Transition from an on-premise, touch-tone IVR to a cloud-based conversational IVR that directly speaks to customers to better understand and support their needs

Current IVR containment is driven by two call types (Billing/Payment & CSOs). Conversational menus can facilitate easier collection of customer data inputs, allowing complex transaction types to be partially automated

The integrated IVR development tools will allow for the configuration of new call intent flows. A dedicated experience design effort ensures a coherent CX across all channels

What will it do...

Value Lever	PEER	Q1	BASLINE	POST CCC	BENEFIT
IVR Containment	46%	65%	49%	53%	\$1.3.M
Average Handle Time	320	284	252	-	-
Agent Shrinkage	28%	25%	45%	-	-

This initiative is expected to eliminate 170k calls per year at an average of \$7.80 per call

Call Type	3Y Avg. Call Volume X1000	Baseline Containment	Future Containment	Benefit
Billing + Collections	763	5.1%	10%	\$260K
Start Service	472	-	3%	\$132K
Stop Service	187	41.8%	50%	\$81K
Moves (Transfer Service)	295	-	3%	\$82K
Emergency	373	-	-	-
BillMatrix / Payments	2,727	90.1%	92%	\$330K
CSO	243	11.7%	15%	\$54K
Programs	83	27.8%	35%	\$56K
Escalation	-	-	-	-
Business	97	-	-	-
Translation	-	-	-	-
Manage Accounts	679	99.0%	99%	-
Other	858	0.8%	6%	\$348K

Legend

- Net New
- Enhance
- No Change

Business Benefits – AI (Next Best Action)

What it is...

An analysis of top performing agents to identify new standards and inform potential agent assist and next best action capabilities.

Identifying and training to organizational best practices reduces AHT and serves as the foundation for more sophisticated agent assist tools. Increasing the consistency of agent performance also supports a more predictable, efficient scheduling process

Refresh and prioritizing the existing knowledge base articles and enables functionality that presents relevant articles to agents in real time.

Analyze, refine and update the call handling process and data requirements for program enrollment calls and redesign the process to eliminate call work

What will it do

Value Lever	PEER	Q1	BASELINE	POST CCC	BENEFIT
IVR Containment	46%	65%	49%	53%	\$1.3M
Average Handle Time	320	284	252	248	\$0.4M
Agent Shrinkage	28%	25%	45%	-	-

This initiative is expected to reduce overall AHT by 4 seconds at an average cost of \$0.03 per second

Call Type	3Y Avg. Call Volume X1000	Avg AHT/Type	Benefit
Billing + Collections	700	241	\$0.1M
Start / Transfer Service	551	318	-
Stop Service	88	186	-
Emergency	443	171	-
BillMatrix / Payments	266	217	-
CSO	208	228	-
Programs	208	312	\$0.1M
Escalation	182	218	-
Business	169	248	\$0.1M
Translation	52	258	-
Manage Accounts	5	233	-
Other	762	267	\$0.1M

Legend

- Net New
- Enhance
- No Change

Business Benefits - Scheduling Process & Real-Time Adherence

What it is...

Optimize scheduling and leverage an enhanced RTA capabilities to proactively manage deviations from defined schedules.

Shrinkage is a core measurement of contact center efficiency and is currently sitting at 45% (compared to industry avg of 28%). New WFM processes and RTA capabilities will recover agent productive time

New scheduling and RTA processes should be redesigned and supported with rigorous performance management processes to bring shrinkage in line with industry performance

What will it do

Value Lever	PEER	Q1	BASELINE	POST CCC	BENEFIT
IVR Containment	46%	65%	49.4%	53%	\$1.3M
Average Handle Time	320	284	252	248	\$0.4M
Agent Shrinkage	28%	25%	45%	43%	\$0.7M

This initiative is expected to reduce shrinkage by 2%, for a benefit of \$.7M.

Category	3Y Avg. Call Volume X1000	Baseline Shrinkage	Future Shrinkage	Benefit
Shrinkage	3,134	45%	43%	\$0.7M

Legend

- Net New
- Enhance
- No Change

Appendix D: CCaaS Technology Assessment & Recommendation

Technology evaluation – Key considerations

Below are the key factors that are considered as part of the software evaluation and recommendation

1

Evaluation

scoring of each of the solutions against

- Functional requirements
- Non-functional requirements
- Additional key capabilities of a leading contact center

2

SoCalGas Scoring

How SoCalGas scored each of the solutions against the functional and non-functional requirements

3

Key Additional Factors

- **Single-Vendor Approach**
- Analyst / External evaluation
- Alignment with future state architecture objectives
- Pricing
- Service & Support

Technology Recommendation

CCS Technology Solution Recommendation

Evaluation Factor	████████████████████ Cloud ██████████	████████████████████ ██████████	████████████████████ ██████████
██████████ Evaluation	★		
SCG Functional Requirements	★	★ (or WFO capabilities)	
SCG Non-Functional Requirements	★		
SoCalGas Scoring	★		
SCG Functional Requirements	★		
SCG Non-Functional Requirements	★		★
Analyst Evaluation	★	★ (for WFO capabilities)	
Price Model / Pricing	★		
Product Support & Services	★		

Recommendation



For the SCG CC technology upgrade, the recommendation is to move forward with a [single-vendor approach](#), implementing ██████████ Cloud for the entire CCaaS solution, covering technology for the key operational areas evaluated including IVR, Channels, WFM, QA/PM, and Training.

Additional Considerations:

Moving forward with a single-vendor solution will allow:

- For a simplified technology architecture for the CCC.
- The business to better utilize all capabilities offered by the solution, including integrations and related features across Channels <-> WFM <-> QA, etc.
- For cost benefits associated with implementation of just one solution / vendor product.

Additionally, although ██████████ is regarded as the market leader for WFO, based off workshops and conversations with the SCG WFM and contact center teams, the existing CC ██████████ WFM products and related service and support by ██████████ are currently not meeting business needs.

Analyst View of CCaaS Providers

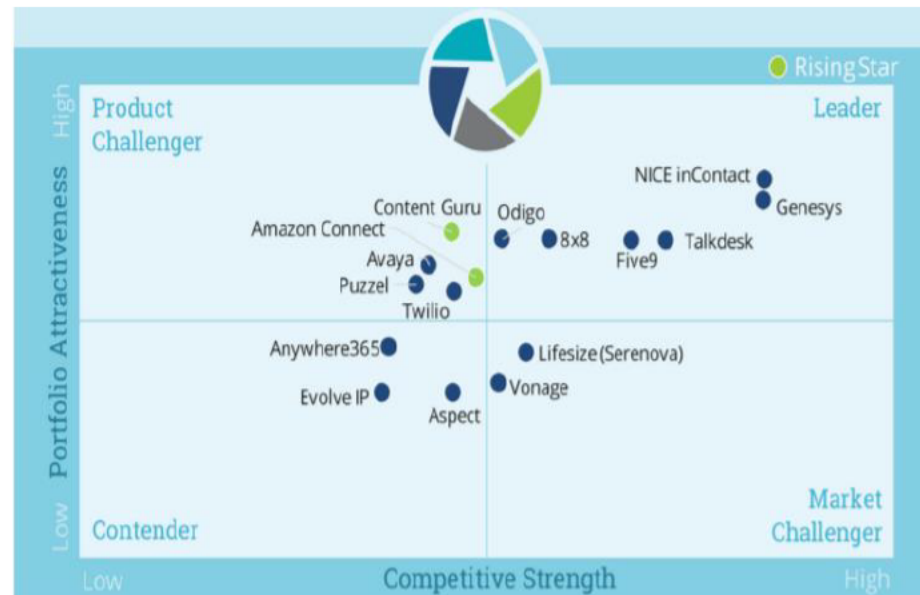
GARTNER MAGIC QUADRANT

Contact Center As A Service North America
Aug 2021



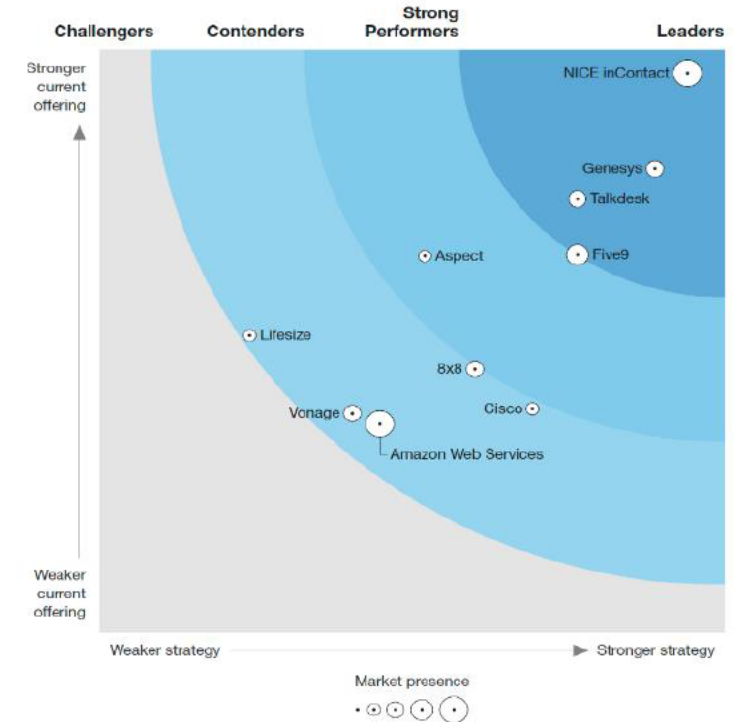
iSG Providers Lens

Contact Center As A Service North America
ISG Research 2021 Global



THE FORRESTER WAVE

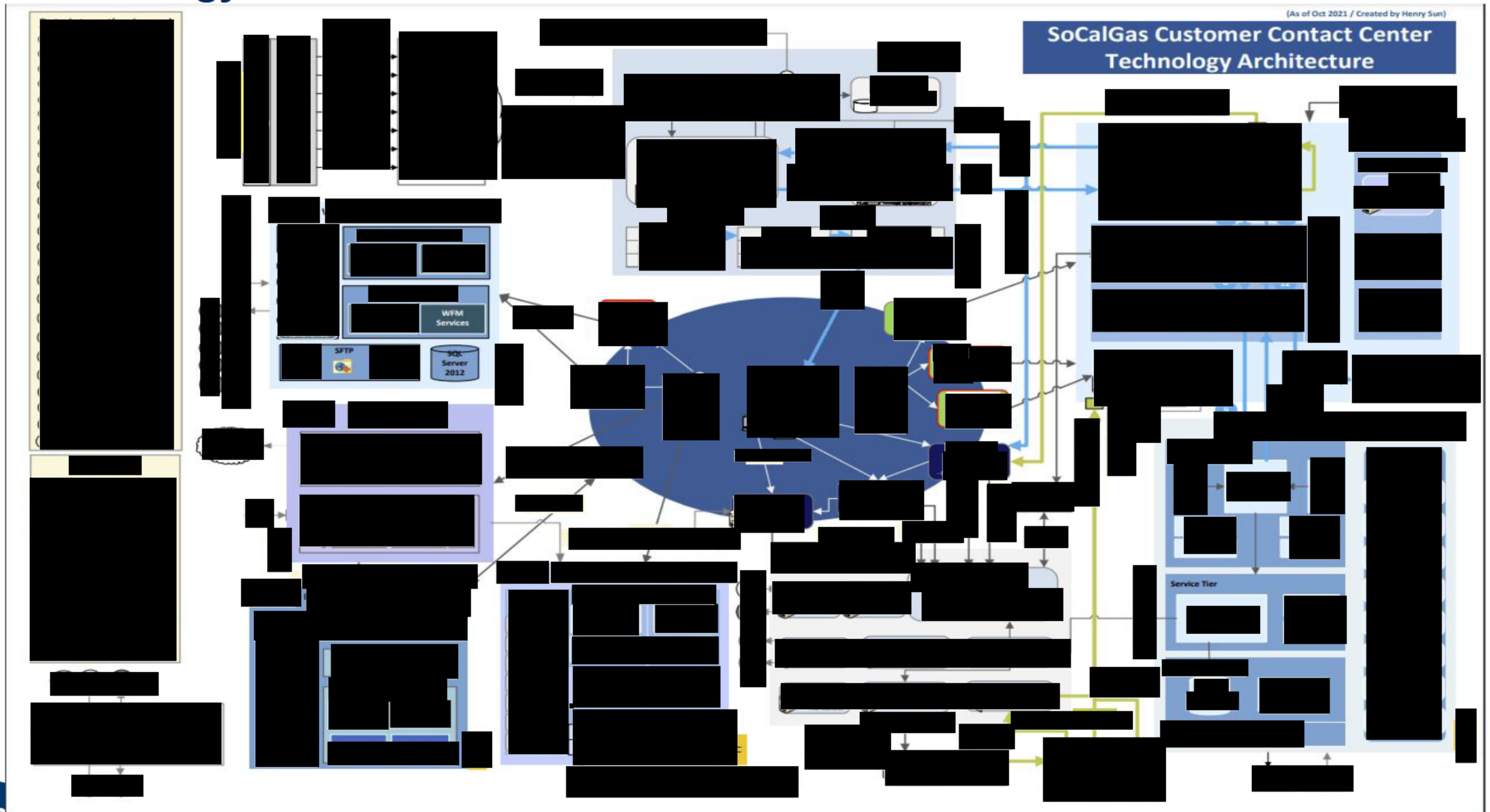
Contact Center As A Service (CCaaS) Providers
Q3 2020



Summary

Analysts' comparison of the leading contact center solutions indicate that **Cloud** and **Cloud** are the clear market leaders for CCaaS and omnichannel capabilities. AWS/Connect is considered a less mature product behind the other two solutions that are being evaluated.

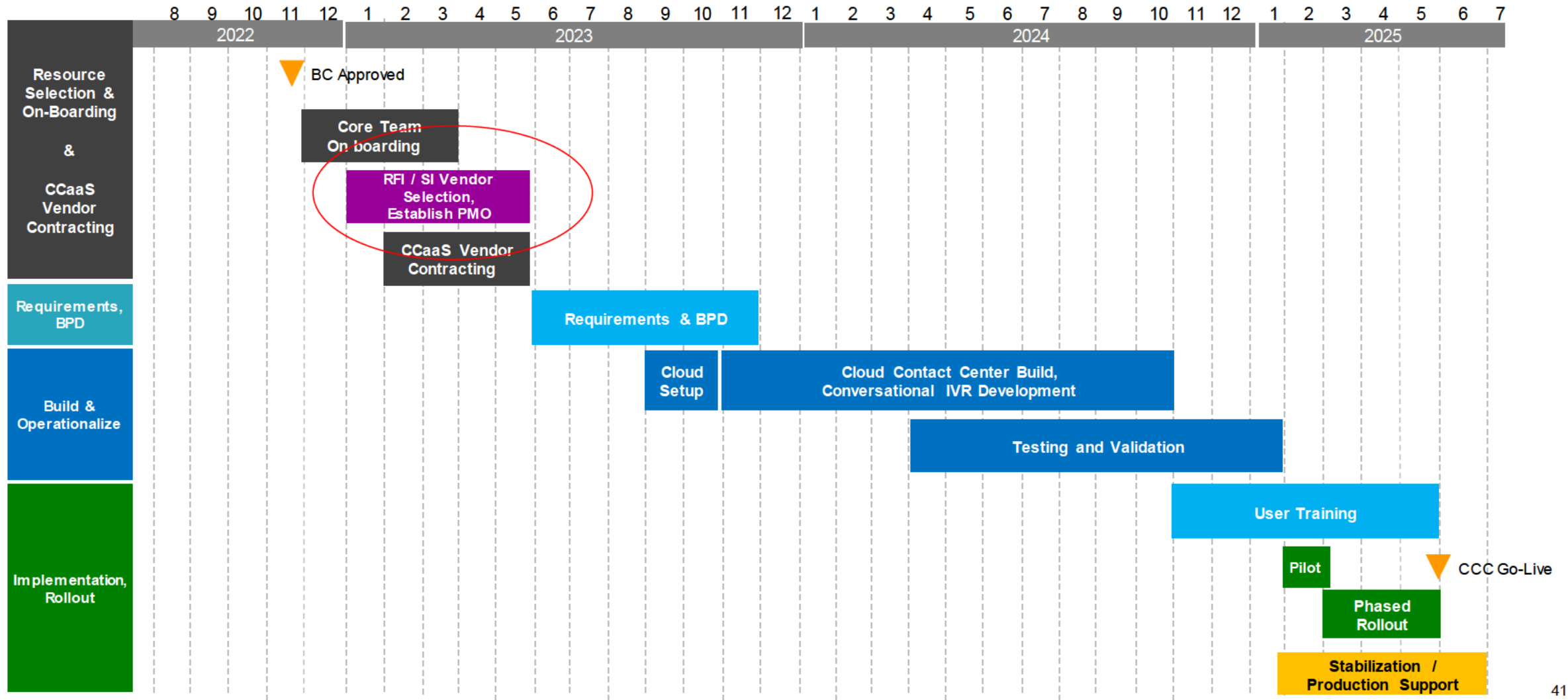
CCC Technology Architecture - Current State



Billing & Collections Future Cost Allocation Estimate

No	Item/Capability	B&C Usage?	Cost
1	████████ Cloud (GC3) Platform subscription	Y	\$1,076,544
2	Voicebot with dialog engine		\$609,000
3	Chatbot		\$19,000
4	SMS usage inbound & outbound		\$24,000
5	BYOC redirection cost	Y	\$0
6	Predictive routing	Y	\$83,000
7	████████ (Customer journey tracking)		\$736,000
8	████████ (████████ Cloud reporting tool)	Y	\$109,000
9	Telecom usage (in/out bound calls)	Y	\$387,000
10	Agent adapter ██████████		\$187,000
11	Test enviroment and DR	Y	\$104,000
12	QA test automation		\$150,000
13	████████ (agent desktop activity monitoring)	Y	\$95,000
14	Annual cloud support	Y	\$100,000
	Grand Total (CCC + B&C)		\$3,679,544
	Total Cost For Billing & Collections Only		\$1,954,544
	Cost per License (Total Cost / 623 agents)		\$3,137.31
	Total Billing & Collections Cost Allocation (\$ per license x 100)		\$313,730.98

CCaaS Implementation Timeline (OLD)



See Procedure Instructions and Guidelines at the end of this deck

PGC Pre-requisites – New Projects and Re-Authorizations (pg. 1 of 3)

Please answer all questions below along with the remainder of the PGC slides.

1. Who is asking for the work to be done? (e.g. is this a business driven project, if so, which group is requesting this project)

Response: Combination of Business and IT. Our Customer Contact Center (CCC) is the hub of SoCalGas customer interactions and engagement. Currently, CCC handles over 7M calls annually and its core operations run on multiple technologies/systems from different vendors with complex integration and support requirements. Many of these technologies (e.g., █████, █████ On-Prem) are 10+ years old and approaching obsolesce which in recent years has been further accelerated due to a major increase in Cloud migration trend.

2. Is there a legal or compliance driver for the work?

Response: No

3. Are the reliability of our systems at risk and why?

Response: Yes. The current systems are over 10 years old and are in danger of failing and being out of support from the vendors.

4. When was the project originally supposed to start?

Response: December 2022

PGC Pre-requisites – New Projects and Re-Authorizations (pg. 2 of 3)

Please answer all questions below along with the remainder of the PGC slides.

5. When is it supposed to complete?

Response: Phase 1 will finish in June of 2025. There are 2 more phases for which the timeline will be determine as part of Phase 1.

6. Project methodology (Agile vs Waterfall, etc.)?

Response: Currently we are looking at Waterfall for each application. We will make the final decision after the detail requirements and vendor selection is complete.

7. Cost breakdown of Capital vs O&M?

Response: Capital \$26.9M & O&M \$589K

8. Cost breakdown of Planned vs unplanned (contributing to upward pressure)? planned

Response:

PGC Pre-requisites – New Projects and Re-Authorizations (pg. 3 of 3)

Please answer all questions below along with the remainder of the PGC slides.

9. Who will be executing the work (if external party, why can't internal employees execute the work)?

Response: Combination of internal and external resources. Internal subject matter expert have limited availability because of on going management of the current production application. External resources will provide a combination of expertise in the cloud environment for the specific vendor along with helping take pressure of internal resources.

10. What happens if we don't do the project, how long can we put off the project, what are the risks to reliability, safety, cyber security?

Response: The current applications are coming to the end of life and their failures will have sever impact on the SCG CCC's ability to engage and manage customer calls.

Business Case Short Form – CCC Modernization

Project ID		BC210212		Business PM		TBD		IT PM and Product Owner		██████████ ██████████		Start Date End Date		12/1/2022 6/30/2025		Funding Portfolio		Customer Service			Prioritization Category		Safety, Reliability, Hard Benefits, Strategic														
Business VP		Jennifer Walker, Jeff		Business		██████████		Technology		██████████		Business or IT		██████████		Planning		████████████████████			Director		██████████														
Compliance Proj		N		SaaS		Y		Cloud Soln		Director Y		Meet Cap Rqmts		IRB Sent		Yes		Info Security Engage #		TBD		Enterprise Architect Engaged		██████████		Domain Architect Engaged		██████████		Primary Vendor(s)		██████████		Agreement Type		██████████	
Project Capital Cost (\$ 000's) (loaded NO afudc)		\$24.5M		Capital Plan (\$ 000's)		\$24.5M		Cap Variance (\$ 000's)		\$0		2022 Capital \$ 2023 Capital \$ (\$ 000's)		\$60K \$6.4M						Cap Tier				SDG&E Blanket WOA													
Project O&M (\$ 000's) (Directs)		\$589K		Project O&M Plan (\$ 000's)		\$589K		Project O&M Variance (\$ 000's)		\$0		Total Recurring O&M (\$ 000's)		\$3.68M		2022 O&M Recur \$ 2023 O&M Recur \$ (\$ 000's)		\$0 \$0		O&M 2022 Plan (\$ 000's)		\$26.8K		O&M 2022 Variance (\$ 000's)		\$0											

Project Scope:

- Transition to Cloud
- Channel Enhancements & Optimization
- Operational Improvements
- Forecasting Process Enhancements
- Process & Real-Time Adherence
- Customer Analytics

In Service (Phase)

Business Purpose

Post Project O&M Cost Description:

Annual licensing cost for software and cloud subscription. Business and IT support FTE.

Benefits/Outcomes:

- Improve Customer
- Enhance Customer Experience through use of innovative techniques and technologies
- Improve Business Agility and Responsiveness
- Improve Technology Reliability & Viability
- Expand Stakeholder Education & Engagement

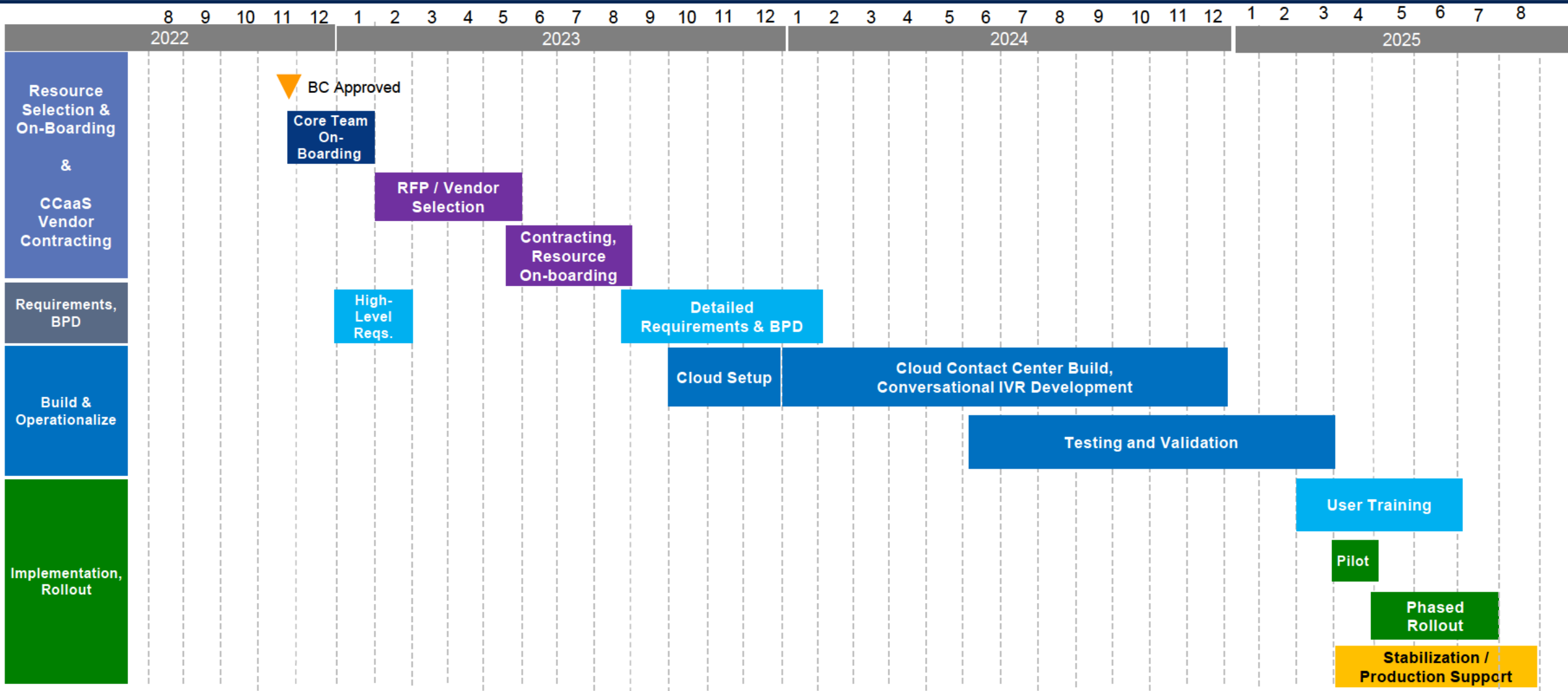
Critical Risks & Issues and Dependencies:

- Dependencies with Vista and Maverick
- Lack of internal resources and global shortage of technology resources

CCC Modernization– Financials

Project Costs										
Project Totals			Project Capital - On-premise SW/HW* (Rounded in Thousands)			Project Capital -SaaS/IaaS/PaaS Implementation (Rounded in Thousands)				
			(Loaded)	(Unloaded)		(Loaded)		(Unloaded)		
Internal Labor			\$0	\$0		\$3,616		\$1,952		
Contract Labor			\$0	\$0		\$12,975		\$12,880		
Hardware			\$0	\$0		\$0		\$0		
Software & SW Maintenance			\$0	\$0		\$0		\$0		
Vendor Services			\$0	\$0		\$6,914		\$6,863		
Other (Incidentals)			\$0	\$0		\$0		\$0		
Administrative & General Loader			\$0	N/A		\$1,001		N/A		
SubTotal Estimate			\$0	\$0		\$24,506		\$21,695		
AFUDC			\$2,427	Start Date:		12/1/22	Completion Date:		8/30/25	
Capital Total Estimate + AFUDC			\$26,933	In Service Date:		7/30/25	Payback Calc (in yrs):		15.3	
Project Totals			Project O&M*** (Rounded in Thousands)			SaaS/IaaS/PaaS Subscription Cost** (Rounded in Thousands)				
			(Loaded)	(Unloaded)		(Loaded)		(Unloaded)		
Internal Labor			N/A	\$0		N/A		\$0		
Contract Labor				\$0				\$0		
Hardware Maintenance				\$0				\$0		
Software & SW Maintenance				\$0				\$937		
Vendor Services				\$589				\$0		
Other (Incidentals)				\$0				\$0		
Administrative & General Loader				N/A				N/A		
SubTotal Estimate			\$0	\$589		\$0		\$937		
Annual Totals (Rounded in Thousands)			2022	2023	2024	2025	2026	Remaining Years Total	Total	
SaaS/IaaS/PaaS Subscription Cost			\$0	\$0	\$0	\$937	\$0	\$0	\$937	
Project O&M (Unloaded+Congtingency, no A&G, no AFUDC)			\$27	\$134	\$214	\$214	\$0	\$0	\$589	
Self Dev Software (Loaded+A&G+Contingency,no AFUDC)			\$0	\$2,350	\$2,765	\$2,118	\$0	\$0	\$7,232	
Project Capital (Loaded+A&G,no contingency,no AFUDC)			\$56	\$5,976	\$11,746	\$5,126	\$0	\$0	\$22,903	
Capital Contingency (Loaded, no AFUDC)			\$4	\$418	\$822	\$359	\$0	\$0	\$1,603	
Capital Contingency % (as a % of Project Capital)			7.00%	7.00%	7.00%	7.00%	0.00%	0.00%	7.00%	
Project Capital + Capital Contingency Total			\$60	\$6,394	\$12,568	\$5,485	\$0	\$0	\$24,506	
Post Project Annual Hard / Avoided Cost Benefits and O&M Cost										
Annual Totals (Rounded In Thousands)			Functional Area / Cost Center(s) \$	2025	2026	2027	2028	2029	No O&M or Benefit Est.	Total
O&M Cost (Unloaded, no A&G, no AFUDC)	Business	Labor	2200-0400, 2200-2395	\$0	\$260	\$260	\$260	\$260	\$260	\$1,300
		Non Labor	2200-0400	\$1,881	\$3,680	\$3,680	\$3,680	\$3,680	\$0	\$16,601
	IT	Labor		\$0	\$0	\$0	\$0	\$0	\$0	\$0
		NL - Other		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Benefits (Unloaded, no A&G, no AFUDC)	Business	Labor		\$0	\$0	\$0	\$0	\$0	\$0	\$0
		Non Labor	2200-0400	\$0	\$4,627	\$5,096	\$5,096	\$5,096	\$5,096	\$25,009
	IT	Labor		\$0	\$0	\$0	\$0	\$0	\$0	\$0
		Non Labor		\$0	\$0	\$0	\$0	\$0	\$0	\$0
Asset Life (in yrs):										5

CCC Modernization– Schedule & Procurement Plan



Procurement Plan

Description	Item Category	Vendor	Agreement	ECM Month	Agreement Month	Procurement Month	Proj Capital \$	Proj O&M \$	Recurring O&M \$	Contingency \$	Total need \$
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
	TBD						-	\$ -	\$ -	\$ -	\$ -
							-	\$ -	\$ -	\$ -	\$ -
							-	\$ -	\$ -	\$ -	\$ -
							-	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
				Feb-21	Mar-21	Jun-21	\$ -	\$ -	\$ -	\$ -	\$ -
Total Estimates							\$ -	\$ -	\$ -	\$ -	\$ -

CCC Modernization – Financials



BC21012 - SoCalGas CCC Modernization Project (P)

Forecast

Capital

	Prior Years	2022	2023	2024	2025	2026	2027	All Time
Internal Labor	-	1,100	537,042	854,232	307,712	-	-	1,700,086
Purchased Labor	-	32,000	2,546,160	7,027,410	2,386,516	-	-	11,992,086
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	-	-	-	-
Vendor Services	-	-	2,076,000	2,443,000	1,871,000	-	-	6,390,000
Other Costs	-	-	-	1	751,167	-	-	751,168
Overheads	-	1,064	519,346	826,085	297,573	-	-	1,644,068
Total w/o AFUDC	-	34,164	5,678,548	11,150,728	5,613,968	-	-	22,477,408
AFUDC	-	105	140,296	610,401	-	-	-	750,801
Contingency	-	-	-	950,000	1,070,000	-	-	2,020,000
Total	-	34,268	5,818,844	12,711,129	6,683,968	-	-	25,248,209



BC21012 - SoCalGas CCC Modernization Project (P)

Forecast

O & M

	Prior Years	2022	2023	2024	2025	2026	2027	All Time
Internal Labor	-	-	-	-	-	-	-	-
Purchased Labor	-	-	-	-	-	-	-	-
Hardware	-	-	-	-	-	-	-	-
Software	-	-	-	-	2,508,000	3,940,000	3,940,000	18,268,000
Vendor Services	-	-	-	-	-	-	-	-
Other Costs	-	-	180,000	200,000	1,109,000	-	-	1,489,000
Overheads	-	-	-	-	-	-	-	-
Total w/o AFUDC	-	-	180,000	200,000	3,617,000	3,940,000	3,940,000	19,757,000
AFUDC	-	-	-	-	-	-	-	-
Contingency	-	-	-	-	-	-	-	-
Total	-	-	180,000	200,000	3,617,000	3,940,000	3,940,000	19,757,000

CCC Modernization – Financials

Procedure and Guidance

Procedure

Background:

- The intent of the PGC is to provide Portfolio (financial) Approval for Business Cases to ensure they align with the IT Portfolio's investment objectives and timing.
 - The Business Case should already be approved by the Project Stakeholders, who ensure the appropriateness of the project based on Company strategies, prior to coming for PGC approval.
 - The Business Case should already be reviewed and approved by your Program Manager
 - Once a business case is approved by the PGC then the PM will request the work order authorization.
 - **Note: Customer Services (SDG&E and SCG), Gas Operations (SCG) and WMP funded projects are awareness items for PGC. No need to present in meeting, unless a Technology Director has a question regarding the Business Case.*
1. The PGC meetings occur bi-weekly. The PGC meetings are included in the calendar at this [link](#).

2. Process:

- a. The meeting invitation will come from the TIO Team.
- b. All PGC materials should be submitted through the [PGC Submission Form](#) **EOD 2 business days prior** to the meeting. (IE materials must be received by PGC form submission by 5pm on Monday for a Wednesday meeting. For Monday meetings materials must be received by 5PM the prior Thursday).
- c. The desire of the PGC is to limit the attendees to those that have an interest in the content of the meeting. The Portfolio manager should attend the meeting to and speak on behalf of the business case
- d. [REDACTED] will prepare the **deck** for the presentation and send to the meeting **attendees by midday the working day prior to the meeting**. (IE [REDACTED] will send the deck by Midday Friday for a Monday meeting).
- e. During the meeting, each presenter will need to share their camera while presenting.
- f. After the meeting occurs, [REDACTED] will **publish** the notes to the SharePoint (see the [PGC List Overview](#)) as well as email the meeting attendees **after the meeting**. If you have specific questions about a meeting or presentation reach out Deja.

Procedure – Determine Re-Auth versus New Project

NOTE - This Template applies to New Projects for Re-authorizations use the PGC Re-Auth Template

Determine if a Re-authorization or New Project is appropriate:

- Funding:
 - If it is merely that there are not enough funds left to complete the current scope of the project this would be a re-auth
- Scope:
 - If the project adds additional scope which could be undertaken independently of the existing project, then it would be a new project.
 - If the new scope is dependent on completion of portions of the existing project, then it could be additional scope and re-auth/ revision (SCG).
 - If the Scope does not have a “logical” point where work can be stopped without affecting the “project” then it is all part of the same project and would be a re-auth/revision (SCG).
- ❖ Additional note: The agreements associated with your project should coincide with the length of your project. For example, a capacity-based project funding a persistent team for three years should have agreements that span three years.
 - This limits the overhead costs of revising existing agreements annually.
 - This DOES NOT mean the funds have to be spent if the project stops. The agreements should be written in such a way that they can be ended early if needed.
- Directors have the authority to determine if they feel the guidance applies or if an exception exists for individual project situations, they are accountable for.

JOINT PGC AND PRC APPROVALS

Purpose/Process:

- Joint PGC and PRC approvals acts as an alternative to attending the PRC meeting and DOES NOT change the need for diligence to ensure purchasing policies are still adhered to.
- If a joint approval is desired the submitter should advise the PGC facilitator and submit the PGC and PRC decks when they request attendance at the PGC meeting.
- After the PGC meeting, if joint approval was received, the PGC facilitator will communicate that and provide next steps direction to the submitting team.

Guidance:

- If an item involves a vendor that is known and there is little question that this will be the vendor used for the purchase, then the Program Manager presents their Business Case to the PGC for approval and presents their PRC deck and asks for related PRC approval in the same PGC meeting.

Obligations:

The obligation is still on the Approvers (Director and Program Manager) to ensure that approval policies are not broken.

Template Completion Guidance:

Template Last Updated: 9/14/22

General Guidelines:

- Make sure to fill out all areas of the template
- All dollar values are - in thousands, loaded, excluding AFUDC
- Contact your Program Manager if you are unsure on any entry

Specific field guidance for the Executive Summary slide:

Field	Guidance	Values
Project ID	Enter the SEMPRA Project ID To request a temporary ID, use this form	SDG&E - BD* or T* SCG – BC* or 8*
Business PM	Enter Business Project Manager. If no Business Project Manager assigned enter “NA”	Business Project Manager Name or NA
IT PM or Product Owner	Enter IT Program Manager and Product Owner. If no IT Project Manager or Product Owner assigned enter “NA”	IT Program Manager Name, Product Owner Name, or NA
Start Date	Start Date: Enter the date that the project will start to incur either O&M or Capital charges Agile Guidance: The start date should reflect the anticipated "launch" date	MM/DD/YY
End Date	End Date: The date the project is expected to end Agile Guidance: The end date reflects when the Business Case scope has been completed	MM/DD/YY
Funding Portfolio	Enter the Portfolio which funding is related to. If in doubt, ask the Program Manager responsible for the Business Case	SDG&E: SDGE IT Customer Services, SDGE IT Application, SDGE IT Cyber, SDGE IT Infrastructure, SDGE IT Network SCG: SCG IT Customer Services, SCG IT Gas Ops, SCG IT Application, SCG IT Cyber, SCG IT Infrastructure, SCG IT Network
Prioritization	Enter the Prioritization Category the project was given during the planning cycle. If not known, ask the Program Manager responsible for the Business Case	SDG&E: Responsive, Proactive, Strategic SCG: Not Applicable
Business VP	Enter the Business VP that is responsible for the Business Case	Business VP Name
Business Director	Enter the Business Director that is responsible for the Business Case	Business Director Name
Technology Director	Enter the IT Director that is responsible for the Business Case	IT Director Name
Business or IT Accountable	Who is accountable for the project success. Some IT funded projects may be business accountable (e.g. Gas Ops) If in doubt, ask the Program Manager responsible for the Business Case	Business or IT
Planning Contacts	All IT projects must engage Project Accounting and Business Planning for guidance and agreement prior to the Business case being presented to the PGC (required business controls and business planning). <i>*Note that this engagement is not required for projects which only use Professional/Vendor services (no hardware/software).</i>	Project Accounting: ██████████ (SCG); ██████████ (SDGE) Business Planning: ██████████, ██████████ (SCG); ██████████, ██████████ ██████████ (Engage appropriate O&M planner) (SDGE) Business Controls: ██████████ (SCG); ██████████ (SDGE)
Director Approved	Enter the IT Director who has approved the business case that is ready to be presented to the PGC	IT Director last name

Template Completion Guidance:

Template Last Updated: 9/14/22

Field	Guidance	Values
Compliance Project	Enter “Yes” for any CPUC, State or Federal compliance. Consult with your Business Stakeholders	Y or N
SaaS	If any portion of the project requires a SaaS (Software as a Service) solution	Y or N
Cloud Solution	If any portion of the project requires use of the Sempra Cloud	Y or N
Meet Cap Requirements	Refer to the Capitalization Policy. SCG Capitalization Policy and SDGE Capitalization Policy	Y or N
IRB Sent	Date the IRB is sent out to various IT groups to determine if they will be involved in the project	MM/DD/YY
Info Security Engagement Number	Enter the IS Engagement Number provided. Request Cyber Security Consultation using: Engagement Request Form	Engagement Number or Requested
Enterprise Architect Engaged	Based on IRB responses, if an Enterprise Architect is assigned, note their name	Architect Name or NA
Domain Architect Engaged	Based on IRB responses, if a Domain Architect is assigned, note their name	Architect Name or NA
Primary Vendor(s)	Vendors that have been contracted to work on the project	Vendor Name(s) or NA
Agreement Type	Note whether the agreement or contract is going to be a fixed bid or time and material	Fixed or T&M
Project Capital Cost	Note the estimated dollar amount, excluding AFUDC, that will be spent on Capital work during the project	In thousands (\$ 000’s); If no spend enter \$0
Capital Plan	Capital dollars approved for the project during the annual Capitalization Planning process. Any questions, consult your PMO manager	In thousands (\$ 000’s); If no spend enter \$0
Cap Variance	=Project Capital Cost – Capital Plan	In thousands (\$ 000’s); If no spend enter \$0
2022 (Current Year) \$ Capital	Capital dollars to be spent on the project during 2022	In thousands (\$ 000’s); If no spend enter \$0
2023 (Following Year) \$ Capital	Capital dollars to be spent on the project during 2023	In thousands (\$ 000’s); If no spend enter \$0
Cap Tier	Enter the TIER given during the final prioritization during the planning cycle. If not known, ask the Program Manager responsible for the Business Case	Tier 1, 2, 3 or NA
SDG&E Blanket WOA	For SDG&E only. Enter the Blanket WOA number which applies to your project. If not known, ask the Program Manager responsible for the Business Case	WOA number that is a 900 series number
Project versus Recurring O&M	Project O&M are amounts which are required for the implementation of the project such as Training Recurring O&M are items which cause future costs to be incurred such as maintenance	
Project O&M	Note the estimated dollar amount, excluding AFUDC, that will be spent on O&M work (training, change management, etc.) during the project	In thousands (\$ 000’s); If no spend enter \$0
Project O&M Plan	O&M dollars approved for the project during the annual Capitalization Planning process. Any questions, consult your PMO manager	In thousands (\$ 000’s); If no spend enter \$0

Template Completion Guidance:

Field	Guidance	Values
Project O&M Variance	=Project O&M – Project O&M Plan	In thousands (\$ 000's); If no spend enter \$0
Total Recurring O&M	Note the estimated dollar amount to be spent on O&M apart from the project (subscriptions, licenses, warranties, etc.)	In thousands (\$ 000's); If no spend enter \$0
2022 (Current Year) O&M Recur \$	Recurring O&M dollars to be spent on the project during 2022	In thousands (\$ 000's); If no spend enter \$0
2023 (Following Year) O&M Recur \$	Recurring O&M dollars to be spent on the project during 2023	In thousands (\$ 000's); If no spend enter \$0
O&M 2022 (Current Year) Plan	O&M dollars approved for 2022 during the annual Capitalization Planning process. Any questions, consult your PMO manager	In thousands (\$ 000's); If no spend enter \$0
O&M 2022 (Current Year) Variance	=2022 O&M Recurring - O&M 2022 Plan	In thousands (\$ 000's); If no spend enter \$0
In Service (Phase)	Enter Single if your project has one phase and enter Multiple if your project has multiple distinct go live dates	"Single" or "Multiple"
Business Purpose	Enter Gas, Electric or Common	"Electric", "Gas", or "Common"

Presenter Guidance - General

Guidance during the presentation: (your presentation should be approx. 5 mins and then PGC team may ask questions)

- The Business Case merits **DO NOT** have to be justified by the PGC as the Project Stakeholders have performed that oversight. (IE you do not need to convince the PGC the Business Case is a good idea)
- The template **MUST** be complete. If through the Stakeholder approval process, there are still unknowns those should be covered in your discussion points for understanding which may result in contingent approval.
- Use the Script (next slide) to prepare your presentation. The script covers the main points of the information needed for decision making and is in an order that is consistent for all presenters.
- PGC will ask clarifying questions as they desire. Some general questions to be prepared for include;
 - Timing of procurement realistic?
 - Cashflow valid and not just “peanut butter spread”?
 - Potential dependencies that would affect cashflow?

Presenter Guidance - Script

1. DISPLAY “Executive Summary” slide from template
 - a. **Describe** PROJECT OBJECTIVES 1-3 SENTENCES.
 - i. IF HARDWARE OR SOFTWARE WILL BE INCLUDED ADVISE OF THE PRODUCT
 1. If SO, STATE IF THE ENTERPRISE ARCHITECT TEAM HAS AGREED TO ITS USE.
 - b. **Confirm** that project has engaged all relevant groups and the Business Case was approved by:
 - i. IT or BUSINESS DIRECTOR NAME
 - ii. Project stakeholder team on APPROVAL DATE.

1. DISPLAY “Financials” slide from template
 - a. **Communicate**
 - i. Total DOLLAR VALUE of Business Case; Of which
 - i. Capital spend DOLLAR VALUE in 2021 and Capital spend DOLLAR VALUE in each future year.
 - ii. O&M maintenance costs which will be charged to the COST CENTER NAME cost center and amortized at a rate of DOLLAR VALUE per year over # of YEARS
 - b. **Confirm** These values have been agreed to by ACCOUNTANT NAME ([REDACTED] @ SDGE or [REDACTED] @ SCG), PLANNER NAME ([REDACTED] @ SDGE or [REDACTED] @ SCG) and the cost center owner COST CENTER OWNER NAME.
 - c. **Confirm:**
 - i. This project’s Capital Costs included in the 2021 capital submission.
 1. IF NOT EXPLAIN THE DIFFERENCE.
 - ii. The project’s O&M included in the 2021 O&M plan.
 1. This “has or has not” discussed with [REDACTED] @ SDGE or [REDACTED] @ SCG who have advised this “does or does not” represent upward pressure to the cost center.

2. EXPLAIN THE DIFFERENCE
 - i. This has been included in the Outlooks in TM1.

1. DISPLAY “Schedule and Procurement Plan” slide from template
 - a. **Communicate:**
 - i. START DATE and an estimated completion of END DATE.
 1. If the project has the flexibility to spend earlier or can be delayed to the following year state that here.
 - ii. VENDOR NAMES as our primary vendors and will be creating our ECM requisitions in ECM REQUISITION SUBMISSION DATE to start our investment spending in
 1. FIRST VENDOR INVOICE ESTIMATED RECEIPT DATE.
 2. This vendor “is or is not” an existing vendor and this project will be creating a new or will be using an existing agreement.

Project Information

Request Number: 29277		Status: Completed	
Date Prepared: 12/1/2022	Preparer: [REDACTED]	Start Date: 12/1/2022	Estimated Completion Date (ECD): 8/30/2025
Project Name: SoCalGas CCC Modernization Project	Company Code: 2200 - SCG	Project Type: Both (Capital & O&M)	Budget Code: 774
Billing Code: NC - Non-Collectible	Organization: Gas Distribution	Business Unit/Functional Area: Information Technology (IT)	
Responsible Cost Center: 2200-0332 - CORPORATE BUDGETS	Work Order Type: Work Order Authorization - WOA	Project Manager/First Level Approver: [REDACTED]	
Operating Area/District: GCT - GCT	Operating Region: 39 - SCG Headquarters	City: LOS ANGELES	County: LOS ANGELES
SEU Approval Policy: Category 1 (Base Business)	Phase: N/A	Prelim Eng Survey: No	
Affiliate Support Required?: Yes		Regulatory Program:	
Additional Users to be notified:			

Job Scope Summary

Based on [REDACTED] Cloud CX platform, this project will deliver "Contact Center of the future" capability that addresses current service delivery challenges using one standard platform, enables new business capabilities and delivers enhanced personalized experiences.

Detailed Description of Work

Code	Detailed Description of Work
New Installation - I	Based on [REDACTED] Cloud CX platform, this project will deliver "Contact Center of the future" capability that addresses current service delivery challenges using one standard platform, enables new business capabilities and delivers enhanced personalized experiences. Key deliverables in the following areas: Transition to [REDACTED] Cloud: Using Genesys Cloud as foundation, improve reliability, scalability and security. Increase responsiveness to business needs through standardization and simplified architecture. Increased business agility and faster time to market while reducing maintenance effort Channel Enhancements & Optimization: Conversational IVR with increased containment through AI, Natural Language Processing (NLP), predictive interactions, additional self-service capabilities and Omni-Channel support Operational Improvements: Improve AHT and LOS by reducing call volumes optimizing staffing/resource model. Improve Quality Assurance and Performance Management through automation Forecasting Process Enhancements: Transition the forecasting process into a fully-integrated WFM platform and enhance forecasting processes to minimize forecast variances. Process & Real-Time Adherence: Optimize scheduling and leverage enhanced RTA capabilities to manage deviations from defined schedules proactively. Customer Analytics: Develop dedicated customer and journey-centric analytic models to provide a complete view of the customer experience to enable segmentation, propensity modeling, personalization, and performance analytics.
O&M - O	CSR training, documentation, business transformation and RFP Administration

FERC Account Information

FERC Account	Capital Install	Capital Removal	O&M
303.10	100	0	0
F923000G	0	0	100
146.20			
146.22			
Total %	100	0	100

Order Information						
Order No. Suffix	SAP Des.	Budget Code	CCTr	Work Order Type	Extenal Order Number	Internal Order
000	SoCalGas CCC Modernization Project PARNT	774	2200-0332	SG05	B89137	300828548
001	SCG CCC Modernize Proj SW Impl SG05	774	2200-0332	SG05	B89137	300828549
101	SCG CCC Modernize Proj SW O&M SG41	774	2200-0332	SG41	B89137	300828550
401	SCG CCC Modernize Proj SW IMPL SG41	774	2200-0332	SG41	B89137	300828551
004	SCG CCC Modernize Proj SW SAAS LIC	774	2200-0332	SG10	B89137	300828552
005	SCG CCC Modernize Proj O&M	774	2200-0332	SG10	B89137	300828553
105	SCG CCC Modernize Proj O&M	774	2200-0332	SG41	B89137	300828554

Estimate Sub Totals			
GROSS ESTIMATED CAPITAL INSTALLATION COSTS	GROSS ESTIMATED CAPITAL REMOVAL COSTS	GROSS ESTIMATED O&M COSTS	TOTAL NET ESTIMATED COSTS (Incl. ITCCA & Less Billing)
\$27,015,153.83	\$0.00	\$1,576,392.50	\$28,814,884.41

Affiliate Information			
Affiliate Cost Company:	SDGE	Affiliate Project Manager:	
Company:	2100 - SDGE		
Request Information from Affiliate Project Manager?:	No		
Sending Cost Center:	2100-3900		
Is the sender allocated to multiple receivers?:	No	Sending IO Order Type:	S036
Sending IO Number:	000007153127, 000007153128	Created By:	
Parent Order Number:	PAB0385	DPSS Number:	AB0385

Estimated Costs					
ESTIMATED COSTS	CAPITAL INSTALLATION (\$)	CAPITAL REMOVAL (\$)	O&M (\$)	AFFILIATE COST SDGE (\$)	TOTAL (\$)
Company Labor:	\$1,854,400.00	\$0.00	\$0.00	\$97,600.00	\$1,952,000.00
Contract Costs:	\$12,880,000.00	\$0.00	\$0.00	\$0.00	\$12,880,000.00
Material:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Direct Charges:	\$6,863,000.00	\$0.00	\$1,525,000.00	\$0.00	\$8,388,000.00
TOTAL DIRECT COST	\$21,597,400.00	\$0.00	\$1,525,000.00	\$97,600.00	\$23,220,000.00
Company labor Indirects:	\$2,569,390.36	\$0.00	\$38,125.00	\$93,949.76	\$2,701,465.12
Material Indirects:	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Other Indirects:	\$189,566.34	\$0.00	\$13,267.50	\$31,788.32	\$234,622.16
Ad Valorem Tax (per GRC decision):	\$378,416.62				\$378,416.62
AFUDC:	\$2,280,380.51				\$2,280,380.51
TOTAL INDIRECT COST:	\$5,417,753.83	\$0.00	\$51,392.50	\$125,738.08	\$5,594,884.41
GROSS ESTIMATED COST	\$27,015,153.83	\$0.00	\$1,576,392.50	\$223,338.08	\$28,814,884.41
ITCCA:	0%				\$0.00
Total Gross Estimated Costs:					\$28,814,884.41
Customer payments(CIAC):					\$0.00
TOTAL NET ESTIMATED COSTS:					\$28,814,884.41

Request Approval				
Approver Name	User Type	Approver Level	Approver Title	Approval Date
	Project Manager			1/11/2023 8:21 AM
	Accounting User			1/11/2023 8:49 AM
	Financial Review	\$0		1/11/2023 8:21 AM
	Financial Review	\$0	IT Proj Mgr	1/11/2023 9:22 AM
	Financial Review	\$250,000	Software Dev Mgr	1/11/2023 9:48 AM
	Financial Review	\$250,000	Sr Mgr Customer Legacy Sys	1/11/2023 9:58 AM
Walker, Jeffery	Financial Review	\$30,000,000	SVP, Sys&Tech & Chief Div Ofcr	1/11/2023 11:25 AM
	Unit Estimation			1/13/2023 9:33 AM
	ABC Work Order Coordinator			
	ABC Work Order Coordinator			1/13/2023 12:10 PM
	ABC Supervisor			1/18/2023 11:34 AM
	ABC Work Order Coordinator			1/18/2023 1:34 PM
	ABC Work Order Coordinator			

Request Notes				
Request Notes	Send To User	Request Action	Created By	Created Date
Pulling back due to K2 system issues	NA	Recall Request		12/5/2022
Recalling to update PM name	NA	Recall Request		12/20/2022
Financial Approval Request is rejected via Email Smart Actions	NA	Reject		1/10/2023
Financial Approval Request is approved via Email Smart Actions	NA	Approve		1/11/2023
Financial Approval Request is approved via Email Smart Actions	NA	Approve		1/11/2023
Based on approved CCC modernization business case	BMS-B-99A	Approve	Walker, Jeffery L	1/11/2023

Entry Description	Comments
Project Information	
Title	Project Name
Company (Business Unit)	SCG, SDG&E or Corporate
Department	Customer Services, Gas Ops, Enterprise (App, Cyber, Infrastructure, Network)
Sub-Department	Options: Advanced Meter, Customer Contact Center, Customer Operations, Customer Services Staff, Customer Solutions, Major Markets
Requested Start	Project estimated start date: mm/dd/yyyy
Requested Finish	Project estimated end date: mm/dd/yyyy
Project Contacts	
IT Project Manager	Enter name
IT Program Manager	Enter name
IT Director Sponsor	Enter name
IT VP Sponsor	Enter name
Business Project Manager	Enter name
Business Director Sponsor	Enter name
Business VP Sponsor	Enter name
Business VP Organization	Enter name
Scope / Benefits	
Project Scope	Enter project scope and description
Project Benefits	Describe hard or soft benefits
Dependencies TO	List the external dependencies that this project relies on.
Dependencies FROM	List the external dependencies that rely on this project.
Project Deferred from Prior Year?	Options: Yes or No
Financials	

Funding Type	Options: Capital GRC, Capital Balanced, O&M Refundable, O&M Non-Refundable
Who is funding the work?	Options: IT or Business
SDG&E Asset Allocation Percentage	SDG&E / SCG / Corp Asset Allocations must total 100%
SCG Asset Allocation Percentage	SDG&E / SCG / Corp Asset Allocations must total 100%
Corp Asset Allocation Percentage	SDG&E / SCG / Corp Asset Allocations must total 100%
Strategic Alignment	
SCG Prioritization Category (only if SCG project)	Safety & Security Compliance Other - Reliability Other - Hard Benefits Other - Elective [See SCG Category Tab for description]
Importance	Must Do: Aligns to priorities Security, Compliance, Reliability (Significant risk if we do not proceed). Should Do: Projects with benefits and efficiencies. Potential to Defer: Strategic investment but could be deferred, continue to monitor to ensure appropriate timing.
Scoring Model Link	
Enter score of 3-High, 2-Medium, 1-Low, 0-Not Applicable [see S	
Safety	Options: 0-3
Compliance	Options: 0-3
Reliability	Options: 0-3
Strategy	Options: 0-3
Customer Experience	Options: 0-3
Productivity	Options: 0-3
RAMP, GRC & Compliance	
Included as RAMP?	Choose Yes if this project is specifically called RAMP in the GRC. Options: Yes or No
RAMP Chapter	Choose the RAMP chapter that this project relates to. Options: -SCG - 02 Employee, Contractor, Customer & Public -SCG - 03 Cyber Security -SCG - 08 Records Management -SDG&E - 01 Wildfire Caused by SDG&E Equipment -SDG&E - 07 Cyber -SDG&E - 12 Electric Infrastructure Integrity -SDG&E - 13 Records Management -N/A
Included in GRC?	Choose Yes if the project is specifically noted in the GRC. Options: Yes or No [For quick reference see tabs: 2016 GRC List, 2019 GRC List]

GRC Year	Enter the GRC year that the project is applicable to. If the project occurs in multiple GRC submissions, enter each year separated by a comma. Options: 2016, 2019
GRC Workpaper Reference	Example: SCG-18-CWP-00770C, pg. 236
GRC Accountability Driver	If this project be included in the annual Accountability Reporting, choose the most applicable Accountability Driver. 'Reliability' and 'Maintenance' refer to the gas pipeline or grid, not IT infrastructure (see Note). Options: Safety, Reliability, Maintenance, Security. Otherwise: N/A
Mandatory or Compliance Related	Select Yes if this is mandated by any government or regulatory agency. Options: Yes or No
Mandatory/Compliance Deadline	Examples: 01/01/2020 or 'End of fire season'
If Compliance, what percent is Compliance work?	Provide an estimated percentage Options: 100%, 75%, 50%, 25%, 0%
Mandatory/Compliance Driver	Specify reason for indicated completion date. Example: PRIVACY 2020 must be completed by January 2020 to meet compliance for CCPA (California Consumer Privacy Act) -or- Wildfire Mitigation
LINK to Estimation Spreadsheet Rep	
Financial Estimation URL	Copy the project estimation spreadsheet in SP repository (link provided above). Then provide direct URL to project estimation spreadsheet here ==> <i>Refer to Concept Development Job Aid for further instructions</i>
Allocate to Strategy	
IT Strategy/Strategies	IT Strategies (note that in Planview these four strategies drill down another level to program/initiative): -Accelerate Digital -Manage Risk Proactively -Simplify & Standardize -Transform How We Work Include any additional business strategies the project aligns with.
Dates	
Concept Created Date	
Concept Point of Contact	Enter name of best point of contact for questions regarding the concept details.

Enter Response
AM HE and MDMS Next-Generation (AclaraONE)
SCG
Customer Services
Advanced Meter
7/1/2022
6/30/2024
TBD
Ben Gordon
Customer Services
<p>The project will upgrade the Advanced Meter HeadEnd and MDMS applications to the next generation of Aclara's software product, called AclaraONE. Without AclaraONE, many Advanced Meter roadmap items and business opportunities/benefits, such as DCU 2+, end-to-end encryption, and support for S3500/S3600 MTUs, methane & cathodic protection etc., will not be realized due to hard dependency with AclaraONE.</p> <p>The project will modernize the AM backoffice systems to ensure active IT and vendor support and meet future SoCalGas business demands.</p> <p>* Ensure AM related business opportunities, benefits and roadmap items can be realized as planned</p> <p>Enable AM systems to meet future SCG business demands in billing and safety areas</p> <p>* Modernize AM systems to ensure active IT & vendor support</p> <p>* Significant cost avoidance (multi \$M) due to interruption of billing process or safety incidents resulted from outdated AM technologies</p>
2021 AM HE and MDMS Refresh
No

Capital GRC
IT
0%
100%
0%
Safety & Security
Should Do
CG Scoring Tab for full description]
3
1
3
3
2
1
No
No

No
Aggregated AM data is used to comply with several compliance requirements, such as Core Balancing.
<u>pository</u>
2022 - SCG Concept - CS - Yee - AM HE and MDMS Next-Generation (AclaraONE)_FinancialEstimationTemplate_2020_2.18.xlsx
Transform How We Work
6/26/2020

Financial Estimation Template Executive Summary										Version 4.2	
Project Name: AM HE and MDMS Next-Generation (AclaraONE)						Prepared By: [REDACTED]					
Funding, Loaders & Contingency											
Primary Funding Source:		CPUC GRC SCG		Loader Scenario:		SCG	SDGE	SCG			
Asset Allocation: (explain if not 100%)		SDGE	0%	Total Costs:		1%	99%				
		SCG	100%	Labor Loader:							
		Corp	0%	Non-Labor Loader:							
		Total	100%	Admin & General Loader:							
						AFUDC:					
Contingency for New and Change (Business)		Internal Labor %:	3.50%	Contingency For Growth (Technology)		Internal Labor %:		3.50%			
		Non Labor %:	3.50%			Non Labor %:		3.50%			
		Capital \$ (loaded,thousands):	\$129			Capital \$ (loaded,thousands):		\$129			
Project Costs											
Project Totals		Project Capital - On-premise SW/HW* (Rounded in Thousands)				Project Capital -SaaS/IaaS/PaaS Implementation (Rounded in Thousands)					
		(Loaded)		(Unloaded)		(Loaded)		(Unloaded)			
Internal Labor		\$1,438		\$725		\$1,274		\$642			
Contract Labor		\$12		\$12		\$12		\$12			
Hardware		\$0		\$0		\$0		\$0			
Software & SW Maintenance		\$216		\$214		\$0		\$0			
Vendor Services		\$431		\$428		\$539		\$535			
Other (Incidentals)		\$0		\$0		\$13		\$13			
Administrative & General Loader		\$52		N/A		\$46		N/A			
SubTotal Estimate		\$2,150		\$1,380		\$1,884		\$1,203			
AFUDC		\$295		Start Date:		1/2/23	Completion Date:		12/31/24		
Capital Total Estimate + AFUDC		\$4,329		In Service Date:		12/31/24	Payback Calc (in yrs):		None		
Project Totals		Project O&M*** (Rounded in Thousands)				SaaS/IaaS/PaaS Subscription Cost** (Rounded in Thousands)					
		(Loaded)		(Unloaded)		(Loaded)		(Unloaded)			
Internal Labor				\$27				\$0			
Contract Labor				\$0				\$0			
Hardware Maintenance				\$0				\$0			
Software & SW Maintenance				\$0				\$0			
Vendor Services				\$54				\$9,823			
Other (Incidentals)				\$0				\$0			
Administrative & General Loader				N/A				N/A			
SubTotal Estimate		\$0		\$81		\$0		\$9,823			
Annual Totals (Rounded in Thousands)		2023	2024	2025	2026	2027	Remaining Years Total	Total			
SaaS/IaaS/PaaS Subscription Cost		\$4,911	\$4,911	\$0	\$0	\$0	\$0	\$9,823			
Project O&M (Unloaded+Contingency, no A&G, no AFUDC)		\$37	\$43	\$0	\$0	\$0	\$0	\$81			
Self Dev Software (Loaded+A&G+Contingency,no AFUDC)		\$1,452	\$1,380	\$0	\$0	\$0	\$0	\$2,832			
Project Capital (Loaded+A&G,no contingency,no AFUDC)		\$2,027	\$1,749	\$0	\$0	\$0	\$0	\$3,776			
Capital Contingency (Loaded, no A&G, no AFUDC)		\$138	\$119	\$0	\$0	\$0	\$0	\$257			
Capital Contingency % (as a % of Project Capital)		6.81%	6.82%	0.00%	0.00%	0.00%	0.00%	6.82%			
Project Capital + Capital Contingency Total		\$2,165	\$1,869	\$0	\$0	\$0	\$0	\$4,034			
Post Project Annual Hard / Avoided Cost Benefits and O&M Cost											
Annual Totals (Rounded in Thousands)		Functional Area / Cost Center(s) \$		2025	2026	2027	2028	2029	No O&M or Benefit Est.	Total	
O&M Cost (Unloaded, no A&G, no AFUDC)	Business	Labor	xxxx-xxxx \$K	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
		Non Labor	TBD	\$4,590	\$4,590	\$4,590	\$4,590	\$4,590	\$0	\$22,950	
	IT	Labor		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
		NL - Other		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Benefits (Unloaded, no A&G, no AFUDC)	Business	Labor	2200-2303	\$409	\$409	\$409	\$409	\$409	\$0	\$2,046	
		Non Labor	2200-2303	\$789	\$789	\$789	\$789	\$789	\$0	\$3,946	
	IT	Labor		\$0	\$0	\$0	\$0	\$0	\$0	\$0	
		Non Labor		\$0	\$0	\$0	\$0	\$0	\$0	\$0	

Note:*Includes Cloud software that could be brought on premise or third parties without significant penalties

Note:** Includes subscription during implementation phase. The on-going subscriptions are included in Post Project Cost Estimates

Note:** Includes maintenance during project development phase

Assumptions

- 1 Complex HE & MDMS upgrade/migration to AclaraONE in the cloud
- 2 Hybrid Cloud Solution: AclaraONE HE remains on-prem and MDMS will be in the cloud.
- 3 HE & MDMS license fees waved.
- 4 AclaraONE HeadEnd and MDMS will run on Microsoft SQL databases.
- 5 AclaraONE HE & MDMS SaaS annual subscription fee is \$5.1M per year (20% HE, 20% MDM, 10% NEMO and 50% Shared)
- 6 \$100k prof svcs to build the AclaraONE MDM interface with SEW for Energy Prism
- 7 Need to purchase additional Microsoft SQL Server licenses (~\$200K)
- 8 \$800K for Aclara prof svcs cost
- 9 Duration: 24 months (1/1/2023-12/31/2024)
- 10 7% contingency (i.e. 3.5% CFG and 3.5% CFNC)
- 11 Misc expenses: \$13K (e.g. T&E, lunch etc.)
- 12 Avoided cost: current Aclara HE & MDMS s/w maint. cost at \$700k per year.
- 13 Avoided cost: 4 FTEs could be freed up to support other applications
- 14 Avoided cost: 2 offshore contractors can be freed up or terminated (~\$89K per year)