

Application of SOUTHERN CALIFORNIA GAS)
COMPANY for authority to update its gas)
revenue requirement and base rates)
effective January 1, 2024 (U 904-G))

Application No. 22-05-015

Exhibit No.: (SCG-13-WP-2E)

WORKPAPERS TO
PREPARED DIRECT TESTIMONY
OF EVAN D. GOLDMAN
ON BEHALF OF SOUTHERN CALIFORNIA GAS COMPANY

SECOND ERRATA

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

JUNE 2023



2024 General Rate Case - Application

ERRATA

INDEX OF WORKPAPERS

Exhibit SCG-13-WP-2E - CIS REPLACEMENT PROGRAM

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Southern California Gas Company
 2024 GRC - APPLICATION ERRATA
 SECOND ERRATA

Overall Summary For Exhibit No. SCG-13-WP-2E

Area:	CIS REPLACEMENT PROGRAM
Witness:	Evan D. Goldman

	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Description				
Non-Shared Services	1,815	2,308	4,696	20,247
Shared Services	0	0	0	0
Total	1,815	2,308	4,696	20,247

Note: Totals may include rounding differences.

Southern California Gas Company
 2024 GRC - APPLICATION ERRATA
 Non-Shared Service Workpapers

Area: CIS REPLACEMENT PROGRAM
 Witness: Evan D. Goldman

Summary of Non-Shared Services Workpapers:

Description	In 2021 \$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
A. CS - CIS Replacement Program	1,815	2,308	4,696	20,247
Total	1,815	2,308	4,696	20,247

Note: Totals may include rounding differences.

Southern California Gas Company
2024 GRC - APPLICATION ERRATA
Non-Shared Service Workpapers

Area: CIS REPLACEMENT PROGRAM
 Witness: Evan D. Goldman
 Category: A. CS - CIS Replacement Program
 Workpaper: 2CI000.000

Summary for Category: A. CS - CIS Replacement Program

	In 2021\$ (000) Incurred Costs			
	Adjusted-Recorded	Adjusted-Forecast		
	2021	2022	2023	2024
Labor	514	558	377	1,802
Non-Labor	1,301	1,750	4,319	18,445
NSE	0	0	0	0
Total	1,815	2,308	4,696	20,247
FTE	3.4	3.8	2.5	12.2

Workpapers belonging to this Category:

2CI000.000 Customer Services - CIS Replacement Program

Labor	514	558	377	1,802
Non-Labor	1,301	1,750	4,319	18,445
NSE	0	0	0	0
Total	1,815	2,308	4,696	20,247
FTE	3.4	3.8	2.5	12.2

Note: Totals may include rounding differences.

Beginning of Workpaper
2CI000.000 - Customer Services - CIS Replacement Program

Southern California Gas Company
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Area: CIS REPLACEMENT PROGRAM
Witness: Evan D. Goldman
Category: A. CS - CIS Replacement Program
Category-Sub: 1. CS - CIS Replacement Program
Workpaper: 2CI000.000 - Customer Services - CIS Replacement Program

Activity Description:

The CIS Replacement Program will replace the company's current Customer Information System (CIS) and related subsystems with a modern CIS platform. CIS is the foundational information technology system for the Customer Services organization. It facilitates meter-to-cash transactions (metering/measurement, billing calculation, payment processing, credit & collections activity, etc.) and is the primary system used by Customer Service Representatives (CSRs) when interacting with customers. CIS also provides the underlying data and information in support of the company's Interactive Voice Response (IVR) and other Digital Customer Experience channels ("My Account") and is responsible for the generation of most service orders that are ultimately worked by the Customer Services Field (CSF) team. SoCalGas's current CIS is an outdated, mainframe-based solution that was custom developed and implemented in 1996. The new CIS will provide increased capability, agility, and speed-to-market needed to support company sustainability and climate policy goals, and to help meet evolving regulatory requirements and customer expectations.

Forecast Explanations:

Labor - Base YR Rec

The O&M labor forecast for the CIS Replacement Program costs for SoCalGas internal employees are based on the number of required labor hours for each phase of the program. The CIS Replacement Program Phases include; Plan/Analyze Phase, Design/Build & Validate Phase, Test Phase, Deploy Phase, and Post Go-Live Support Phase. Refer to SCG-13-WP-2CI000.000, Supplemental Workpapers, for details of the non-labor costs within each phase of the CIS Replacement Program. A Base Year forecast methodology was chosen for this budget code and the forecasted labor expenses are based on the incremental program costs above Base Year 2021 recorded labor, that are added to determine total funding requirements. The forecast method developed for the program costs is derived from the cost estimate prepared by personnel experienced in this type of work and with reference to recent programs of similar scope. Refer to Exhibit SCG-13-WP, Supplemental Workpaper 2CI000.000, for labor details and drivers.

Non-Labor - Base YR Rec

The O&M non-labor forecast for the CIS Replacement Program costs cover System Integrator (SI), 3rd Party Labor and Professional Services resources and related expenses are based on the number of required labor hours for each phase of the program. The CIS Replacement Program Phases include; Plan/Analyze Phase, Design/Build & Validate Phase, Test Phase, Deploy Phase, and Post Go-Live Support Phase. Refer to Exhibit SCG-13-WP, Supplemental Workpaper 2CI000.000, for details of the non-labor costs within each phase of the CIS Replacement Program. A Base Year forecast methodology was chosen for this budget code and the forecasted labor expenses are based on the incremental program costs above Base Year 2021 recorded labor, that are added to determine total funding requirements. The forecast method developed for the program costs is derived from the cost estimate prepared by personnel experienced in this type of work and with reference to recent programs of similar scope. Refer to Exhibit SCG-13-WP, Supplemental Workpaper 2CI000.000, for details of the non-labor costs and drivers

NSE - Base YR Rec

Not Applicable. There are no NSE costs for CIS Replacement.

Note: Totals may include rounding differences.

Southern California Gas Company
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Area: CIS REPLACEMENT PROGRAM
 Witness: Evan D. Goldman
 Category: A. CS - CIS Replacement Program
 Category-Sub: 1. CS - CIS Replacement Program
 Workpaper: 2CI000.000 - Customer Services - CIS Replacement Program

Summary of Results:

		In 2021\$ (000) Incurred Costs								
		Adjusted-Recorded					Adjusted-Forecast			
Years		2017	2018	2019	2020	2021	2022	2023	2024	
Labor		0	0	0	0	514	558	377	1,802	
Non-Labor		0	0	0	0	1,301	1,750	4,319	18,445	
NSE		0	0	0	0	0	0	0	0	
Total		0	0	0	0	1,815	2,308	4,696	20,247	
FTE		0.0	0.0	0.0	0.0	3.4	3.8	2.5	12.2	

Note: Totals may include rounding differences.

Southern California Gas Company
2024 GRC - APPLICATION ERRATA
Non-Shared Service Workpapers

Area: CIS REPLACEMENT PROGRAM
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 Workpaper: 2CI000.000 - Customer Services - CIS Replacement Program

Summary of Adjustments to Forecast:

In 2021 \$(000) Incurred Costs										
Forecast Method		Base Forecast			Forecast Adjustments			Adjusted-Forecast		
Years		2022	2023	2024	2022	2023	2024	2022	2023	2024
Labor	Base YR Rec	514	514	514	44	-137	1,288	558	377	1,802
Non-Labor	Base YR Rec	1,301	1,301	1,301	449	3,018	17,144	1,750	4,319	18,445
NSE	Base YR Rec	0	0	0	0	0	0	0	0	0
Total		1,815	1,815	1,815	493	2,881	18,432	2,308	4,696	20,247
FTE	Base YR Rec	3.4	3.4	3.4	0.4	-0.9	8.8	3.8	2.5	12.2

Forecast Adjustment Details:

Year	Labor	NLbr	NSE	Total	FTE	Adj Type
2022	44	449	0	493	0.4	1-Sided Adj
Explanation:	Adjustment of 0.4 FTE O&M labor at an average rate of \$150K per FTE, for program management support, and additional adjustment made for forecasted 3rd-party labor and non-labor activities for the CIS Replacement Pre-Planning Phase. Refer to Exhibit SCG-13-WP, Supplemental Workpaper 2CI000.000 for 2022 CIS Replacement Pre-Planning Phase cost forecast details.					
2022 Total	44	449	0	493	0.4	
2023	-137	3,018	0	2,881	-0.9	1-Sided Adj
Explanation:	Adjustment out to shift O&M labor resources of .9 FTE at an average rate of \$150K per FTE, associated with Capital expenses for program management support. Additional adjustment made for forecasted 3rd-party labor and non-labor activities for the CIS Replacement Pre-Planning Phase. Refer to Exhibit SCG-13-WP, Supplemental Workpaper 2CI000.000 for 2023 CIS Replacement Pre-Planning Phase cost forecast details.					
2023 Total	-137	3,018	0	2,881	-0.9	
2024	1,288	17,144	0	18,432	8.8	1-Sided Adj
Explanation:	Adjustment to account for normalization of labor and non-labor O&M forecast derived from the TY2024 through 2027, 4 year average cost for CIS Replacement O&M expense comprised The CIS Replacement Program Phases: Plan/Analyze Phase, Design/Build & Validate Phase, Test Phase, Deploy Phase, and Post Go-Live Support Phase. Refer to Exhibit SCG-13-WP, Supplemental Workpaper 2CI000.000 for CIS Replacement annual and program phase details. Non-labor forecast is associated with Program Implementation Resourcing & Expenses; 3rd Party Labor & Professional Services; Program QA and Controls; Operational Assurance; and Transformational GPs. Refer to Exhibit SCG-13-WP, Supplemental Workpaper 2CI000.000 for cost forecast details.					
2024 Total	1,288	17,144	0	18,432	8.8	

Note: Totals may include rounding differences.

SCG/CIS REPLACEMENT PROGRAM/Exh No:SCG-13-WP-2E/Witness: E. Goldman

Southern California Gas Company
2024 GRC - APPLICATION ERRATA
Non-Shared Service Workpapers

Area: CIS REPLACEMENT PROGRAM
 Witness: Evan D. Goldman
 Category: A. CS - CIS Replacement Program
 Category-Sub: 1. CS - CIS Replacement Program
 Workpaper: 2CI000.000 - Customer Services - CIS Replacement Program

Determination of Adjusted-Recorded (Incurred Costs):

	2017 (\$000)	2018 (\$000)	2019 (\$000)	2020 (\$000)	2021 (\$000)
Recorded (Nominal \$)*					
Labor	0	0	0	0	437
Non-Labor	0	0	0	0	1,302
NSE	0	0	0	0	0
Total	0	0	0	0	1,739
FTE	0.0	0.0	0.0	0.0	2.9
Adjustments (Nominal \$) **					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	-1
NSE	0	0	0	0	0
Total	0	0	0	0	-1
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Nominal \$)					
Labor	0	0	0	0	437
Non-Labor	0	0	0	0	1,301
NSE	0	0	0	0	0
Total	0	0	0	0	1,738
FTE	0.0	0.0	0.0	0.0	2.9
Vacation & Sick (Nominal \$)					
Labor	0	0	0	0	77
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	77
FTE	0.0	0.0	0.0	0.0	0.5
Escalation to 2021\$					
Labor	0	0	0	0	0
Non-Labor	0	0	0	0	0
NSE	0	0	0	0	0
Total	0	0	0	0	0
FTE	0.0	0.0	0.0	0.0	0.0
Recorded-Adjusted (Constant 2021\$)					
Labor	0	0	0	0	514
Non-Labor	0	0	0	0	1,301
NSE	0	0	0	0	0
Total	0	0	0	0	1,815
FTE	0.0	0.0	0.0	0.0	3.4

* After company-wide exclusions of Non-GRC costs

** Refer to "Detail of Adjustments to Recorded" page for line item adjustments

Note: Totals may include rounding differences.

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Non-Shared Service Workpapers

Area: CIS REPLACEMENT PROGRAM
 Witness: Evan D. Goldman
 Category: A. CS - CIS Replacement Program
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 Workpaper: 2CI000.000 - Customer Services - CIS Replacement Program

Summary of Adjustments to Recorded:

In Nominal \$ (000) Incurred Costs						
	Years	2017	2018	2019	2020	2021
Labor		0	0	0	0	0
Non-Labor		0	0	0	0	-1
NSE		0	0	0	0	0
	Total	0	0	0	0	-1
FTE		0.0	0.0	0.0	0.0	0.0

Detail of Adjustments to Recorded:

<u>Year</u>	<u>Labor</u>	<u>NLbr</u>	<u>NSE</u>	<u>FTE</u>	<u>Adj Type</u>
2017 Total	0	0	0	0.0	
2018 Total	0	0	0	0.0	
2019 Total	0	0	0	0.0	
2020 Total	0	0	0	0.0	
2021	0	-1	0	0.0	1-Sided Adj
2021 Total	0	-1	0	0.0	

Explanation: Incremental COVID-related costs that are anticipated to be requested for recovery through a non-GRC Catastrophic Event Memorandum Account (CEMA).

Note: Totals may include rounding differences.

Supplemental Workpapers for Workpaper 2C1000.000

CIS Replacement Program Forecast - By Year

SoCalGas		2022		2023		TY2024		PTY2025		PTY2026		PTY2027		GRC Total (2022-2027)	
CIS Replacement Program (\$ in thousands)		Forecast	FTE	Forecast	FTE	Forecast	FTE	Forecast	FTE	Forecast	FTE	Forecast	FTE	Total	FTE
Capital															
	SoCalGas Labor	\$1,026	6.8	\$1,053	7.0	\$3,701	34.0	\$6,362	65.0	\$3,672	50.4	\$0	-	\$15,814	32.65
	Contingency	\$0	-	\$0	-	\$815	7.5	\$815	8.3	\$612	8.4	\$0	-	\$2,242	4.84
	V&S	\$181	1.3	\$186	1.3	\$797	6.4	\$1,267	12.3	\$756	9.5	\$0	-	\$3,187	6.15
	Labor Sub-Total	\$1,207	8.1	\$1,239	8.3	\$5,313	47.8	\$8,444	85.6	\$5,040	68.3	\$0	-	\$21,243	43.65
	Third Party Contractors	\$3,705		\$1,484		\$31,179		\$54,856		\$33,473		\$0	-	\$124,697	
	Software	\$0		\$0		\$45,925		\$0		\$0		\$0		\$45,925	
	Contingency	\$0		\$0		\$10,833		\$10,833		\$8,124		\$0		\$29,789	
	Non-Labor Sub-Total	\$3,705		\$1,484		\$87,937		\$65,688		\$41,597		\$0	-	\$200,411	
	Capital Total	\$4,913	8.1	\$2,723	8.3	\$93,250	47.8	\$74,133	85.6	\$46,637	68.3	\$0	-	\$221,655	43.6

SoCalGas		2022		2023		TY2024		PTY2025		PTY2026		PTY2027		GRC Total (2024-2027)	
CIS Replacement Program (\$ in thousands)		Forecast	FTE	Forecast	FTE	Forecast	FTE	Forecast	FTE	Forecast	FTE	Forecast	FTE	Total	FTE
O&M															
	SoCalGas Labor	\$474	3.2	\$320	2.1	\$765	5.8	\$2,194	12.1	\$2,490	16.3	\$0	-	\$5,448	8.54
	Contingency	\$0	-	\$0	-	\$206	1.6	\$206	1.1	\$241	1.6	\$22	2.7	\$676	1.8
	V&S	\$84	0.6	\$57	0.4	\$171	1.4	\$424	2.5	\$482	3.4	\$4	0.5	\$1,081	1.9
	Labor Sub-Total	\$558	3.8	\$377	2.5	\$1,142	8.8	\$2,824	15.7	\$3,213	21.2	\$26	3.2	\$7,205	12.2
	Third Party Contractors	\$1,750		\$4,319		\$11,118		\$17,018		\$35,194		\$1,959		\$65,290	
	Software	\$0		\$0		\$64		\$64		\$48		\$0		\$175	
	Contingency	\$0		\$0		\$2,706		\$2,706		\$2,726		\$180		\$8,318	
	Non-Labor Sub-Total	\$1,750		\$4,319		\$13,888		\$19,787		\$37,968		\$2,140		\$73,782	
	O&M Total	\$2,308	3.8	\$4,696	2.5	\$15,030	8.8	\$22,611	15.7	\$41,181	21.2	\$2,166	3.2	\$80,988	12.2

CIS Replacement Program		TY2024-2027 AVG	
O&M (NORMALIZED 4-YR AVG)		(\$ in thousands)	
Labor	SoCalGas Labor	\$1,801	12.2
	Third Party Contractors	\$16,322	
	Software	\$44	
	Contingency	\$2,079	
Non-Labor	Sub-total	\$18,446	
O&M Total		\$20,247	12.2

Total Request	\$302,642
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CIS Replacement Program - Supplemental Workpaper_01 - Section: Phase Forecast Summary

CIS Replacement Program Forecast - By Phase

Capital by Phase (Dollars in thousands)	Pre-Planning	Plan & Analyze	Design, Build & Validate	Test	Deployment	Post Go Live Stabilization	Total (2022-2026)
Direct Labor	\$2,079	\$2,074	\$4,730	\$4,890	\$3,058	\$1,226	\$18,056
Non-Labor	\$5,189	\$34,439	\$58,518	\$45,360	\$44,903	\$12,003	\$200,411
Total Direct	\$7,269	\$36,512	\$63,248	\$50,250	\$47,961	\$13,228	\$218,468
V&S	\$367	\$366	\$835	\$863	\$540	\$216	\$3,187
Grand Total	\$7,636	\$36,878	\$64,083	\$51,113	\$48,501	\$13,444	\$221,655

O&M by Phase (Dollars in thousands)	Pre-Planning (2022-2023)	Plan & Analyze	Design, Build & Validate	Test	Deployment	Post Go Live Stabilization	Total (TY2024-2027)
Direct Labor	\$794	\$505	\$858	\$2,009	\$2,481	\$272	\$6,124
Non-Labor	\$6,070	\$7,566	\$11,641	\$14,468	\$23,400	\$16,708	\$73,782
Total Direct	\$6,864	\$8,071	\$12,498	\$16,477	\$25,881	\$16,980	\$79,907
V&S	\$140	\$89	\$151	\$355	\$438	\$48	\$1,081
Grand Total	\$7,004	\$8,160	\$12,650	\$16,831	\$26,319	\$17,028	\$80,988



SoCalGas CIS Replacement Assessment Final Report

October 2021

Southern California Gas Company
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Document Purpose

This document summarizes the results of the collaborative study between SoCalGas and Accenture to identify a solution, estimated timeline, and estimated costs to replace SoCalGas's Customer Information System. The study leveraged Accenture's CIS Assessment and CIS Estimation Frameworks, which have been applied at multiple North American utilities. The results of the assessment will serve as the basis for pre-planning activities required to launch the CIS Replacement program.

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Our Assessment

Recommended Solution and Implementation Approach



**Recommendation to Implement SAP
for CIS Replacement**

Capability Maturity Assessment Overview

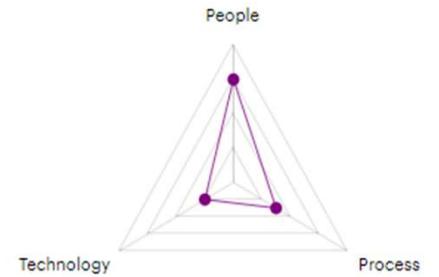
SCG/CIS REPLACEMENT PROGRAM/Ext No: SCG-13-WP-2EAM/Issue: E. Goldman

SEILIBI/IB/ASSESSED CAPABILITIES

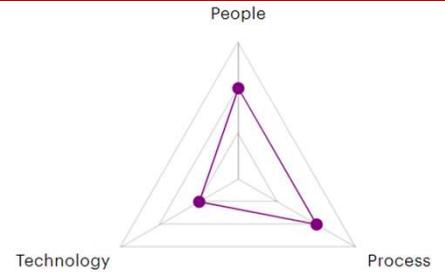
We assessed the maturity of our existing capabilities (across Channels and CIS) using a strategic assessment framework. New capabilities were identified based on the areas of improvement that are needed to become a Leading Utility.

		Experience Expectations Met			
		NONE	FEW	MOST	ALL
CHANNELS	Field Technician			▲	
	Brand Experience			▲	
	IVR			▲	
	Customer Intelligence			▲	
	Digital Experience			▲	
	Branch Offices		▲		
	Channel Strategy		▲		
	Account Manager		▲		
	Customer Service Representatives		▲		
CIS	Usage			▲	
	Payments			▲	
	Customer Contact		▲		
	Credit and Collections			▲	
	Billing		▲		

CHANNEL MATURITY BY DIMENSION



CIS MATURITY BY DIMENSION



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Findings from Fit/Gap Assessment

Capabilities that make up some of the most impactful customer experiences are not possible with the existing system given the current architecture and data model.

CIS Replacement Customer Experiences and Example of Capabilities



Accessing, updating, and sharing customer history in real-time through centralized system

- Ability to integrate data among various channels. Store data centrally or available on a real-time basis to all the departments, systems and processes via APIs or other automated integrations.
- Ability to provide a single screen to view/edit data on customer accounts. This screen would include contact history, view usage data and behavioral trends, across all channels for customer service representatives and account executives



More Proactive Communications Across Channels

- Ability to have a centralized platform to manage all customer communications/notifications and customer channel preferences.



New Alternate Payment Options

- Ability to store centralized payment information for the customer (e.g., in CIS) so that customer can use same payment info stored to make a payment in channel of their choice.
- Ability for customers to have a single view to manage payments across multiple accounts (across multiple residential and commercial locations).
- Ability to split bills among multiple customers (for self-serve functions and with CSR)

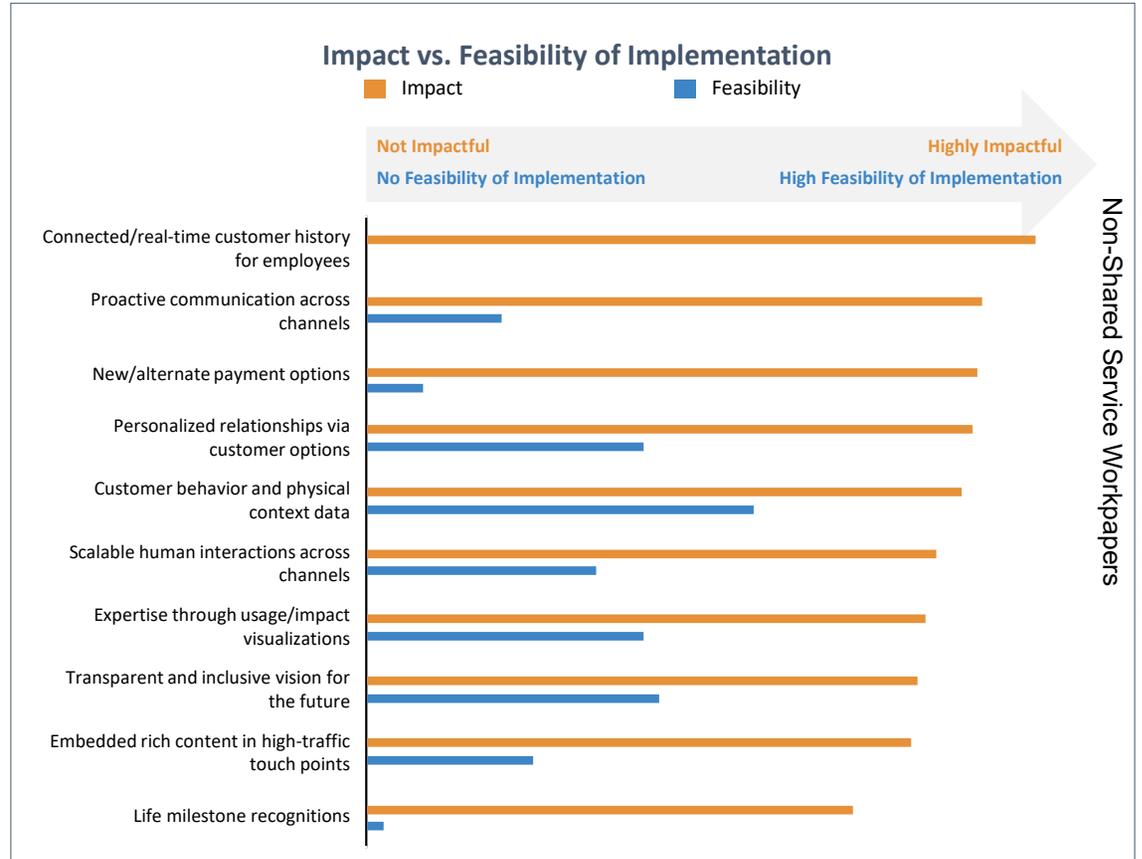
Capability Maturity Assessment Key Findings

Through customer experience interviews and the capability maturity assessment, we identified 65 Customer Experience capabilities.

We then conducted a high-level system fit/gap assessment for those new capabilities, grouping them by prioritized modern, expected customer experiences.

Key Findings

We found that the capabilities that make up the most impactful customer experiences would **not be possible with the existing systems** or would require significant effort to implement.



Technical Assessment

Value Levers

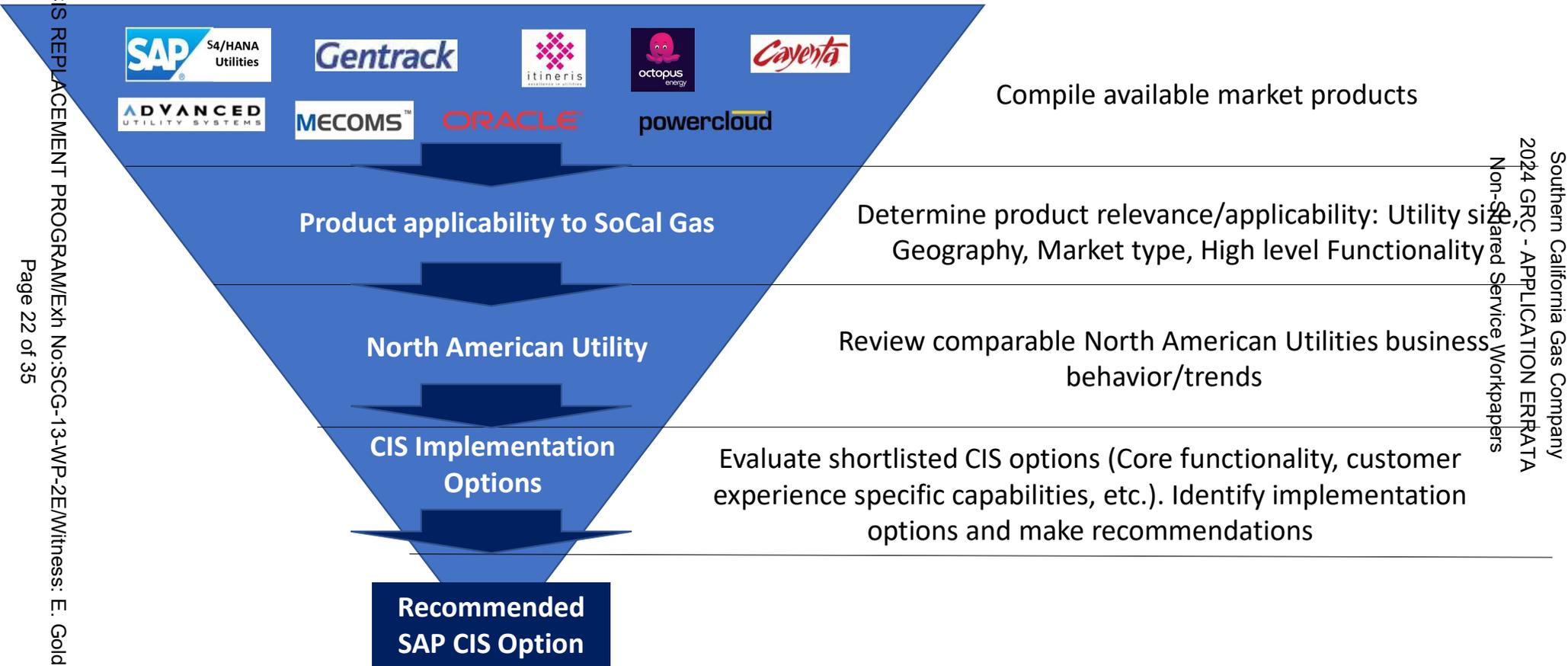
Opportunities and Challenges

Enabling Capabilities

Value Levers	Opportunities and Challenges	Enabling Capabilities
 <p>Technical Landscape Support</p>	<p>Adopt an architecture that lowers maintenance and enhances supportability to reduce the overall technical debt.</p>	<div style="display: flex; justify-content: space-around;"> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">MODERN & FLEXIBLE ARCHITECTURE</div> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">REDUCED TEST/TRAINING ENVIRONMENTS MAINTENANCE & COMPLEXITY</div> </div>
 <p>System Complexity</p>	<p>Reduce the complexity of the overall system in order to shorten the development/testing cycle and be flexible/agile to meet regulatory requirements or business demands.</p> <p>Using standard solutions with modernized programming tools and languages will increase the pool of available resources with the necessary skills and knowledge for future development.</p> <p>There is a high risk of resources retiring with the in-depth institutional knowledge of a highly customized solution.</p>	<div style="display: flex; flex-direction: column; justify-content: space-around;"> <div style="display: flex; justify-content: space-around;"> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">STANDARD INDUSTRY SOLUTIONS</div> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">SIMPLIFIED TEST DATA CREATION & AUTOMATED TESTING</div> </div> <div style="display: flex; justify-content: space-around;"> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">SIMPLIFIED ENHANCEMENTS</div> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">MODERN PROGRAMMING TOOLS & LANGUAGE</div> </div> </div>
 <p>Data Management</p>	<p>Provide cross organizational and workstream data intelligence with real-time data visibility and alerts to create improved situational awareness and data quality.</p>	<div style="display: flex; justify-content: space-around;"> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">SINGLE SOURCE OF TRUTH</div> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">CUSTOMER PRIVACY</div> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">DATA GOVERNANCE</div> </div>
 <p>Security</p>	<p>Provide a more flexible/configurable solution that supports enforcement of security roles and access reporting.</p>	<div style="display: flex; justify-content: space-around;"> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">CONFIGURABLE SECURITY ROLES</div> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">ACCOUNTABILITY & AUDIT TRACKING</div> <div style="background-color: #007bff; color: white; padding: 5px; text-align: center;">CYBERSECURITY</div> </div>

CIS Candidates Evaluation Approach

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Solution Plan/Summary

CIS Solution Plan Recommendation

Replace current CIS with SAP



ENABLING THE CAPABILITIES OF THE FUTURE

Supporting the development of transformative decarbonization, diversification, and digitalization goals set in Aspire 2045



IMPROVED CUSTOMER AND EMPLOYEE EXPERIENCE

Enabling modern Customer Experiences (e.g., 360-degree view of customer, more personalized customer interactions, omni-channel experience)



AGILITY

Reducing system complexity and technical debt while integrating agility into SoCalGas business operations to foster innovation and enable new capabilities for our customers



REGULATORY COMPLIANCE

Agility and adaptability to respond to and implement cost effective business changes and regulatory requirements to support the CS business and regulators.



RESILIENCE

Maintaining an ever-improving resilient infrastructure that prevents, withstands, adapts to, and quickly recovers from disruption



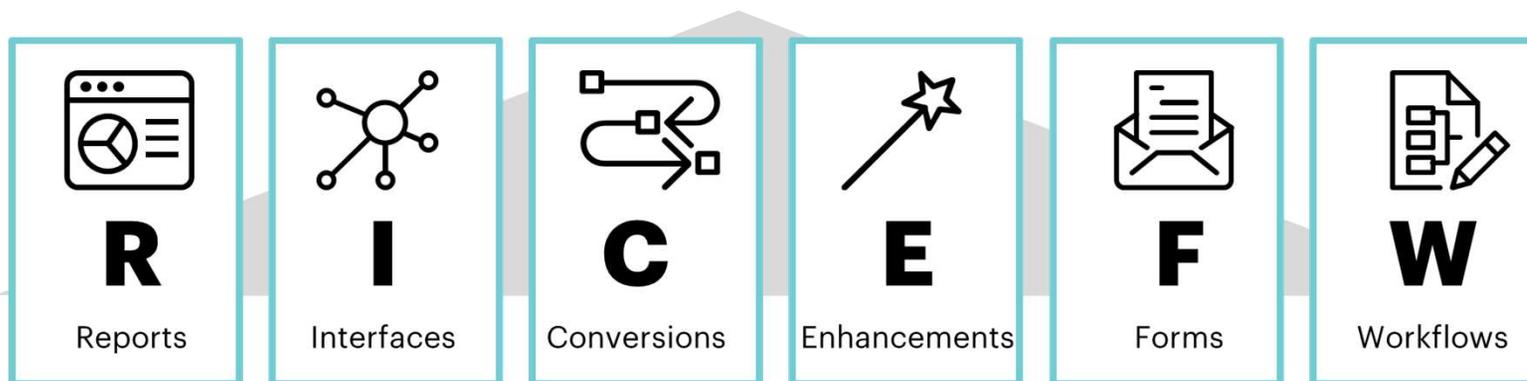
SAFETY

Continued support of safe operations, company safety culture, and overall safety performance within SoCalGas's workplace and communities

SAP: Configuration and Development

Within SAP projects it is recommended to use **the SAP standard functionalities** for each SAP module whenever possible. The business processes can be managed via **Configuration**.

If business requirements results in additional developments (e.g. unique regulatory rules), additional developments may be necessary. A development object for SAP is called a **RICEFW**

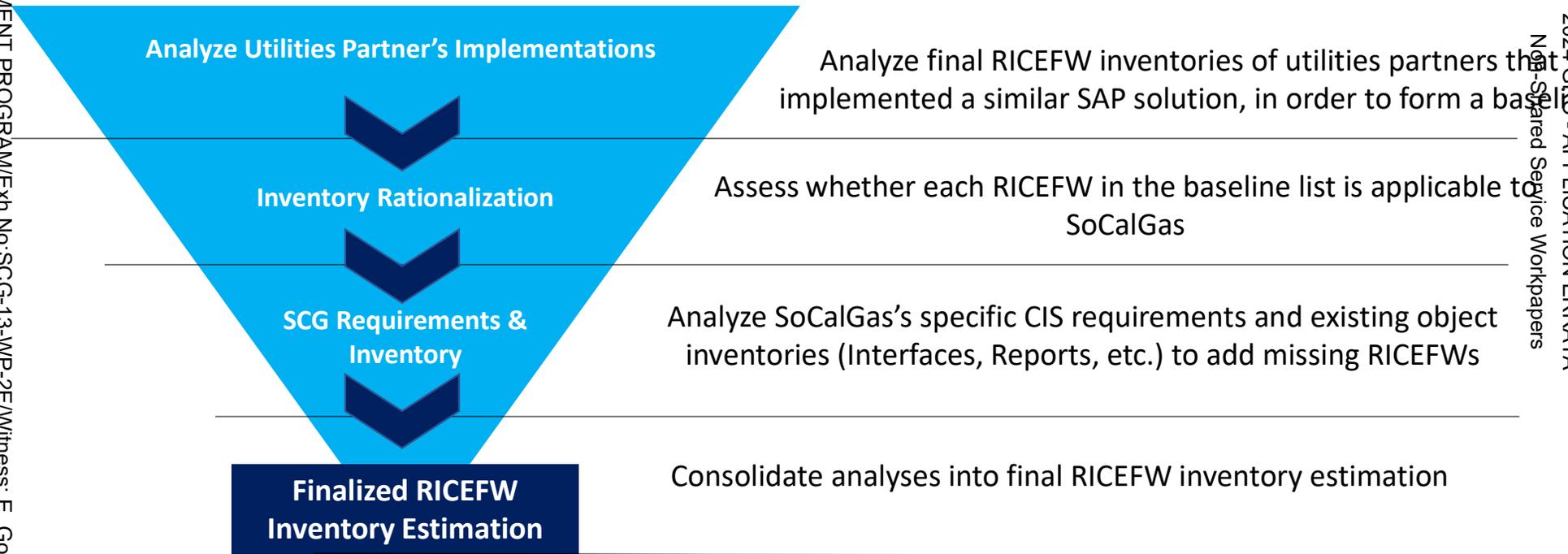


EXAMPLES

- Reporting and analytics for gas meter test
- Interface for uploading Gas Meter Data from Meter Data Management System (MDMS)
- Conversion for historical meter reads
- Enhancement for gas curtailment
- Letter for Gas Setup/ Cancellation
- Workflow to approve refunds based on credit amounts in customer accounts

CIS RICEFW Inventory Forecast

Activity: forecast the total number of SAP developments [RICEFWs] that will be required to enable the future solution to meet SoCalGas’s requirements and future capabilities list. RICEFWs are applicable to S4HANA, C4C, MKT Cloud. The RICEFW forecasts made can be drilled down to RICEFW Type, Complexity, and Workstream.



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CIS RICEFW Inventory Forecast

RICEFW Forecast	Simple (S)	Medium (M)	Complex (C)	Total
Reports (R)	12	47	21	80
Interface (I)	75	142	57	274
Conversion (C)	11	26	9	46
Enhancement (E)	22	95	87	204
Form (F)	17	20	4	41
Workflow (W)	0	2	2	4
Total Count	137	332	180	649
Total %	21%	51%	28%	100%

CIS Process Inventory Assessment

Activity: analyzed all key SCG business processes and compared whether each process was implemented at SDG&E during their CIS Replacement. If so, what was the primary CIS sub-system(s) at SDG&E where the requirement was implemented [S4, C4C, SSA]. The process scope includes the *Billing & Collections, Field & Dispatch, and Customer Contact Center* business areas.

Objective: perform a high-level assessment on implementation feasibility leveraging the recommended SAP solution and ensure key SCG business processes are accounted for.

Customer Services Process Excellence

Gather key SoCalGas business processes for analysis

SDG&E (Envision) Comparison

Assess whether each process / feature was implemented at SDG&E and what the primary CIS sub-system(s) was

Solution Fit Analysis

Evaluate fit/gap of recommended solution

Confirm Recommended
CIS Solution

Confirm implementation feasibility with the chosen solutions

CIS Process Inventory Assessment

At a high-level, nearly all processes listed in the SoCalGas customer services process inventory can be implemented via SAP. While business rules and requirements will determine the level of configuration and enhancements required for each solution, the assessment's process mapping/comparison effort indicates that the recommended CIS solution (with 89 in-scope Business Processes) can provide coverage for the required functionality to cover SoCalGas's key as-is customer service business processes.

SoCalGas As-Is Customer Services Business Processes (for mapping/comparison to To-Be Process Inventory)

Business Area	Customer Contact Center	Field & Dispatch	Billing & Collections	TOTAL
# of Business Processes Analyzed	27	25	54	106



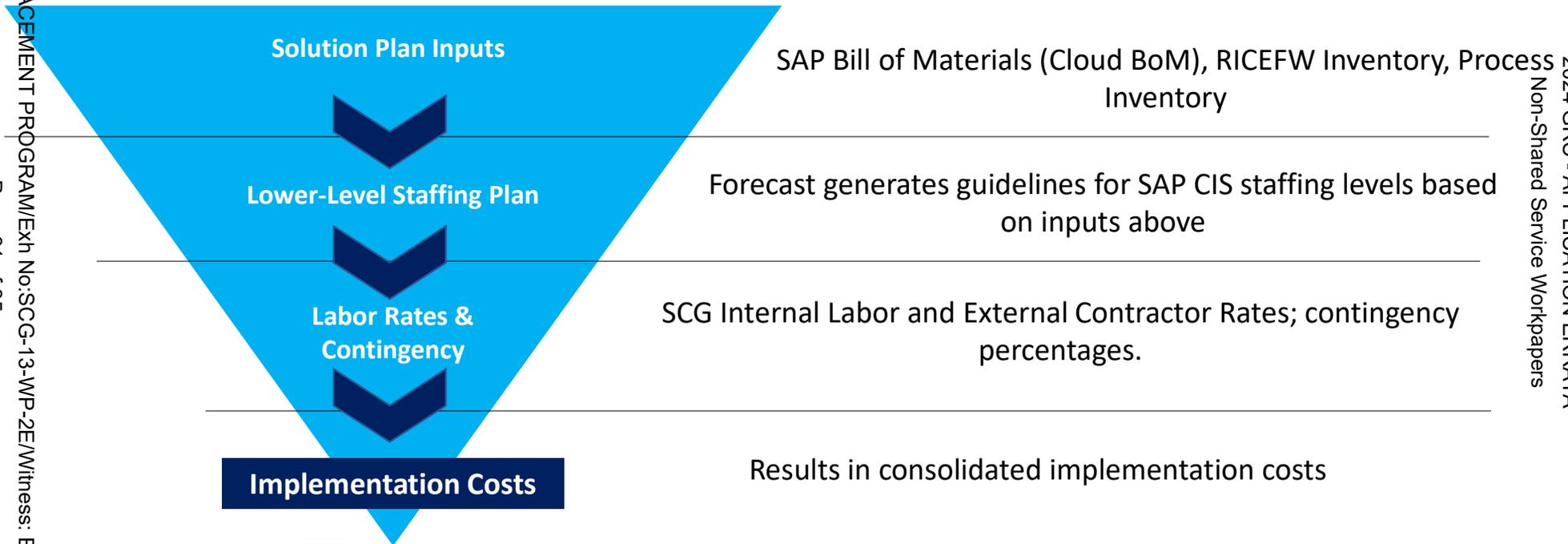
To-Be CIS Replacement Program Business Processes (confirmed – via process mapping – to fully cover As-Is processes above)

Functional Area	Customer Engagement	Device Management	Consumption Management	Revenue Management	TOTAL
# of Business Processes Analyzed	45	10	14	20	89

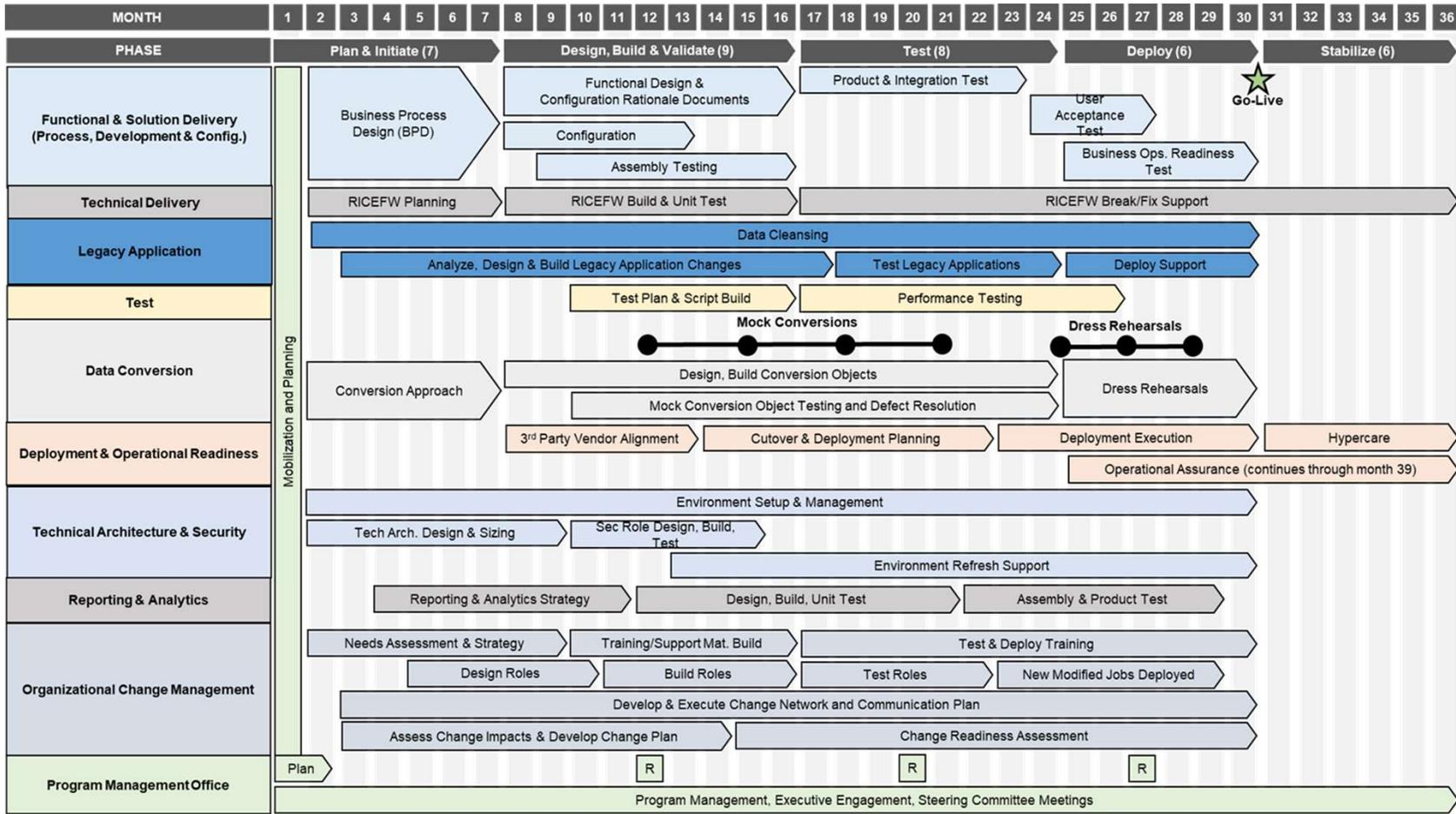
CIS Forecasting Approach

CIS Implementation Plan Forecast

The following diagram details the key forecasting factors used in determining the implementation plan costs.



CIS Implementation Timeline



CIS Estimated Resources, Hours, and Costs

Resources

Workstream	Role Count
Functional	72
Technical	118
Change & Training	98
Project Mgt.	21
Testing	34
Legacy Apps	44
Total	387

Hours by Phase

	Plan & Analyze	Design, Build & Validate	Test	Deploy	Post Go-live Support	Total Hours
SoCalGas Hours	33,040	80,350	103,630	83,804	18,750	319,574
Contractor Hours	106,263	295,852	348,364	242,849	73,097	1,066,425
Totals	139,303	376,202	451,994	326,653	91,847	1,385,999

Cost Forecast

Total forecasted program costs are approximately \$300 million. Specific forecasts for O&M and Capital will be included in the TY2024 GRC.

SYSTEMS TO BE REPLACED: 21

- Includes Legacy CIS, Major Markets Customer Billing applications, legacy Data Warehouses, front office applications, and other CRM systems

SYSTEMS TO BE REMEDIATED: 6

- Multiple Reporting & Analytics systems require remediation due to changes in the data model

SYSTEMS TO BE INTEGRATED WITH NEW CIS: 55

Examples Include:

- Customer Contact Center (CCC) technology
- Digital Channel technology, including MyAccount
- Existing enterprise SAP subsystems
- Advanced Metering systems
- Customer Services Workforce Management (WFM) systems
- Payment processing & collections management systems

CIS DISPOSITION SUMMARY

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Area: CIS REPLACEMENT PROGRAM
Witness: Evan D. Goldman

Appendix A: List of Non-Shared Cost Centers

Cost Center	Sub	Description
2200-0804	000	CIS - WORK MANAGEMENT SYSTEM
2200-0853	000	CIS-WMS-VISTA
2200-8940	000	Customer Services – Vista