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CHAPTER 2
PREPARED DIRECT TESTIMONY OF
GABRIEL CHONG AND DENNIS ENRIQUE

ON BEHALF OF
SOUTHERN CALIFORNIA GAS COMPANY
AND
SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

May 1, 2026

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1 **DIRECT TESTIMONY OF GABRIEL CHONG AND DENNIS ENRIQUE**

2 **I. INTRODUCTION**

3 The purpose of this testimony is to describe the activities proposed to be undertaken to
4 continue the migration of the SAP enterprise resource planning platform (ERP or ERP
5 platform),¹ shared by Southern California Gas Company (SoCalGas), San Diego Gas & Electric
6 Company (SDG&E; together, Joint Utilities) through their SAP Migration Program (Program).²
7 This testimony explains the Program structure, implementation plan, scope, and timeline, and
8 describes the business and technical outcomes Joint Utilities expect to achieve. The Program
9 scope proposed in this testimony, which includes operating and maintenance activities (O&M)
10 for Phase 1 (i.e., Phase 1B) along with Phase 2 O&M and capital activities, mitigates the
11 technical and functional challenges introduced by SAP’s announcement to cease support for four
12 crucial components (i.e., the ERP-connected systems) that comprise the SAP ecosystem by the
13 end of 2027. Further, this testimony and accompanying workpapers³ describe the forecasted
14 direct costs totaling \$290.7 million⁴ associated with these proposed activities, and the business
15 and productivity benefits that are expected to occur after the Program is executed.

16 The approach proposed reflects a phased response governed by formal stage gates,⁵
17 independent quality assurance, and executive oversight to an externally mandated technological

1 ¹ An ERP is an integrated platform used for financial management, supply chain operations, work order processing, and other core business processes.

2 ² Note that Sempra’s Shared Services Corporate Center (Corporate Center) also utilizes the ERP. As described in Chapter 3, SoCalGas is the primary user of the ERP and thus maintains the shared asset on its books. Costs are allocated and billed by SoCalGas to SDG&E and Corporate Center based on the number of employees using the software. Costs allocated to Corporate Center are then reallocated to SoCalGas, SDG&E, and other Sempra affiliates as appropriate. *See* Chapter 3, the Prepared Direct Testimony of Rae Marie Yu, Maria Becerra, DJ Scott, Marjorie Schmidt-Pines, and Rachelle Baez, at YBSPB-7-9.

3 ³ *See* Workpapers Supporting the Prepared Direct Testimony of Gabriel Chong and Dennis Enrique.

4 ⁴ Direct costs presented in this testimony are in nominal dollars. The total forecasted Enterprise-wide loaded and escalated costs of approximately \$348 million are presented in Chapter 3 at YBSPB-4.

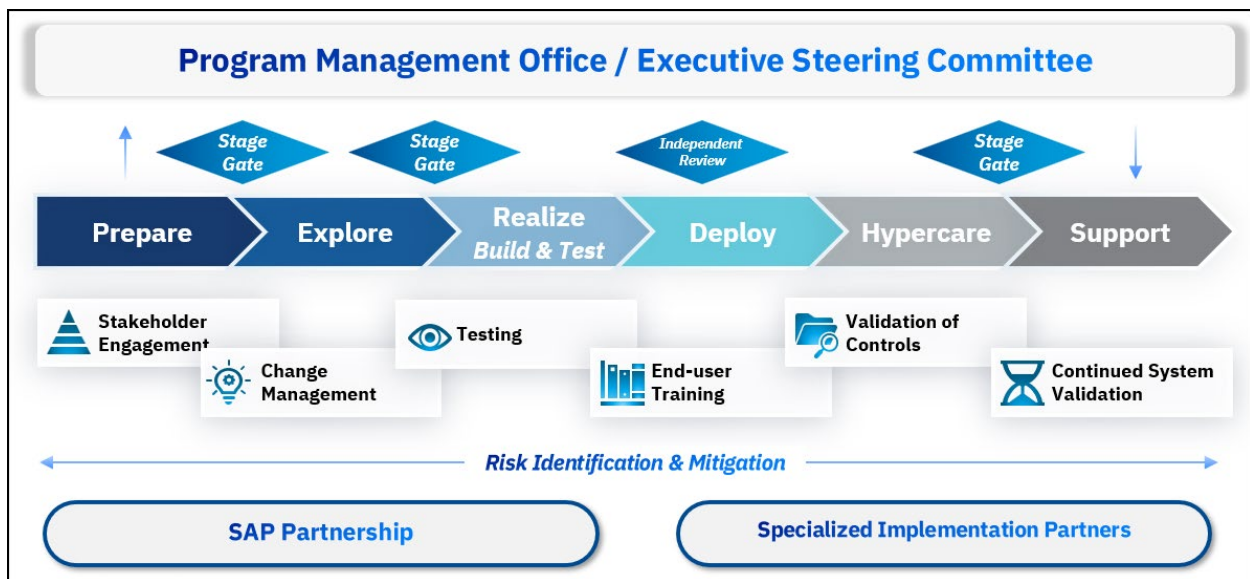
5 ⁵ Stage gates are formal management review and approval checkpoints used to confirm scope, cost, schedule, and risk readiness before authorizing progression to the next release or phase of the Program.

1 transition.⁶ Specifically, the phased efforts proposed in this SAP Migration Program maintain
 2 continued system viability and regulatory compliance while exercising responsible stewardship.
 3 If the Program is not approved as proposed, the Joint Utilities will be left with a fragmented
 4 architecture that increases the likelihood of system instability, data integrity issues, weakened
 5 internal controls, and reliance on manual workarounds.

6 **II. PROGRAM STRUCTURE**

7 The Joint Utilities proposes to execute Phase 2 of the SAP Migration Program under an
 8 overarching program structure that establishes centralized governance, decision-making
 9 authority, and independent oversight across all workstreams. As shown in Figure 2-1, under this
 10 structure, technical and business activities are coordinated, sequenced, and controlled under a
 11 unified program execution plan.

12 **Figure 2-1 Integrated Delivery & Governance Framework**



13
 14 **A. Program Execution Plan, Governance, and Assurance Framework**

15 The Program is guided by a formal governance model that includes documented
 16 checkpoints, escalation protocols, and oversight mechanisms reviewed at regular intervals.

⁶ See announcements made by SAP at <https://support.sap.com/en/release-upgrade-maintenance/maintenance-information/maintenance-strategy/s4hana-business-suite7.html?anchorId=section> and <https://news.sap.com/2020/02/sap-s4hana-maintenance-2040-clarity-choice-sap-business-suite-7/>.

1 Execution will be phase-based with stage gates. Each stage of the program--preparation,
2 exploration, realization, deployment, and support--is governed by stage gates that validate
3 completion of required activities before progressing to the next stage.

4 The Program Management Office (PMO) develops and administers a formal stage gate
5 framework so that the Program is executed consistently, transparently, and in alignment with
6 approved established controls and review criteria. Through the management and facilitation of
7 stage gates at key points in the Program lifecycle, the PMO promotes validation of readiness to
8 proceed to subsequent phases, and provides oversight of scope, schedule, cost, and risk. Each
9 stage gate confirms that required activities and deliverables have been completed, that identified
10 risks and issues are understood, addressed or tracked for mitigation, and that the Program
11 remains aligned with expectations and business objectives. Any variances or gaps identified
12 through the stage gate process are documented and addressed through established tracking,
13 escalation and corrective action processes before the Program advances.

1

Figure 2-2: SAP Migration Stage Gates

| SAP Migration Stage Gate | Primary Governance Objective | What the Stage Gate Validates |
|---------------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prepare | Program readiness and governance alignment | Program scope, governance structure, decision authorities, and delivery approach are established; roles, standards, and controls are defined; risks associated with mobilization are identified and managed. |
| Explore | Solution and business alignment | Business requirements, process designs, and solution architecture are sufficiently defined and aligned with Program objectives; regulatory, security, and compliance considerations are incorporated into the design baseline. |
| Realize | Delivery quality and execution control | Configuration, build, and integration activities are progressing in accordance with approved designs; quality controls are functioning; risks, defects, and dependencies are actively managed and transparently reported. |
| Deploy | Operational and organizational readiness | Systems, data, integrations, controls, and users are ready for deployment; testing, cutover planning, training, and change readiness criteria are met; go-live risks are understood and accepted by governance bodies. |
| Hypercare⁷ | Post-deployment stabilization and risk mitigation | System performance, data, processes, and controls are monitored against defined criteria; issues are identified, prioritized, and resolved through established escalation processes; readiness to transition to steady-state operations is confirmed. |
| Support | Stabilization and benefits realization | System performance, business operations, and controls are stable post deployment; issues are addressed through formal processes; transition to steady state support is completed, and expected benefits can be realized. |

2

The above stage gates support compliance, readiness, and alignment across stakeholders

3

within the Joint Utilities through the following framework elements:

⁷ Hypercare is a time-bound, intensified support period immediately following a major change such as a product launch, system release, migration, or process rollout. Its purpose is to stabilize operations, quickly resolve issues, and support successful adoption before transitioning to normal support.

- 1 • Quality assurance: Quality assurance resources provide objective oversight,
2 validate deliverables, and confirm adherence to standards and regulatory
3 expectations.
- 4 • Proactive risk management: Risks are identified early and tracked through formal
5 registers, with controls embedded throughout the Program lifecycle to support
6 continuous mitigation.
- 7 • Stakeholder engagement and transparency: Structured workshops and
8 documented decisions provide for stakeholder input to be captured, reviewed, and
9 aligned with Program objectives.
- 10 • Organizational readiness and change management: Cross-functional experts from
11 across the Joint Utilities are actively engaged to validate business processes,
12 support change adoption, and promote operational readiness. Cutover rehearsals
13 and support activities are planned and documented to maintain business continuity
14 and user confidence.
- 15 • Traceable documentation: All phases produce formal deliverables—including
16 plans, decisions, test results, and risk logs—maintained in a centralized repository
17 to support auditability, compliance review, and program documentation.

18 **B. The Program Management Office (PMO)**

19 The PMO serves as the central governance authority for the SAP Migration Program
20 Implementation Plan, supporting transparency, accountability, and alignment with strategic
21 objectives throughout the Program lifecycle.

22 The PMO establishes and enforces formal governance practices, administers quality
23 assurance review at each stage gate to validate compliance and readiness, and oversees risk
24 management activities to maintain business continuity. It coordinates stakeholder engagement
25 and change management efforts, facilitates structured reporting to the Executive Steering
26 Committee and Joint Utility stakeholders, and manages vendor relationships so that technical
27 deliverables meet requirements. By providing disciplined oversight of scope, schedule, and
28 budget, the PMO supports cost control, decision transparency, and alignment with delivery
29 commitments.

1 **C. Implementation Partners**

2 To successfully deliver a system migration of this scale and complexity, the Joint Utilities
3 will engage a combination of specialized implementation partners, each serving a distinct but
4 complementary role. Industry leading practices distinguish between the roles of a System
5 Integrator (SI) and a Business Integrator (BI) in large-scale implementations like the Phase 2
6 migrations.

7 A System Integrator is responsible for the technical execution of the program. This
8 includes system architecture, configuration, data migration, testing, and deployment. Their focus
9 is on a solution that is technically sound, secure, and aligned with SAP’s platform standards and
10 roadmap.^{8,9}

11 A Business Integrator aligns the solution with the Joint Utilities’ business needs and
12 prepares the organization for the change. This team works closely with business stakeholders to
13 validate processes and support change management activities. They help translate business
14 requirements into system capabilities, coordinate readiness across impacted functions, and lead
15 training efforts to equip users with the knowledge and confidence needed to operate effectively
16 in the new environment.

17 In addition, the Joint Utilities will work directly with SAP to maintain alignment with the
18 vendor’s direction, future innovations, and support model. This collaboration helps the solution
19 remain compatible with SAP’s evolving roadmap and capabilities, supporting a successful
20 migration.

21 Engaging both SI and BI partners alongside SAP facilitates migration so that it is not
22 only technically robust but also operationally effective, SAP-Standard-Based, and future-ready.

⁸ For additional information regarding System Integrators, *see* Edmondson, James. “What is a System Integrator? Role, benefits & Best Practices.” Business Tech Weekly, November 24, 2024, available at <https://www.businesstechweekly.com/operational-efficiency/outsourcing-and-supplier-management/what-is-a-system-integrator/#What-is-a-System-Integrator>.

⁹ For additional information regarding Business Integrators, *see* Lawinsky, Jennifer. “The Critical Role of Business Integrators in SAP S/4HANA Implementations.” SAP Insider, March 28, 2025, available at <https://sapinsider.org/map/the-critical-role-of-business-integrators-in-sap-s-4hana-implementations/>; “Unlocking Success: KPMG’s Business Integrator for SAP S/4 Transformation.” KPMG, 2024, available at [business-integrator-sap-s4.pdf](#).

1 **III. IMPLEMENTATION PLAN**

2 The implementation is organized into two parallel but tightly integrated tracks: (1) a
3 Technical Implementation Track, and (2) a Business Implementation Track. Both tracks apply to
4 the scope covered in the next section. Operating with a unified structure avoids fragmented
5 delivery and allows technical and business scopes to reinforce one another rather than
6 introducing new risks.

7 **A. Technical Implementation Track**

8 The Technical Implementation Track focuses on remediating SAP components reaching
9 end of support and resolving technical risks related to system stability, cybersecurity, and
10 integration. Guidance published by the National Institute of Standards and Technology (NIST)¹⁰
11 emphasizes that effective incident handling begins with preparation activities focused on risk
12 prevention, rather than solely on post-incident response. As part of this preparation, NIST
13 identifies legacy and unsupported software as a significant source of cyber risk due to the
14 absence of vendor security patches and ongoing support, making such systems attractive targets
15 for cyber threats.

16 The Technical Implementation Track encompasses the execution of all system-level
17 changes required to remediate ERP-connected system components that are reaching or have
18 reached end of vendor support and to address associated technical risks. This work includes
19 replacing unsupported SAP components for continued compatibility with SAP’s supported
20 product roadmap.¹¹

21 Through this track, the Joint Utilities execute the technical activities necessary to
22 maintain a secure, stable, and supportable SAP environment while minimizing operational and
23 customer impacts during transition.

¹⁰ See National Institute of Standards and Technology (NIST), Computer Security Incident Handling Guide, Special Publication 800 61, Revision 2 (August 2012), superseded by Revision 3 (April 2025) <https://csrc.nist.gov/pubs/sp/800/61/r3/final>.

¹¹ SAP publishes a product roadmap that describes its intended strategic direction and planned evolution of SAP S/4HANA. The roadmap is a planning tool and is subject to change.

- 1 • **SAP Activate Methodology** – The Joint Utilities will follow SAP’s delivery
2 methodology,¹² progressing through the Prepare, Explore, Realize, Deploy,
3 Hypercare, and Support phases. Each phase includes defined activities,
4 deliverables, and documentation requirements.
- 5 • **Stage Gates and Entry/Exit Criteria** – Formal gates are established between
6 phases for quality assurance. Advancement to the next stage requires confirmation
7 that defined entry and exit criteria are met, including completion of required
8 deliverables, readiness assessments, and risk mitigation actions.
- 9 • **Independent Quality Assurance** – Independent quality assurance resources
10 provide objective validation of deliverables, controls, and readiness throughout
11 the lifecycle. These reviews strengthen transparency and support traceability.
- 12 • **PMO, Governance, Decision Rights, Documentation/Traceability** – As
13 described above, a centralized PMO oversees scope, schedule, risk, and reporting.
14 Governance structures define decision rights and escalation paths. All Program
15 artifacts are maintained in a centralized repository to support traceability and
16 regulatory review.

17 **B. Business Implementation Track**

18 The Business Implementation Track focuses on supporting continuity of current
19 processes and controls in the supported environment, preparing the organization for the transition
20 to supported systems and avoiding operational, compliance and audit risks associated with
21 unsupported systems.

- 22 • **Process Alignment to Support System Requirements** - Structured reviews of
23 existing legacy processes to identify variations, manual workarounds, and
24 compliance dependencies that arise due to obsolete technology.
- 25 • **Policies and Controls Workstream** – A dedicated workstream maps existing
26 regulatory, audit, and internal controls to supported system configurations to
27 support continuity and auditability. Controls are preserved, or enhanced, with

¹² More information about SAP Activate Methodology is available at
<https://www.sap.com/products/erp/activate-methodology.html>.

1 opportunities to embed automation and reduce manual intervention, without
2 expanding control scope or requirements.

- 3 • **Data Governance and Reporting Continuity** – Establishes data ownership,
4 stewardship, and validation practices necessary to replace unsupported tools, and
5 maintain existing regulatory and financial reporting capabilities.
- 6 • **Organizational Change Management, Training, Communications** –
7 Organizational readiness is supported through impact assessments, change agent
8 networks, targeted communications, and role-based training.

9 **IV. SCOPE OF SAP MIGRATION PROGRAM ACTIVITIES**

10 **A. Phase 1B Activities**

11 Migration of the core SAP ERP Platform from ERP Central Component (ECC) to
12 S/4HANA has a targeted go-live date of May 2027.¹³ Phase 1B completes the O&M activities
13 associated with the core ERP platform in parallel to remaining Phase 1A activities.¹⁴ Phase 1B
14 has two primary streams of work related to the core ERP platform: data migration and
15 organizational change management activities. Data migration is the act of copying data from the
16 SAP ECC source system, putting it through data cleansing routines for data integrity, and
17 eventually loading into the target system, SAP S/4HANA. There are five instances of data
18 migration within Phase 1B, with each successive iteration improving the data quality.
19 Organizational change management activities include planned stakeholder communications,
20 assessment of organizational and role-based impacts, development and delivery of targeted
21 training, and coordinated actions to support workforce readiness, adoption, and transition to the
22 new operating environment. Phase 1B also includes conducting a competitive solicitation process
23 in 2027 for Phase 2 activities so Phase 2 can be commenced promptly after a final decision in
24 this proceeding.¹⁵ The following are the forecasted direct costs of Phase 1B activities, all of
25 which are O&M.

¹³ For more information about SAP S/4HANA, see “SAP S/4HANA Overview and Learning Guide,” available at <https://learning.sap-press.com/sap-s4hana-overview-benefits>.

¹⁴ Costs for Phase 1B could not have been sought in the Joint Utilities’ prior GRC. Phase 1B work has been necessitated by Joint Utilities’ decision to pursue a migration rather than a transformation of their ERP and was not estimable for the prior GRC.

¹⁵ Note that no contracts for Phase 2 will be executed prior to a final decision in this proceeding.

1 **Table 2-1: Phase 1B Forecasted Direct Costs**

| SAP Migration Program - Phase 1B (S000s) | Forecast | | Total |
|------------------------------------------|----------------|----------------|-----------------|
| | 2026 | 2027 | |
| Phase 1B - O&M | \$6,970 | \$4,950 | \$11,920 |
| Total Direct Cost | \$6,970 | \$4,950 | \$11,920 |

2
3 **B. Phase 2 Activities**

4 Phase 2 will address the remaining areas of technical and business obsolescence that were
5 not included in Phase 1 but are required to complete the Program’s objective of migrating to a
6 supported ERP Platform and ERP-connected systems. Phase 2 is structured into sequenced
7 releases that are expected to complete implementation in 2030. Technical component
8 replacements are bundled into Release 1 to address software interdependence and reduce
9 cumulative risk, while remediation of system and process obsolescence required to maintain
10 regulatory compliance, along with a targeted modernization effort to improve cost capture and
11 long-term operational sustainability, are sequenced into two subsequent releases (Releases 2 and
12 3).

13 **Figure 2-3: SAP Migration Program Release Schedule¹⁶**



14
15 **1. Technical Obsolescence Remediation (Release 1)**

16 Phase 2 includes the migration of the following ERP-connected systems that SAP has
17 indicated are entering end-of-maintenance cycles at the end of 2027. As a result, they will no

¹⁶ Timeline for Phase 2 based on the assumption that Commission resolves this Application within 12 months of the filing date and is subject to change if a final decision is issued beyond this timing.

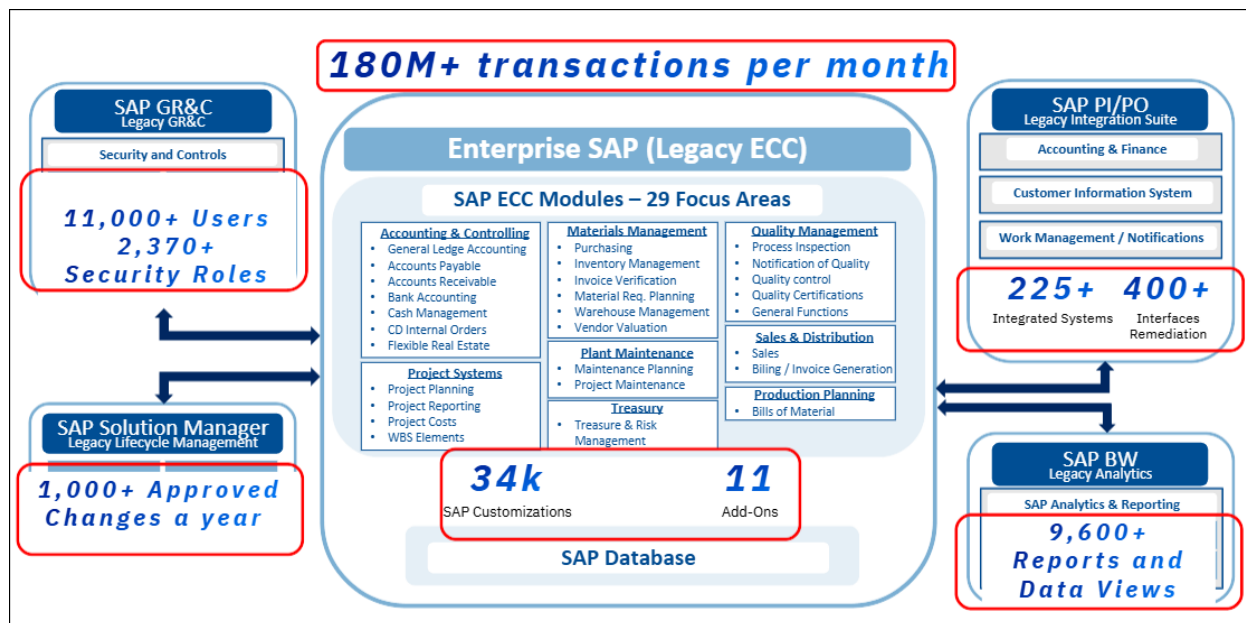
1 longer receive standard support, security patches, legal updates, regulatory updates, or defect
2 corrections after their respective end-of-maintenance dates.¹⁷

- 3 • **SAP PI/PO (Process Integration/Process Orchestration):** Enables secure inter-
4 application data exchange, supporting connectivity between SAP and non-SAP
5 systems across the enterprise.
- 6 • **SAP GR&C (Governance, Risk, and Compliance):** Oversees user access, roles,
7 and segregation of duties, providing critical controls to maintain compliance.
- 8 • **SAP Solution Manager:** Facilitates planning, approval, and implementing
9 system changes, supporting operational stability and adherence to regulatory
10 requirements.
- 11 • **SAP BW (Business Warehouse):** Manages financial and operational reporting
12 through more than 9,600 reports, requiring continuous synchronization with ERP
13 data to maintain accuracy and compliance.

14 The Joint Utilities' current SAP technology environment, which utilizes these ERP-
15 connected systems, is further characterized as follows:

¹⁷ For announcements made by SAP, see <https://support.sap.com/en/release-upgrade-maintenance/maintenance-information/maintenance-strategy/s4hana-business-suite7.html?anchorId=section> and <https://news.sap.com/2020/02/sap-s4hana-maintenance-2040-clarity-choice-sap-business-suite-7/>. See also SAP Note Number 2881788 (me.SAP.com).

Figure 2-4: Current SAP Environment¹⁸



The replacement of SAP Process Orchestration (PI/PO), Governance, Risk & Compliance (GR&C), SAP Solution Manager, and SAP Business Warehouse (BW) will be executed concurrently as a single, bundled implementation (Release 1). As described below, these ERP-connected systems are tightly integrated and support end-to-end financial processing, application lifecycle management, and internal controls. Implementing them as a unified release reduces overall program risk, avoids redundant integration work, reduces the likelihood of extended dual-maintenance costs, and limits operational disruption that would result from staggered deployments.

The forecasted direct cost of Release 1 is \$140.2 million, which includes software licensing and subscriptions, system integration services, data migration and testing activities, internal labor, and change management. This investment is necessary to maintain reliable financial reporting, comply with regulatory requirements, and migrate the Joint Utilities' ERP-connected systems in a manner that is coordinated and cost-effective over the long term.

¹⁸ As of April 2026.

1 **Table 2-2: Phase 2 Release 1 Forecasted Direct Costs¹⁹**

| SAP Migration Program - Phase 2 Release 1 (\$000s) | Forecast | | Total |
|-------------------------------------------------------|-----------------|-----------------|------------------|
| | 2027 | 2028 | |
| Phase 2 - Release 1 - Capital | \$78,187 | \$44,448 | \$122,635 |
| Phase 2 - Release 1 - O&M | \$9,840 | \$7,723 | \$17,563 |
| Total Direct Cost | \$88,027 | \$52,170 | \$140,197 |

2
3 a. *SAP PI/PO replaced with SAP Business Technology Platform (BTP)*
4 *Integration Suite (Integration Suite)*

5 The Joint Utilities' enterprise application landscape includes approximately 225
6 integrated applications and more than 400 interfaces that currently rely on the legacy SAP PI/PO
7 ERP-connected system. These integrations support critical business processes across finance,
8 operations, regulatory reporting, and customer-facing functions. As SAP PI/PO approaches the
9 end of its supported lifecycle and is not aligned with SAP's strategic roadmap, all dependent
10 applications and interfaces must be migrated and remediated to supported ERP-connected
11 system.

12 Although this is a like-for-like functionality replacement, the migration from SAP PI/PO
13 to SAP Integration Suite represents a significant and complex undertaking. SAP Integration Suite
14 is a fundamentally different, cloud-based ERP-connected system that requires new security
15 configurations, connectivity models, monitoring capabilities, and governance controls. Each
16 existing interface must be individually assessed, redesigned or rebuilt as necessary, secured, and
17 thoroughly tested to validate functional accuracy, data integrity, and performance consistency
18 prior to reintegration with the ERP Platform and other dependent applications.

19 Given the breadth of application integrations and the criticality of the underlying business
20 processes, the migration effort requires coordinated sequencing across technical and business
21 workstreams across the Joint Utilities' functional, technical, and operational teams. This includes
22 coordination with application owners, designated business and IT owners responsible for data
23 quality, cybersecurity, compliance, and external partners to sequence interface migrations,
24 manage dependencies, and reduce the likelihood of operational disruption. Parallel operations,
25 controlled cutovers, and rigorous testing will be required to reduce risk to business continuity

¹⁹ Subtotals may include rounding differences.

1 and regulatory reporting. The Joint Utilities estimate a 12-month timeline to properly transition
2 from SAP PI/PO to SAP Integration Suite.

3 *b. SAP GR&C replacement with SAP GR&C for HANA*

4 The Joint Utilities' GR&C ERP-connected system supports access controls, segregation
5 of duties, audit monitoring, and compliance reporting for approximately 11,000 SAP users across
6 financial, operational, and regulatory systems. As the Joint Utilities transition their SAP
7 landscape to S/4HANA, the existing GR&C ERP-connected system must be replaced with SAP
8 GR&C for HANA to maintain compatibility with vendor support.

9 The transition will require securing, configuring, and validating the new GR&C for
10 HANA environment to align with the Joint Utilities' security policies, regulatory requirements,
11 and internal control framework. Each user role, including privileged, operational, and
12 regulatory-sensitive roles, must be individually tested, remediated as necessary, and migrated for
13 continued enforcement of segregation-of-duties rules, access approvals, and audit traceability.

14 This approach is designed to support access governance, segregation-of-duties
15 enforcement, and audit traceability during the transition, while maintaining alignment with
16 financial reporting and regulatory requirements.

17 Given the scale of the user population, the complexity of role mappings, and the need for
18 extensive testing and parallel operation to avoid disruption, the Joint Utilities estimate that
19 completing the GR&C replacement will require a 12-month timeline. This includes system
20 configuration, role redesign and remediation, integration with dependent SAP applications, user
21 validation, audit review, and controlled cutover to the new system.

22 *c. SAP Solution Manager replaced with SAP Cloud ALM (Application*
23 *Lifecycle Management)*

24 The Joint Utilities process and govern over 1,000 ERP platform changes annually,
25 including platform enhancements, software updates, regulatory updates, and production fixes
26 across their enterprise application landscape. These changes are currently managed using SAP
27 Solution Manager.

28 Migrating from SAP Solution Manager to SAP Cloud ALM ERP-connected system will
29 allow for continued vendor support, improve operational resiliency, and align the Joint Utilities'
30 application lifecycle management capabilities. Cloud ALM provides visibility into platform

1 health, change execution, and release readiness, while simplifying platform architecture and
2 reducing technical debt associated with on-premises tooling.

3 The transition to Cloud ALM will also improve governance and control over platform
4 changes by standardizing change management workflows, strengthening traceability for audit
5 and compliance purposes, and enabling faster identification of defects. These capabilities are
6 particularly critical given the volume of annual changes and the Joint Utilities' regulatory
7 obligations related to financial reporting, cybersecurity, and operational reliability.

8 The Joint Utilities estimate a 9-to-12-month effort to complete the migration from SAP
9 Solution Manager to SAP Cloud ALM. This timeframe includes configuration, data and process
10 migration, integration with existing ERP-connected systems, user training, and validation to
11 maintain continuity of change management, testing, and monitoring functions throughout the
12 transition.

13 *d. SAP BW replaced with SAP Business Data Cloud (BDC)*

14 The Joint Utilities' financial analytics environment is currently supported by SAP BW,
15 which underpins approximately 9,600 regulatory, financial, and operational reports and
16 associated data models. As SAP BW will no longer be supported, these assets must be migrated
17 to SAP Business Data Cloud (BDC) to provide continued vendor supportability, integrity with
18 SAP S4/HANA, and long-term scalability.

19 The migration effort is complex and resource-intensive, requiring detailed remediation,
20 validation, and parallel testing of each report and data model to preserve historical accuracy,
21 regulatory traceability, and downstream integrations with finance, rates, and operational systems.
22 The Joint Utilities estimate this work will require approximately 12 months, reflecting the
23 volume of artifacts, the need for dual-system operation during transition, and the rigor required
24 for regulatory and financial controls testing.

25 **2. Business and Process Obsolescence Remediation (Releases 2 & 3)**

26 Releases 2 and 3 address two distinct but related objectives: (1) remediation of system
27 and process obsolescence required to maintain regulatory compliance, and (2) one targeted
28 modernization to improve cost capture and long-term operational sustainability.

29 Release 2 focuses on obsolescence remediation through the replacement of the
30 unsupported Special Purpose Ledger (SPL). SPL is no longer vendor-supported and relies on
31 highly customized functionality. Its replacement is required to continue compliance with FERC

1 regulatory reporting requirements. Release 3 advances process modernization by transitioning
 2 the Cost Capture Model into the activity-based Work Breakdown Structure (WBS) approach.
 3 Together, these releases address compliance risks associated with unsupported systems, while
 4 modernizing key cost-capture processes to support long-term regulatory, financial, and
 5 operational objectives.

6 *a. Replacement of the Unsupported SPL to Comply with Regulatory*
 7 *Requirements for FERC Reporting (Release 2)*

8 The Joint Utilities currently rely on a SPL and legacy tools to derive FERC accounts for
 9 regulatory reporting which is not supported in SAP S/4HANA. The CPUC requires utilities to
 10 comply with FERC’s Uniform System of Accounts to support consistent reporting, including
 11 FERC Forms 1 and 2 and regulatory audits.²⁰

12 As part of Phase 2, the Joint Utilities will replace SPL by implementing and configuring
 13 SAP’s S/4 Universal Ledger to capture required FERC account information. This requires
 14 designing and developing the logic in SAP S/4HANA so that FERC account information is
 15 configured and recorded directly in the system as transactions occur, rather than derived later
 16 through unsupported systems. This approach eliminates reliance on obsolete systems, improves
 17 maintainability, and supports ongoing regulatory reporting directly from SAP S/4HANA. The
 18 Joint Utilities estimate 12 to 15 months to replace the legacy SPL derivation logic and
 19 incorporate it into the SAP S/4 Universal Ledger, with a forecasted cost of \$54.8 million in
 20 Release 2.

21 **Table 2-3: Phase 2 Release 2 Forecasted Direct Costs²¹**

| SAP Migration Program - Phase 2 Release 2 (\$000s) | Forecast | | | Total |
|-------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| | 2028 | 2029 | 2030 | |
| Phase 2 - Release 2 - Capital | \$11,656 | \$21,813 | \$11,296 | \$44,765 |
| Phase 2 - Release 2 - O&M | \$2,462 | \$4,611 | \$2,958 | \$10,031 |
| Total Direct Cost | \$14,118 | \$26,424 | \$14,254 | \$54,796 |

22 *b. Activity-Based Cost Capture with WBS Model (Release 3)*

23 The Joint Utilities currently operate with a cost capture model that relies on Internal
 24 Orders (IOs) to record project costs. IOs were designed for small, simple activities and are not
 25

²⁰ D.03-12-056 at 10-11.

²¹ Subtotals may include rounding differences.

1 well suited for today's large, complex, asset intensive projects. As a result, the Joint Utilities
2 have relied on custom logic and workarounds to link large numbers of IOs to track full project
3 costs and meet regulatory reporting requirements. This model is outdated, and WBS offers a
4 more appropriate and standardized approach.

5 WBS is designed specifically to plan, manage, and control large, multi-phase projects.
6 WBS is hierarchically structured, with nested elements that represent project phases and the
7 activities within each phase. This structure supports detailed cost planning, budgeting, and
8 reporting across the full lifecycle of a project. Because more than 75 percent of the
9 Joint Utilities' transactions in SAP are project-based, WBS will replace IOs and the associated
10 custom IO extensions as the standard method for capturing project costs.

11 As part of this strategic modernization, the Joint Utilities will replace existing custom
12 logic embedded in work management processes across project-heavy areas such as Distribution,
13 Transmission, Construction, and Information Technology with a standardized WBS-based
14 approach. This change modernizes how project costs are recorded and aligns cost capture with
15 standard ERP platform capabilities.

16 Adopting WBS also allows the Joint Utilities to standardize interfaces between SAP
17 S/4HANA and downstream financial and regulatory reporting systems, improving platform
18 performance and reducing complexity during each monthly close cycle. In addition, the Joint
19 Utilities will enhance the FERC derivation logic described in the SPL section above to
20 incorporate WBS information directly into the SAP S/4HANA Universal Ledger in near real
21 time. This enables more streamlined reporting and provides the necessary structure to categorize
22 costs by project, phase, activity, and milestone with less manual intervention.

23 As part of Release 3, the Joint Utilities will modernize the obsolete cost capture model
24 over a 24-month timeline to implement WBS in SAP S/4, with a forecast of \$83.8 million.

1 **Table 2-4: Phase 2 Release 3 Forecasted Direct Costs²²**

| SAP Migration Program - Phase 2 Release 3 (\$000s) | Forecast | | | Total |
|-------------------------------------------------------|-----------------|-----------------|-----------------|-----------------|
| | 2028 | 2029 | 2030 | |
| Phase 2 - Release 3 - Capital | \$13,241 | \$36,306 | \$24,204 | \$73,751 |
| Phase 2 - Release 3 - O&M | \$2,231 | \$4,611 | \$3,189 | \$10,031 |
| Total Direct Cost | \$15,472 | \$40,917 | \$27,393 | \$83,782 |

2
3 This WBS-based cost capture modernization builds on the SAP S/4HANA data model
4 and Universal Ledger implemented in Phase 1. Sequencing this work within the existing program
5 execution window leverages the active program team, integrated testing cycles, and
6 implementation planning already in place. Deferring this work would require remobilization of
7 resources and a separate round of planning, testing, and deployment activities.

8 **V. SAP MIGRATION PROGRAM COST FORECAST (2026-2030)**

9 This section provides further detail for Phase 1B and Phase 2 of the SAP Migration
10 Program direct costs, where the total capital and O&M expenditures forecasted are estimated
11 at \$290.7 million.

12 **Table 2-5: SAP Migration Program Direct Cost Forecast²³**

| SAP Migration Program (\$000s) | Forecast | | | | | Total |
|-----------------------------------|----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| | 2026 | 2027 | 2028 | 2029 | 2030 | |
| Phase 1B O&M | \$6,970 | \$4,950 | - | - | - | \$11,920 |
| Phase 2 O&M | - | \$9,840 | \$12,415 | \$9,221 | \$6,147 | \$37,624 |
| Subtotal - O&M | \$6,970 | \$14,790 | \$12,415 | \$9,221 | \$6,147 | \$49,544 |
| Phase 2 Capital | - | \$78,187 | \$69,345 | \$58,119 | \$35,500 | \$241,151 |
| Subtotal - Capital | \$0 | \$78,187 | \$69,345 | \$58,119 | \$35,500 | \$241,151 |
| Total Direct Cost | \$6,970 | \$92,977 | \$81,760 | \$67,340 | \$41,647 | \$290,695 |

13
14 The estimates in this Application include only Program-specific work that is incremental
15 to Joint Utilities' prior and next GRC and are based on reasonable assumptions, which include
16 evaluations that were performed to identify scope, pricing, and delivery approach through
17 information from qualified vendors with demonstrated utility experience. Joint Utilities plan to
18 work with established partners that have experience helping energy utility companies update and
19 modernize their ERP platform. These partners will help guide the Program, apply proven

²² Subtotals may include rounding differences.

²³ Subtotals may include rounding differences.

1 approaches, support employees through the change, and make sure the new ERP-connected
2 systems are built and tested to meet the Joint Utilities' needs.

3 **A. Description and Breakdown**

4 Detailed breakdowns of the \$290.7 million forecasted costs by description are provided
5 in Tables 2-5 through 2-8 below. Further details regarding the forecasted costs are provided in
6 the workpapers for this testimony.

7 **1. System Integrator (SI)**

8 SI will be selected after a competitive solicitation process conducted in Phase 1B and will
9 provide specialized SAP implementation expertise and established delivery methodologies that
10 are not practical to resource internally and are necessary to mitigate execution risk. The SI will
11 be responsible for end-to-end solution implementation activities, including solution design and
12 architecture, ERP-connected system configuration, integration with existing and third-party
13 applications, testing and quality assurance, deployment, and post go-live stabilization and
14 optimization. These activities reinforce that the SAP solution will be implemented in a manner
15 that is scalable, secure, and aligned with Joint Utilities' business and operational requirements.

16 SI will provide a dedicated technology-centric Program Management Office (SI PMO)
17 that supports governance and delivery oversight in coordination with the Joint Utilities' PMO.
18 The SI PMO will establish the program framework; coordinate planning across multiple
19 workstreams and vendors; manage risks, issues, and dependencies; and support status reporting
20 to executive stakeholders. This governance structure is necessary to maintain accountability,
21 alignment, and reduce execution risk across a multiphase program. Engagement of the SI is
22 necessary to reinforce a disciplined, controlled, and compliant execution of the Program.

23 **2. Business Integrator (BI)**

24 Given the enterprise-wide scope of the Program and the extent of operational change
25 across multiple functions, the BI role is necessary to support risk mitigation, business adoption,
26 and effective program execution. The BI will be selected after a competitive solicitation process
27 conducted in Phase 1B and serves as the primary bridge between business stakeholders and
28 technical delivery teams, translating business requirements into executable program activities
29 and supporting readiness for new ERP-connected systems, processes, and controls. The BI will
30 be responsible for business readiness planning, organizational change management,

1 communications, training coordination, and oversight quality assurance across key workstreams,
2 including controls, security, and user adoption.

3 The BI scope will include delivery of a dedicated BI Program Management Office (BI
4 PMO) that complements the SI and Joint Utilities' PMOs. The BI PMO will support governance,
5 coordination, and transparency across BI-managed workstreams and provide proactive quality
6 assessment to identify and mitigate risks that could affect program outcomes. The forecasted BI
7 costs reflect activities related to program oversight quality assessment, BI PMO services,
8 communications and training, organizational change management, and business readiness.

9 **3. SAP Technology Solution**

10 The Joint Utilities' SAP Technology scope includes software licenses and cloud-based
11 subscription services required to support implementation and ongoing operation of the SAP
12 solution, as well as associated professional services necessary to configure, integrate, and deploy
13 the technology. As an existing customer of SAP, the cost of licenses, cloud services and SAP
14 professional services will be refined with SAP after a final Commission decision approving the
15 Application is issued. The SAP ERP-connected system components are required to enable core
16 business functions, support data management and analytics, support application integration and
17 security, and maintain compliance and operational reliability in a cloud-based ERP platform
18 environment.

19 The software licenses and subscriptions support modern SAP architecture and include
20 capabilities for data management, analytics, integration, application development, automation,
21 governance, and risk and compliance. These components are necessary to support business
22 processes, enable interoperability between SAP and non-SAP platforms, and provide scalable
23 and secure access to business-critical information.

24 In addition to software licenses and subscriptions, SAP professional services are also
25 required to support implementation. These services include configuration, integration, testing,
26 deployment, and automation activities, as well as SAP MaxAttention services. SAP
27 MaxAttention provides structured technical assurance, access to SAP's highest tier of support,
28 and proactive quality controls to reduce implementation risk and validate the solution is built in
29 accordance with SAP best practices. These services are appropriate given the complexity and
30 criticality of the Program.

4. Program, Business, and Technology Delivery

The Program Delivery work stream is required to provide oversight for coordinated, controlled, and effective execution of the SAP program across all phases of planning, implementation, and deployment.

Given the size, complexity, and cross-functional nature of the Program, dedicated delivery resources, comprised of Joint Utilities employees and external contractors, are reasonable and necessary to maintain governance, manage dependencies, and support business readiness and operational continuity. Program Delivery resources will provide enterprise level governance and oversight, including the establishment of decision-making structures, performance metrics, and alignment with enterprise strategy and regulatory requirements. This workstream will support engagement with business leaders and end users throughout the Program lifecycle and play a central role in coordinating testing, cutover, and go-live activities as well as timely resolution of issues and business signoff on key deliverables.

Business Delivery resources will be responsible for supporting alignment of the SAP solution with operational needs and support effective adoption across the Joint Utilities. Business Delivery resources will serve as functional subject matter experts and process owners, representing key business areas during design, configuration, and testing. They will support requirements definition and validation, participate in User Acceptance Testing (UAT), and support cutover and stabilization activities. Post-implementation, these resources will contribute to continuous improvement by identifying opportunities to optimize processes and system usage.

Technology Delivery resources will provide foundational technical support necessary to design, build, integrate, and operate the SAP ERP platform. These resources will be responsible for platform architecture and infrastructure, integrations with legacy and third-party applications, security and access controls, technical testing, data migration execution, and post go-live support. The Technology Delivery scope will include internal labor, contract labor, and professional services required to maintain platform stability, support audit readiness, and regulatory compliance.

Across Program, Business, and Technology Delivery, ongoing O&M activities will support change management, training coordination, data preparation and validation, documentation, and knowledge transfer to operational support teams. These activities are scoped to maintain data integrity, support user readiness, and sustain program outcomes.

1 **5. Other Program Support Costs (Facilities and Travel & Expense)**

2 Supporting effective Program delivery also necessitates incurring facility and travel-
3 related expenses, included in the “Other” cost category. These necessary non-labor expenditures
4 will be incurred by internal staff, consultants, and vendors when supporting Program activities
5 that require physical presence and onsite collaboration. For a program of this scale and duration,
6 these costs are customary and necessary to enable coordinated execution and operational
7 efficiency.

8 Facility costs support operation and maintenance of the physical workspace used by
9 program resources. The workspace provides a safe, secure, and functional environment for
10 program teams to collaborate and execute critical activities. Facility expenses include utilities
11 (electricity, water, gas, and data/telecommunications), routine maintenance and repairs, janitorial
12 services, security or access systems, and facilities management support.

13 Travel and Expense (T&E) costs support onsite collaboration required for key stages of
14 program delivery. These expenses include airfare, lodging, meals, and local transportation for
15 internal resources, the SI, the BI, and other third-party consultants when onsite presence is
16 required for activities such as workshops, stakeholder engagements, testing cycles, and go-live
17 support. Vendor and consultant travel is governed by contractual terms and reimbursed in
18 accordance with agreed-upon rates or actuals, as applicable.

Table 2-6: Phase 1B O&M Forecast (2026-2027)

| SAP Migration Program - Phase 1B (\$000s) | O&M | | Phase 1B Total |
|----------------------------------------------|----------------|----------------|-------------------|
| | 2026 | 2027 | |
| Phase 1B O&M | | | |
| System Integrator | \$1,900 | \$1,900 | \$3,800 |
| Business Integrator | \$3,800 | \$2,700 | \$6,500 |
| SAP Solution - Professional Services | \$300 | - | \$300 |
| Delivery - Labor/Contract Labor | \$900 | \$300 | \$1,200 |
| Other (T&E) | \$70 | \$50 | \$120 |
| Total Direct Cost | \$6,970 | \$4,950 | \$11,920 |

Table 2-7: Phase 2 Release 1 Cost Category Capital Expenditures and O&M Forecast (2027-2028)²⁴

| SAP Migration Program - Phase 2 Release 1 (\$000s) | Release 1 Total | Capital | | Capital Total | O&M | | O&M Total |
|-------------------------------------------------------|--------------------|-----------------|-----------------|------------------|----------------|----------------|-----------------|
| | | 2027 | 2028 | | 2027 | 2028 | |
| Phase 2 - Release 1 | | | | | | | |
| System Integrator | \$85,647 | \$46,083 | \$32,916 | \$78,999 | \$3,878 | \$2,770 | \$6,648 |
| Business Integrator | \$14,669 | \$4,057 | \$3,670 | \$7,727 | \$3,644 | \$3,297 | \$6,942 |
| SAP Solution - Professional Services | \$2,023 | \$1,062 | \$961 | \$2,023 | - | - | \$0 |
| SAP Solution - Licenses | \$17,555 | \$17,555 | - | \$17,555 | - | - | \$0 |
| Delivery - Labor/Contract Labor | \$12,543 | \$5,537 | \$3,955 | \$9,493 | \$1,779 | \$1,271 | \$3,050 |
| Delivery - Professional Services | \$1,640 | \$861 | \$779 | \$1,640 | - | - | \$0 |
| Other (Facility) | \$922 | - | - | \$0 | \$538 | \$384 | \$922 |
| Other (T&E) | \$5,199 | \$3,033 | \$2,166 | \$5,199 | - | - | \$0 |
| Total Direct Cost | \$140,197 | \$78,187 | \$44,448 | \$122,635 | \$9,840 | \$7,723 | \$17,563 |

Table 2-8: Phase 2 Release 2 Cost Category Capital Expenditures and O&M Forecast (2028-2030)²⁵

| SAP Migration Program - Phase 2 Release 2 (\$000s) | Release 2 Total | Capital | | | Capital Total | O&M | | | O&M Total |
|-------------------------------------------------------|--------------------|-----------------|-----------------|-----------------|------------------|----------------|----------------|----------------|-----------------|
| | | 2028 | 2029 | 2030 | | 2028 | 2029 | 2030 | |
| Phase 2 - Release 2 | | | | | | | | | |
| System Integrator | \$23,949 | \$6,985 | \$11,974 | \$4,989 | \$23,949 | - | - | - | \$0 |
| Business Integrator | \$13,202 | \$1,803 | \$3,091 | \$2,060 | \$6,954 | \$1,620 | \$2,777 | \$1,851 | \$6,248 |
| SAP Solution - Professional Services | \$1,821 | \$472 | \$809 | \$539 | \$1,821 | - | - | - | \$0 |
| Delivery - Labor/Contract Labor | \$11,289 | \$1,424 | \$4,272 | \$2,848 | \$8,543 | \$458 | \$1,373 | \$915 | \$2,745 |
| Delivery - Professional Services | \$1,476 | \$383 | \$656 | \$437 | \$1,476 | - | - | - | \$0 |
| Other (Facility) | \$1,038 | - | - | - | \$0 | \$384 | \$461 | \$192 | \$1,038 |
| Other (T&E) | \$2,022 | \$590 | \$1,011 | \$421 | \$2,022 | - | - | - | \$0 |
| Total Direct Cost | \$54,796 | \$11,656 | \$21,813 | \$11,296 | \$44,765 | \$2,462 | \$4,611 | \$2,958 | \$10,031 |

²⁴ Subtotals may include rounding differences.

²⁵ Subtotals may include rounding differences.

Table 2-9: Phase 2 Release 3 Cost Category Capital Expenditures and O&M Forecast (2028-2030)²⁶

| SAP Migration Program - Phase 2 Release 3 (\$000s) | Release 3 Total | Capital | | | Capital Total | O&M | | | O&M Total |
|----------------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|-----------------|
| | | 2028 | 2029 | 2030 | | 2028 | 2029 | 2030 | |
| Phase 2 - Release 3 | | | | | | | | | |
| System Integrator | \$45,184 | \$7,531 | \$22,592 | \$15,061 | \$45,184 | - | - | - | \$0 |
| Business Integrator | \$13,202 | \$1,803 | \$3,091 | \$2,060 | \$6,954 | \$1,620 | \$2,777 | \$1,851 | \$6,248 |
| SAP Solution - Professional Services | \$1,821 | \$472 | \$809 | \$539 | \$1,821 | - | - | - | \$0 |
| Delivery - Labor/Contract Labor | \$11,289 | \$1,424 | \$4,272 | \$2,848 | \$8,543 | \$458 | \$1,373 | \$915 | \$2,745 |
| Delivery - Professional Services | \$7,846 | \$1,444 | \$3,841 | \$2,561 | \$7,846 | - | - | - | \$0 |
| Other (Facility) | \$1,038 | - | - | - | \$0 | \$154 | \$461 | \$423 | \$1,038 |
| Other (T&E) | \$3,403 | \$567 | \$1,701 | \$1,134 | \$3,403 | - | - | - | \$0 |
| Total Direct Cost | \$83,782 | \$13,241 | \$36,306 | \$24,204 | \$73,751 | \$2,231 | \$4,611 | \$3,189 | \$10,031 |

VI. TECHNICAL AND BUSINESS OUTCOMES

Completing Phase 2 under the Program mitigates both technical and business obsolescence risks in a controlled manner. The delivery sequence for the Releases will address the technical components that require replacement. This will be followed by the update of the Special Purpose Ledger in the SAP S/4 Universal Ledger, and subsequently by incorporation of WBS objects into the Universal Ledger to improve cost-capture. At the completion of Phase 2, full vendor support across the SAP ERP platform will be restored, cybersecurity and compliance will be strengthened, critical financial and cost-capture processes will be modernized, and data integrity and operational resilience will be improved.

Technical outcomes from the completion of Phase 2 include:

- Replacing aging SAP ERP-connected system components (PI/PO, GR&C, Solution Manager, BW) with vendor-supported cloud-based components.
- Standardizing technology and processes on SAP, reducing customizations and leveraging native functionality to simplify support and enable rapid adoption of new features.
- Simplifying the ERP platform to reduce complexity, improve maintainability, and promote business continuity through robust governance, stage gates, and independent effectiveness reviews.

²⁶ Subtotals may include rounding differences.

- Positioning the Joint Utilities to take advantage of SAP’s evolving platform capabilities, including cloud adoption, real-time insights via built-in reports, and continuous improvement opportunities.

Business Outcomes from the completion of Phase 2 include:

- Extending the SAP S/4 Universal Ledger to leverage near real-time capabilities to derive FERC.
- Adopting and implementing WBS to capture costs at the activity level, including incorporating WBS into the Universal Ledger.

Phase 2 completes the work initiated in Phase 1 and enables the Joint Utilities’ ERP platform to function as an integrated, supported, and sustainable foundation for operations.

VII. PROGRAM BENEFITS

As this Program is aimed at replacing unsupported ERP-connected systems, extending the Universal Ledger, and strategically modernizing the cost capture business process, the benefits are largely qualitative. That said, the SAP Migration Program includes some productivity gains from refreshing business processes. These productivity gains are primarily driven by leveraging a WBS–based project accounting model (Release 3), which supports more standardized project structures, stronger budget controls, and lower system load at month-end. These tangible benefits are estimated at \$4.5 million per year and are expected to begin in 2031.

If Phase 2 of the SAP Migration Program is not implemented, the Joint Utilities will be exposed to increasing operational, financial, and compliance risks as SAP’s existing technology stack reaches end of maintenance. The current ERP platform and ERP-connected systems become unsupported beginning in 2027. This means SAP will progressively eliminate access to vendor security patches, legal and regulatory updates, defect corrections, and performance improvements. Between 2028 and 2030, SAP will provide an option for extended maintenance, but it will not reduce the risk of an unsupported platform and will result in higher maintenance fees²⁷ without any functional enhancements, and additional costs to the Joint Utilities. After

²⁷ SAP’s news release indicates 2 percentage points higher than base maintenance costs, *see* <https://news.sap.com/2020/02/sap-s4hana-maintenance-2040-clarity-choice-sap-business-suite-7/>.

1 2030, the ERP platform enters customer-specific maintenance, meaning SAP will no longer
2 provide legal, regulatory, or cybersecurity updates.

3 Operating an unsupported ERP platform and ERP-connected systems introduces
4 substantial cybersecurity exposure, including heightened vulnerability to zero-day exploits²⁸ and
5 inability to remediate known cybersecurity flaws. Regulatory reporting processes dependent on
6 the ERP platform and connected systems risks degradation or failure due to outdated code lines,
7 deprecated interfaces, and the absence of legal updates. Key financial, supply chain, and project
8 accounting processes would become increasingly fragile, requiring manual workarounds that
9 increase error risk, reduce internal controls' effectiveness, and introduce the potential for delayed
10 or missed Securities and Exchange Commission (SEC) filings due to ERP platform issues.

11 In addition, maintaining IO as the dominant project accounting model would perpetuate
12 structural inefficiencies. It constrains visibility into project cost, schedule, and commitments;
13 limits standardization across capital and O&M projects; and sustains higher reconciliation and
14 month-end workloads. The organization would forgo the estimated \$4.5 million per year in
15 productivity benefits, as discussed further in Section C below, that result from shifting to a
16 WBS-based model.²⁹

17 **A. Business Benefits**

18 Phase 2 of the SAP Migration Program will replace Joint Utilities ERP-connected
19 systems so that we may avoid risks and continue to meet the challenges of compliance,
20 cybersecurity, and operational continuity.

- 21 1. Compliance: Obsolete systems cannot reliably support evolving regulatory
22 requirements, including FERC, CPUC, and the SEC, including Sarbanes-Oxley,
23 mandates. Replacing obsolete components of the ERP platform will assist in
24 maintaining compliance and avoiding findings, penalties, and reputational
25 damage.

²⁸ A zero-day exploit is a cyberattack vector that takes advantage of an unknown or unaddressed security flaw in computer software, hardware or firmware. "Zero day" refers to the fact that the software or device vendor has zero days to fix the flaw because malicious actors can already use it to access vulnerable systems.

²⁹ Estimated benefits based on the assumption that Commission resolves this Application within 12 months of the filing date and is subject to change if a final decision is issued beyond this timing.

1 2. Cybersecurity: Unsupported software increases vulnerability to security breaches,
2 as patches and updates will no longer be provided by SAP. Updating ERP-
3 connected system components reduces exposure to cyber-attacks, data loss, and
4 operational disruption. The proposed solution provides the following benefits:

- 5 • Extends GR&C Access Control across cloud and on-premise ERP
6 platforms, centralizing user access management.
- 7 • Automates provisioning, de-provisioning, and access reviews to improve
8 efficiency and reduce human error.
- 9 • Allows greater visibility and control to support access governance and
10 role-based access management to sensitive information.
- 11 • Provides a modern identity and access governance approach to maintain
12 compatibility with future ERP Platform updates and innovations.

13 3. Operational Continuity: Performance degradation caused by outdated
14 functionality and extensive legacy customizations threatens platform stability. As
15 the volume of IOs grow over time in the system, these inefficiencies compound,
16 creating potential for service interruptions and delays. There are several areas of
17 operational benefits:

18 *Enhanced Reporting:* Phase 2 prioritizes enhanced reporting for ERP
19 Platform users by reducing data silos and increasing data quality and
20 availability. S/4HANA Embedded Analytics models and user interface
21 could potentially provide the following benefits:

- 22 ▪ Overall quicker data availability and faster reporting will be
23 achieved by combining various data sources into embedded
24 analytics models. For example, data from the Joint Utilities' fixed
25 asset system will be combined with ERP Platform data to increase
26 reporting efficiency.
- 27 ▪ Standard dashboards will be used to visualize metrics.
- 28 ▪ Faster response time to regulatory requests will be achieved through
29 clearer, more organized reporting and better data visibility.
- 30 ▪ Implementation of WBS to manage and track project costs will
31 allow better visibility and control.

1 *FERC Solution:* The Joint Utilities currently utilize the SPL within the
2 ERP Platform to facilitate parallel accounting and regulatory reporting,
3 specifically for deriving FERC accounts and supporting compliance with
4 federal and state requirements. Processing occurs at month-end: SPL
5 processes monthly transactions and assigns FERC accounts based on
6 rules; most users consume results via Business Warehouse (BW). This is
7 inefficient because FERC classifications become available only after
8 month-end close, and the information exists outside the General Ledger.
9 Phase 2 would introduce a FERC account field in the Universal Ledger
10 and populate it near real-time using the existing ruleset. The benefits of
11 this approach are as follows:

- 12 ▪ Transaction details at the line-item level in the Universal Ledger
13 improve traceability and provide an audit trail for FERC balances.
14 Current approach requires reconciliation between the General
15 Ledger and Special Purpose Ledger.
- 16 ▪ FERC assignments can be analyzed as soon as transactions are
17 recorded, rather than waiting until month-end.
- 18 ▪ Error correction process is simplified; eliminating SPL-only
19 adjustments removes manual reconciliations.
- 20 ▪ US generally accepted accounting principles (GAAP)–to–FERC
21 reconciliation is automated and always available in the Universal
22 Ledger.
- 23 ▪ Regulatory reporting improves as FERC account data coexists with
24 General Ledger information.
- 25 ▪ General Ledger transactions can be grouped by O&M, Capital,
26 Refundable, etc., accelerating analysis and reconciliation.

27 **B. Productivity Savings**

28 Productivity improvements result from replacing IO-based project cost capture with
29 WBS-based accounting within SAP Project Systems. The shift from IO to WBS also contributes
30 to the efficiency benefits commencing in 2031. Today, projects utilize many IOs that cannot be
31 instantly grouped or summarized in the ERP Platform. As a result, project reporting is assembled

1 offline—typically after month-end close—in tools like Microsoft Excel. This offline effort
2 consumes significant time, and corrective actions often occur after-the-fact via journal entries.

3 By implementing WBS, each component of a project is represented within a standard
4 structure in the ERP Platform. Native ERP Platform reports provide enhanced visibility to
5 recorded costs and status, and standard transactions enable proactive project control (e.g.,
6 starting or stopping cost collection for a specific phase). The following improvements are
7 expected:

8 1. Cost Capture Improvements

- 9 • Standardized project creation using WBS templates accelerates setup and
10 eliminates time spent deciding the number of IOs and maintaining
11 structures offline.
- 12 • WBS hierarchy increases cost visibility. Standard reports provide real-
13 time views of each project phase instead of waiting for assembled reports
14 after month-end close.
- 15 • Hierarchical rollups simplify summarization and drill-down. Detailed
16 activity costs aggregate to sub-phases, phases, and the overall project;
17 similar activities can be grouped across projects to provide cross-project
18 insights.
- 19 • Improved reporting via standard Transaction Codes (T-Codes), reports,
20 and new user interface removes manual work required to produce standard
21 reporting for all projects. A standard WBS structure closes this gap.

22 2. Project Management Improvements

- 23 • Networks bundle similar activities across WBS elements, enabling
24 managers to pool costs and identify efficiency opportunities.
- 25 • Project managers can monitor planned versus actual costs and see
26 assigned, pending, and posted costs by type (labor, material, service, etc.)
27 in one place, rather than assembling data manually from multiple
28 modules/reports.

29 3. Alignment of Work Management and Asset Accounting Processes

1 While broader work management enhancements are out of scope, the
 2 Program will allow recording of costs to WBS (instead of IO) and revising the
 3 cost flow from projects to the asset subledger. Today, this process generates
 4 ~70,000 new IOs monthly, with over 2 million open IOs in the ERP Platform.
 5 Every month-end, these must be settled, resulting in straining resources and
 6 delaying the financial close, which could have implications for timely filing with
 7 the SEC and CPUC. The modernization will:

- 8 • Use WBS as the primary cost carrier from projects to the asset subledger
 9 and leverage standard asset accounting derivation to significantly reduce
 10 the number of IOs. Costs from multiple operations will settle into a single
 11 WBS and transfer to the asset subledger on a nightly basis, where it will
 12 derive logical buckets for asset creation using as-built records.
- 13 • Enable nightly transfer of recorded costs via standard WBS functionality,
 14 distributing processing across the month rather than concentrating it at
 15 close.
- 16 • Shorten month-end close process by reducing peak processing volume,
 17 supporting timelier financial insights and decision making.
- 18 • Replace custom code that tracks activities for asset creation/retirement
 19 with standard asset subledger distribution functionality, reducing technical
 20 complexity and long-term maintenance.

21 Select benefits are measurable and are estimated at \$4.5 million per year beginning in
 22 2031, after Release 3 of Phase 2 is fully implemented, currently expected in 2030.

23 **Table 2-10: Projected Annual Benefits Realization**
 24 **(Post implementation – Release 3)³⁰**

| Annual Benefits (\$000) | Total | Capital | O&M |
|----------------------------------|----------------|----------------|----------------|
| San Diego Gas & Electric Company | \$3,000 | \$2,200 | \$800 |
| Southern California Gas Company | \$1,500 | \$1,300 | \$200 |
| Total | \$4,500 | \$3,500 | \$1,000 |

25 ³⁰ Estimated benefits are based on the assumption this Application is resolved within 12 months of the filing date and is subject to change if a final decision is issued beyond this timing.

1 **VIII. CONCLUSION**

2 This concludes our prepared direct testimony.

1 **IX. QUALIFICATIONS**

2 **Gabriel Chong**

3 My name is Gabriel Chong. My business address is 488 8th Avenue, San Diego,
4 California, 92101. I am employed by San Diego Gas & Electric Company (SDG&E) as Director
5 of Enterprise Financial Technology. In this role, I am responsible for the strategy, delivery, and
6 governance of the Joint Utilities' enterprise financial systems, including SAP-based platforms
7 supporting finance and accounting functions. I also oversee the SAP Migration Phase 1, with
8 responsibility for program execution, system modernization, and integration with enterprise
9 technology initiatives.

10 I have been employed by SDG&E since 2001. During this time, I have held leadership
11 roles supporting enterprise applications, financial systems, technology operations, and major
12 program delivery. My experience includes directing system modernization efforts and leading
13 major implementations of enterprise platforms used for company-wide operations.

14 Prior to joining SDG&E, I was employed by Computer Sciences Corporation (CSC), where I
15 supported enterprise infrastructure and server administration for large corporate clients. I hold a
16 degree in Information Systems, a postgraduate degree in Advanced Systems Programming, and a
17 Lean Six Sigma Black Belt certification.

18 I have not previously testified before the Commission.

1 **Dennis Enrique**

2 My name is Dennis Enrique. My business address is 555 W. 5th Street, Los Angeles, CA
3 90013. I am employed at SoCalGas as the Strategy and Operations Manager of the Delivery
4 Program Management Office within the Enterprise Business Technology Department.

5 In this role, I am responsible for the overall program delivery of SAP Migration Phase 1.
6 I assumed my current role in September 2025. Prior to this, I have served in program
7 management roles in Supply Chain, Advanced Meter Deployment, and Financial Systems.

8 Prior to my employment at SoCalGas, I worked for Compuware from 1994 to 1999 as a
9 Developer and Business Systems Analyst supporting the Procurement organization at SoCalGas.
10 I hold a Bachelor of Business Administration Degree, specializing in Information Systems and
11 Quantitative Management, from Loyola Marymount University.

12 I have not previously testified before the Commission.