

# Summary of Qualifications

# CM SOLUTIONS

*Solutions for Project Success*

[www.thecmsolution.com](http://www.thecmsolution.com)

Water



Energy



Facilities



Transportation

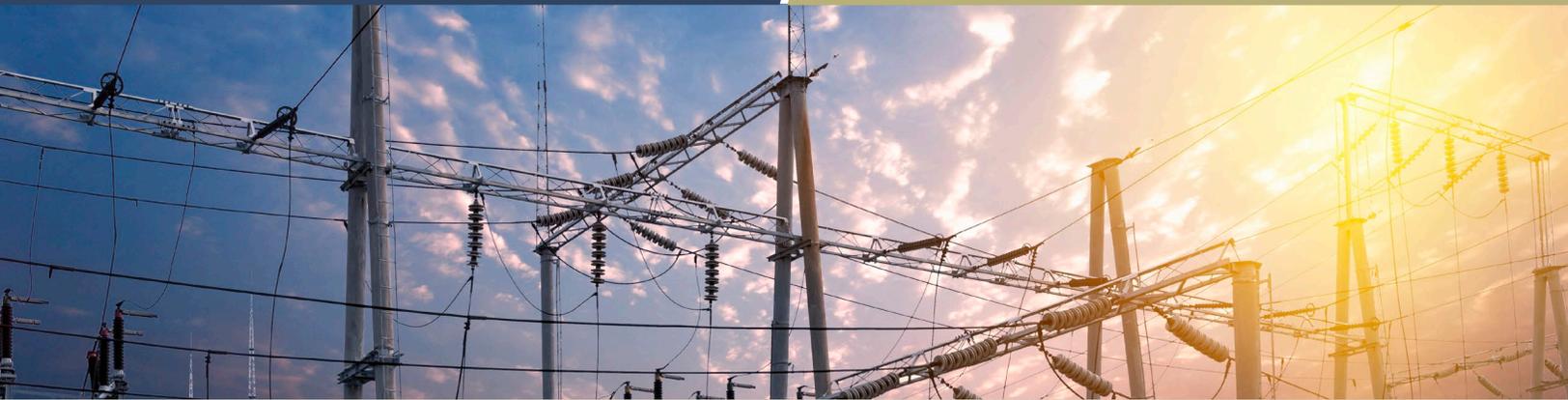


Oil & Gas



# Energy

CM Solutions supports major programs with hundreds of construction projects for utility providers all over California, including natural gas pipelines, compressor stations, electric transmission and distribution, transformers, solar generation, undergrounding, and wind fields



## ENERGY PROJECTS

CM Solutions is the partner you can trust to add depth of expertise in project controls. Since 2001, we have been helping contractors, owners, and agencies in the private and public sectors save time and money with proven project controls for construction management. Tightly managed schedules and budgets are the keys to success when multi-million-dollar projects are on the line.

### Our Qualifications

- Experience** CM Solutions supports major programs with hundreds of construction projects for utilities providers all over Southern California, including natural gas pipelines, compressor stations, electric transmission and distribution, transformers, solar generation, and wind fields.
- Expertise** Experts with variety of backgrounds and certifications, including PE, PMP, PSP, PMI-SP and Six Sigma.
- Diversity** Federal, state and local certifications for SBE, DBE, WBE, WOSB, LBE and LBE.
- Presence** Headquarters in California, with locations in Washington, Arizona, Colorado, and Texas

### Our Services

Program & Project Services	Planning and Scheduling	Cost Controls	Risk Management & Claims Avoidance	Executive Reporting & Dashboards
<ul style="list-style-type: none"> <li>•Construction Management</li> <li>•Scope Management</li> <li>•Environmental Reviews, Permitting</li> <li>•Contract Compliance</li> </ul>	<ul style="list-style-type: none"> <li>•CPM Scheduling</li> <li>•Project Planning</li> <li>•Time Impact Analysis</li> <li>•4D &amp; 5D Scheduling &amp; Modeling</li> </ul>	<ul style="list-style-type: none"> <li>•Program and Project Budgets</li> <li>•Cost Forecasting</li> <li>•Earned Value Management</li> <li>•Estimating</li> </ul>	<ul style="list-style-type: none"> <li>•Claims Preparation</li> <li>•Management of Change</li> <li>•Schedule Risk Analysis</li> <li>•Time Impact Analysis</li> </ul>	<ul style="list-style-type: none"> <li>•Dashboards for Complex Projects</li> <li>•Integrating Systems and Data</li> <li>•Power BI</li> <li>•Training for Project Teams</li> </ul>

### Integrated Capabilities Across Sectors



Transportation



Water & Wastewater



Energy



Facilities



Oil & Gas

# \$10B

Project Value

# 40+

Industry Specialists

# ENERGY

*We trust to power our world.*



**Transmission & Distribution**



**Natural Gas Pipelines**



**Gas Compressor Stations**



**Green Energy**

## Natural Gas Major Projects

**Owner:** Southern California Gas  
**Location:** Southern California  
**Project Value:** Multibillion

CMS is supporting the Sempra project controls team with schedulers, cost engineers, change coordinators, project managers, and estimators. Our consultants work alongside Sempra employees during all project phases from the engineering phase through completion. CMS developed project procedures and training materials to bring industry best practices to program management. In addition, our consultants migrated Primavera P6 databases to a cloud platform and introduced methods and tools to accurately forecast control and manage EPC projects.

## Blythe Compressor Station Plant 4

**Owner:** Southern California Gas  
**Location:** Blythe, CA  
**Project Value:** \$325 million

The Blythe Compressor Station project involved design and construction of a new compressor plant and auxiliary equipment.

CM Solutions provided scheduling and cost controls services from the engineering phase through completion. During the construction phase, CMS staff were onsite, providing scheduling and estimating services, including crew analysis, time impact analysis, risk assessment and negotiation of change orders.

## Electric Distribution Planning Program Management

**Owner:** San Diego Gas & Electric  
**Location:** San Diego, CA  
**Value:** \$250 million per year

SDG&E is expanding and modernizing its electric distribution system to increase capacity and to reduce stress on the power grid.

CM Solutions is providing program management for projects from preconstruction through completion. Our team includes a program manager, project managers, coordinators, cost engineers, and schedulers who improve quality, manage scope and reduce project execution time.

## Artesian Substation Expansion

**Owner:** San Diego Gas & Electric  
**Location:** Del Sur, CA  
**Project Value:** Multimillion

Increased demand for energy has created congestion on the existing power lines. The new Artesian Substation nearly doubles the footprint of an older 69/12kV distribution substation and includes upgrades to the equipment and connections to transmission lines.

CM Solutions schedulers maintained the schedule, provided analysis of schedules and finances, and provide risk management and continuous process improvement.

## Butte Rebuild Program

**Owner:** Pacific Gas & Electric  
**Location:** Paradise, CA  
**Project Value:** Multimillion

This program is part of PG&E's undergrounding initiative to bury powerlines underground to mitigate fire risk. Heavily damaged by wildfires, the program in Butte County represents the largest effort in the US to harden the system.

CMS project managers work with property owners and other stakeholders to handle easements, permitting, traffic control, and community engagement.

# Energy Project Index

Project Name	Project Type	Project Description	Owner/Agency	Project Value	Project Dates
Artesian Substation Expansion	Electric Substation	<p>Increased demand for energy has created congestion on the existing power lines. The new Artesian Substation nearly doubles the footprint of an older 69/12kV distribution substation and includes upgrades to the equipment and connections to transmission lines.</p> <p><i>CM Solutions schedulers maintained the schedule, provided analysis of schedules and finances, and provided risk management and continuous process improvement.</i></p>	Sempra Energy - San Diego Gas & Electric (SDG&E)	Multi-million	2019-2022
Blythe Compressor Station Plant 4	Gas Compressor Stations, Natural Gas	<p>The Blythe Compressor Station project involved design and construction of a new compressor plant and auxiliary equipment.</p> <p><i>CM Solutions provided scheduling and cost controls services from the engineering phase through completion. During the construction phase, CMS staff were onsite, providing scheduling and estimating services, including crew analysis, time impact analysis, risk assessment and negotiation of change orders.</i></p>	Sempra Energy - So Cal Gas (SCG)	\$325M	2017-2022
Butte Rebuild Program	Electric Distribution, Gas Pipelines, Community Engagement	<p>This program is part of PG&amp;E's undergrounding initiative to bury powerlines underground to mitigate fire risk. Heavily damaged by wildfires, the program in Butte County represents the largest effort in the US to harden the system.</p> <p><i>CMS project managers work with property owners and other stakeholders to handle easements, permitting, traffic control, and community engagement.</i></p>	Pacific Gas & Electric (PG&E)	Multi-million	2022-Present
Control Center Modernization Program	Natural Gas Distribution	<p>This program involves modernizing over 200 existing regulator stations with remote-control capabilities to monitor pressure and flow across the gas distribution network in Southern California.</p> <p><i>CMS project managers were selected to lead the projects from engineering through procurement and construction. Site challenges include easements, aesthetics and stakeholder agreement. Our team also captures the lessons learned for the entire program.</i></p>	Sempra Energy - So Cal Gas (SCG)	\$200M	2022-Present
Electric Distribution Planning Program Management	Electric Transmission	<p>SDG&amp;E is expanding and modernizing its electric distribution system to increase capacity and to reduce stress on the power grid.</p> <p><i>CM Solutions is providing program management for projects from preconstruction through completion. Our team includes a program manager, project managers, coordinators, cost engineers, and schedulers who improve quality, manage scope and reduce project execution time.</i></p>	Sempra Energy - San Diego Gas & Electric (SDG&E)	\$250M per year	2021-Present
Electric Project Management T & S Project Controls	Electric Substation, Electric Transmission, Electric Emergency and Maintenance	<p>This program involves substation upgrades, expansions, replacements, voltage support, reinforcements, security upgrades, NERC compliance, and emergent work.</p> <p><i>CMS provides project cost controls and scheduling support to a portfolio involving 34 electric distribution and transmission projects and 13 substations.</i></p>	Pacific Gas & Electric (PG&E)	\$290M	2022-Present
Electric Transmission & Substation Project Controls Services	Electric Transmission, Electric Substation	<p>One of the nation's largest electric utilities, SCE seeks to ensure a safe, reliable, and affordable electric grid with increasing new green energy sources.</p> <p><i>CMS project controls experts work with SCE and client contractors to support the construction and modernization of major transmission projects with scheduling, cost controls and data analytics. CMS also assisted with implementing Primavera P6 as an enterprise scheduling solution.</i></p>	Southern California Edison (SCE)	Multi-billion	2017-Present
Electrical Switchgear Vault Egress	Electric, Hospitals, Claims	<p>This project for the hospital was in progress and experiencing delays.</p> <p><i>CMS is performing a review of project documentation and status to document changes reported by contractor.</i></p>	Huntington Hospital	Multi-million	2022-Present
Gas Operations Control Center	Natural Gas, Facilities	<p>The new 60,000 sf Gas Operations Control Center is a resilient critical facility for monitoring the gas infrastructure assets across Southern California. It will have a large control room with server/storage, operations training and simulation facilities, and office space.</p> <p><i>CMS is providing scheduling services from the planning stages, including development of scheduling specifications, and a collaborative baseline schedule.</i></p>	Sempra Energy - So Cal Gas (SCG)	Multi-million	2021-Present

# Energy Project Index

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LAX 5th Feeder	Airport Utilities, Electric	The utilities' fifth feeder was built to meet the airport's need for increased capacity and reliability to support the coming modernization projects. It involved new electrical duct banks and firewater and domestic water lines.  <i>CMS developed the fully resource and cost loaded baseline schedule for the four-phased approach, and provided monthly schedule updates.</i>	Los Angeles World Airports (LAWA)	\$20M	2014-2016
LAX Receiving Station RS-X	Airport Utilities, Electric	The new receiving station is a collaboration between Los Angeles World Airports and the City of LA Department of Water and Power and includes high voltage duct banks and a connection to LADWP substation equipment.  <i>CMS Solutions provided scheduling and cost engineering support for the project.</i>	Los Angeles World Airports (LAWA)	\$112M	2020-2022
Medicine Subtransmission System	Electric Substation, Electric Transmission	The Medicine Subtransmission project involved construction of two additional 66 kV subtransmission lines into the new "Medicine" Substation, to handle increased customer load demand.  <i>CMS provided scheduling services for the engineering and design phase.</i>	Southern California Edison (SCE)	Multi-million	2019-2022
Mobilehome Park Utility Conversion Program	Natural Gas	The Mobilehome Park Utility Conversion Program is a statewide, CPUC program to replace aging, privately owned, master-metered systems with new, utility-owned systems.  <i>CMS provided scheduling support for a portfolio of mobile home utility conversion projects.</i>	Sempra Energy - So Cal Gas (SCG)	Multi-million	2015-Present
Natural Gas Distribution-Project Management	Natural Gas, Gas Compressor Stations	The nation's largest natural gas distribution utility, SoCalGas committed almost \$10 billion to expand and upgrade its natural gas pipeline infrastructure.  <i>CM Solutions is providing project management and project controls support for projects from design and procurement through construction, then closeout and commissioning. Aligned with industry best practices, we developed procedures, methods and tools to accurately forecast, control and manage EPC projects.</i>	Sempra Energy - So Cal Gas (SCG)	Multi-million	2022-Present
Natural Gas Major Projects	Natural Gas, Gas Compressor Stations	In 2001, Sempra Energy began a period of unprecedented growth, including construction of new facilities, modernization of existing facilities, and thousands of miles of pipeline. Current major projects include several compressor stations under the Southern California Gas Expansion Program.  <i>CMS is supporting the Sempra project controls team with schedulers, cost engineers, change coordinators, project managers, and estimators. CMS developed project procedures and training materials to bring industry best practices to program management.</i>	Sempra Energy - So Cal Gas (SCG)	Multi-billion	2014-Present
Natural Gas Vehicle (NGV) Program	Natural Gas	This program involves upgrading and developing natural gas vehicle filling stations.  <i>CM Solutions provided scheduling and cost support for a portfolio of natural gas vehicle projects.</i>	Sempra Energy - So Cal Gas (SCG)	Multi-million	2015-Present
Pipeline Safety Enhancement Plan (PSEP) for Natural Gas Lines	Pipelines, Natural Gas	The Pipeline Safety Enhancement Plan (PSEP) was established to promote the continued safety and integrity of our natural gas transmission pipelines, and to meet California Public Utilities Commission (CPUC) requirements. This 25-year program includes over 250 projects involving replacing hundreds of miles of pipeline, as well as testing and replacing valves.  <i>CMS schedulers and cost engineers work with the project teams to keep these projects on track. CMS also developed project procedures and training materials to bring industry best practices to program management.</i>	Sempra Energy - So Cal Gas (SCG)	Multi-billion	2017-Present
RECLAIM Emissions Trading Program	Natural Gas, Sustainable/Green Project	The Regional Clean Air Incentives Market (RECLAIM) program seeks to reduce emissions and develop better pollution control technologies. It uses an emission trading program that offers economic incentives for reducing the emissions of pollutants.  <i>CMS provides scheduling services to support this program.</i>	Sempra Energy - So Cal Gas (SCG)	Multi-million	2022-Present

# Energy Project Index

Project Name	Project Type	Project Description	Owner/Agency	Project Value	Project Dates
Riverside Transmission Reliability Project	Electric Transmission, Electric Substation	This project involved 10 miles of a double circuit 220kV transmission line with associated switching substation and telecom, with approx. 4 miles installed underground.  <i>CMS provided scheduling support during the planning phase to assess assumptions and alternatives.</i>	Southern California Edison (SCE)	\$500M	2018-2022
San Manuel Substation	Electric Substation, Electric Transmission	Project involved construction of a new 66kV substation with loop 66kV subtransmission lines and two diverse fiber optic routes to serve the casino expansion and to integrate with the existing substation and transformers.  <i>CMS worked closely with the contractor to set milestones, to provide the resource loaded schedule, and to ensure all SCE processes were handled.</i>	Southern California Edison (SCE)	Multi-million	2019-2022
San Onofre Nuclear Generating Station (SONGS)	Nuclear Power Generation	San Onofre Nuclear Generating Station (SONGS) is a 2,200MW twin nuclear reactor power station and one of the largest nuclear generating stations in the U.S. It was shut down in 2013 and is currently being safely decommissioned.  <i>CMS provided scheduling services to the Design Engineering Organization's (DEO) capital improvement program. CMS managed the fully resourced and cost loaded schedules. We also developed data reconciling procedures to collect SAP data and integrate it with real-time P6 schedules and reports.</i>	Southern California Edison (SCE)	\$200M	2011-2013
SDG&E Reliability Enhancement Projects	Electric Transmission	The portfolio of 500 upgrade and maintenance reliability enhancement projects are part of SDG&E's Electric System Hardening program to reduce wildfire risk and the impact of public safety power shut-offs during extreme weather.  <i>CMS schedulers work closely with SDG&amp;E's designers to follow up on design, permits and planning, and with construction project managers to ensure timely completion of each project. They developed methods to integrate data from multiple sources, and thus generate reliable status and forecasting reports, manage resources, and mitigate risk.</i>	Sempra Energy - San Diego Gas & Electric (SDG&E)	Multi-million	2018-Present
SDGE Cleveland National Forest Powerline Replacement (CNF)	Electric Transmission	SDG&E and the U.S. Forest Service (USFS) are working together to increase safety and reliability of electric facilities throughout the Cleveland National Forest. Projects include replacement of transmission and distribution circuit lines and upgrading to steel poles. The project involved numerous constraints from weather conditions to environmental and cultural stakeholder issues.  <i>CMS provided scheduling support services for the program, including reviewing contractor schedules, providing daily and weekly field schedules, and preparing documentation for change order claims.</i>	Sempra Energy - San Diego Gas & Electric (SDG&E)	Multi-million	2019-2021
SDGE Fire Risk Mitigation (FIRM)	Electric Transmission	The Fire Risk Mitigation (FIRM) program addresses fire risk by modernizing critical and aging infrastructure, including replacement of wiring and electrical poles, and upgrading the older overhead electric distribution system.  <i>CMS provides scheduling support services for the program.</i>	Sempra Energy - San Diego Gas & Electric (SDG&E)	\$1.5B	2019-Present
SDGE Transmission Engineering and Master Scheduling	Electric Transmission, Electric Substation	SDG&E has programs of utilities construction projects to modernize and upgrade the existing substations and electrical infrastructure in the greater San Diego area.  <i>CMS schedulers, cost engineers, and project managers work alongside the client's project teams to provide status and forecasting reports, manage resources, and mitigate risk for various major projects and portfolios of projects.</i>	Sempra Energy - San Diego Gas & Electric (SDG&E)	Multi-billion	2018-Present
SoCalGas PPMS Deployment	Natural Gas, Software Implementation	The Project Portfolio Management System (PPMS) was implemented to help manage the organization's multibillion, multi year program of construction and modernization. It involved creating a roadmap to integrate multiple tools and resources, including Primavera Unifier and the Primavera Cloud project.  <i>CMS serves as the thought leader and business advisor, providing Primavera administrative support as a SME for schedulers.</i>	Sempra Energy - So Cal Gas (SCG)		2022-Present

# Energy Project Index

Project Name	Project Type	Project Description	Owner/Agency	Project Value	Project Dates
SoCalGas Primavera Cloud Deployment	Natural Gas, Software Implementation	The client sought to combine multiple data sources into a seamless system. The new system reduced reporting time, increased accuracy, and provided a single interface to all end users.  <i>CMS deployed the new cloud system from multiple pre-existing systems including Primavera databases, HCSS estimating, SAP, Unifier, permitting systems, and more. A data map was prepared, then the data was restructured and recoded into a single system with a shared interface for all users.</i>	Sempra Energy - So Cal Gas (SCG)		2020-2021
Solar Power Generating Facility	Solar, Wastewater, Water, Electric, Sustainable/Green Project	The project involved electrical upgrades including new transformers, equipment pads, shelters, cabling, security and lighting, for 3MW solar power generating facility for F.E. Weymouth Water Treatment Plant.  <i>CMS provided scheduling services, including development of the baseline schedule and monthly updates.</i>	Metropolitan Water District of Southern California (MWD)	\$3M	2015-2016
Ventura Compressor Modernization Project	Gas Compressor Stations, Natural Gas	The Ventura compressor station, the only one on the SoCalGas coastal transmission system, is critical to energy reliability and resiliency for its 250,000+ customers in Ventura and up and down the California Central Coast.  <i>CMS is providing robust cost controls, scheduling, and change control for all phases of the project.</i>	Sempra Energy - So Cal Gas (SCG)	Multi-million	2021-Present