



MASTER PLANNING, SYSTEM DESIGN AND ENTERPRISE CONSULTING

Owners, Integrators, Specifiers and Developers



RBCG



TODAY'S INTELLIGENT SYSTEMS

are vital contributors to an organization's productivity, safety, energy savings, resource allocation, and ultimately, its bottom line.

Successful installations employ control system integration strategies using open solutions that enable buildings, campuses, cities, and enterprises to readily adapt to environmental, operational, economic, or technological change.

RBCG assists clients in navigating technologies, solutions, standards, and system architectures as part of an enterprise master plan.

RBCG provides a range of services to support the design and implementation of control automation systems.

- SMART CITIES
- SMART BUILDINGS
- STREET LIGHTING
- CONTROL NETWORKING
- ENERGY EFFICIENCY
- EDUCATION/TRAINING
- MARKET RESEARCH



OWNER'S REPRESENTATIVE

With a deep understanding of system architectures and control system integration, RBCG guides system owners through new construction and retrofit projects by establishing standards and specifications that result in customized control systems that exceed expectations. As an owner's representative, RBCG:

- Ensures proper standards and specification documentation are created prior to RFP stage.
- Provides independent expertise to ensure vendors and system integrators comply with established requirements, from submittal to commissioning to verification.
- Delivers a check and balance between the set of specs and submittals that encourages fair competitive bidding.

FACILITY MASTER PLANNING

RBCG assists clients with master planning for enterprise, campus, and city control energy network automation through the use of open systems standards and open procurement best practices. RBCG's open approach releases the client from single-source supplier lock-in and frees them to select solutions, devices and tools based on specific requirements rather than unnecessary "features". As a facility master planner, RBCG:

- Charts a growth strategy for system expansion as new technologies and tools arise in the marketplace.
- Establishes procedures for sub-system integration and installation simplifying multi-system installations while adhering to guide specifications and organizational standards.
- Develops paths for complete system ownership with the freedom to select products and services from multiple suppliers.

BUILDING AUTOMATION - STREET LIGHTING

Performance of a building or streetlighting system depends on the strength and reliability of the various integrated automation components. These must communicate and share operational data. Whether it is a city street lighting project that grows into a city asset and sustainability infrastructure or a campus integrated facility control system, RBCG provides practical integration strategies fostering projects which provide innovative and effective solutions. As a system integration expert, RBCG:

- Designs integrated automation infrastructure and control systems based on open standards that unlock the door to continuous commissioning and ongoing reductions.
- Evaluates market solutions and recommends options that provide a simple path to effective user interfaces and system operational efficiency, keeping in mind user roles and responsibilities.

CONTROL NETWORKING ARCHITECTURE

Your project's success is based on the foresight of the initial architecture and design, one that accounts for future growth and functionality.

By using open-system principles, RBCG architects control system infrastructures that provide for continuous monitoring and management for optimal performance.

With a comprehensive view of control networking, open network communication protocols, and system architecture design, RBCG provides guidance on enabling technologies with practical integration strategies fostering projects which provide innovative and effective solutions.

SMART CITIES, SMART BUILDINGS, SMART DECISIONS

By taking a holistic view, RBCG works with you to develop a "big picture" view of projects. Our team looks into the total requirements of a project and looks at both the short term and long term requirements including CAPEX and OPEX costs. As a controls expert, RBCG:

- Evaluates proven and emerging solutions, standards, and industry trends to recommend an optimal design path.
- Identifies key performance metrics, system functional requirements and balances them with available budget, resources, and operational maintainability.

INTEGRATION STRATEGIES THAT MAXIMIZE EFFICIENCY TODAY – WITH AN OPEN UPGRADE PATH FOR TOMORROW

CORPORATE STANDARDS

Establishing organization-wide standard procedures for system and device installation ensures an efficient and repeatable process for multi-site facilities, campuses, and cities. RBCG helps organizations set guidelines and restrictions for all system-related installations that reduce commissioning time, accelerate site deployment and optimize available resources. RBCG works with clients to set corporate standards that:

- Create consistent and repeatable procedures for system installation and expansion.
- Establish methodologies for selecting appropriate technologies.
- Produce reliable checklists, reports and KPIs to benchmark and monitor progress.

GUIDE SPECIFICATIONS

A well-formulated guide specification is a step-by-step plan for realizing a repeatable, scalable open architecture. Developing and adhering to such guidelines will safeguard against closed, proprietary technologies and vendor lock-in. RBCG assists organizations in enforcing guide specification conditions by:

- Developing standards for cross-enterprise implementation.
- Coordinating with vendor, integrator, and standards body communities to ensure compliance with the overall plan.
- Selecting appropriate technologies that allow for continued system growth and expansion.





As an active industry participant and industry liaison, RBCG comes to the table with a thorough understanding of the technologies and tools emerging in the marketplace.

TRAINING, EDUCATION, ADOPTION

RBCG develops and produces professional educational workshops and training classes to bring teams up to speed on the latest industry trends and technologies.

Part of any successful project is a well-versed team. RBCG can facilitate team consensus building, pre-bid project team compliance evaluation, and submittal validation support.

RBCG develops training courses providing:

- Fully developed, scripted, and narrated training content.
- Classroom, webinar, online, and self-paced content development and delivery.
- SCROM and web-enabled course content to meet any corporate learning toolset requirements.
- Standards body, association, and industry relations support.
- LonMark® Authorized Training Partner programs.

RBCG COMMITTEE AND INDUSTRY LEADERSHIP

- **Grid-Wise Architecture Council:** Elected member of the DOE funded panel investigating strategies and solutions for the modernization of the North American power grid
- **LonMark International:** Chief Ambassador responsible for helping coordinate a team of representatives and industry outreach programs around the world
- **Smart Buildings Institute:** Board of Directors member developing standards, certification, and training programs for smart buildings
- **LonMark BAS Task Group:** Committee chair developing building device and system profiles based on open, international standards
- **CEA R7, R17:** Member, building and home automation, IoT protocol, and device interoperability standards development
- **ASHRAE - GPC-13:** Committee voting member developing an open integration BAS guide specification, industry education, and training for consulting engineers
- **ASHRAE TC1.4:** Committee voting member for control theory and application, lecturer, peer reviewer
- **Illumination Engineering Society/SALC:** Member, lecturer
- **DOE Municipal Solid State Streetlighting Consortium:** Adaptive controls guidespec committee member
- **CommScope Academy/CFE Media/HeatSpring:** Curriculum adviser, class development, trainer
- **UPnP:** Member, IoT committee

RBCG, LLC
info@RB-CG.com
office: +1 858-756-9923
1345 Encinitas Blvd. Suite 242
Encinitas, CA 92024 USA
www.RB-CG.com

