THE PROJECT OVERSIGHT GUIDE

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An Owner's Guide to Oversight of Capital Projects, Project Teams, and General Contractors for Delivering the Expected Return on Your Investment

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FOREWORD

After 36 years in the nuclear power industry, mostly in leadership and in senior officer roles, I have a history of producing excellent results in challenging assignments, including power generation, project management, and oversight. As a senior executive, I've had an opportunity to experience good and bad project management and project oversight from the perspective of the owner's representative and the contractor's management team. Based on my experience, *The Project Oversight Guide (POG)* should be an indispensable resource for tailoring the owner oversight of capital projects.

Before I discuss the merits of the *POG*, first let me tell you why the author, Herb Marshall, is the right person to write it. I met Herb when he was in the process of developing the oversight model for a billion-dollar capital project. His knowledge and understanding of oversight were steeped in the lived experience of numerous past projects as an oversight manager in the field. He rightfully saw project oversight as a uniquely separate discipline from project management. He understood the nuance and balance between how best to advocate the owner's interests while respecting the project team's right to execute the scope of work unfettered by undue owner intrusion.

The *POG* is an impressive contribution to project management literature. Unlike *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, the POG is written from the owner's perspective. It contains the higher-level theoretical concepts for owner oversight and then explains their meaning in easily digestible words and a plethora of examples. I have no doubt that everyone, from a junior-level project manager to high-level executives, will be able to apply the principles in this book and have better project outcomes because of it.

The best capital projects establish a clear understanding of the relationship between owner oversight and the project execution team ahead of project execution. The project management organization needs to know the role of oversight, how oversight will be conducted, what to expect, and how issues will be handled. To this end, the *POG* provides a framework of best practices that owners and contractors can use to tailor a common understanding of the owner's oversight role.

As the *POG* says, "the foundation of trade rests on the assumption that reputable parties engage in commerce as a win-win proposition." This book furthers the prospects for win-win outcomes, which is why I'm thankful for the privilege to recommend it, and to author this foreword.

Cliff Eubanks
Cliff Eubanks Consulting

PREFACE

I came to the insight presented in this guide while overseeing projects for the U.S. Department of Energy (DOE), Naval Reactors (NR), for over a decade. During my tenure, I developed a passion for understanding what cultural, organizational, and procedural practices led to the most effective oversight. There was truly no better place to learn about this than NR.

For more than half a century, NR has chartered and overseen the successful execution of hundreds of complex, high-value projects contracted to selected bidders. The NR oversight model is guided by a reverence for safety, regulatory compliance, stewardship of the public trust, and the protection of its reputation through prudent decision-making. I learned valuable lessons while overseeing power plant overhauls, nuclear reactor servicing, plant operations, maintenance, testing, demolition, and construction contracts. The NR field oversight program and culture represents unparalleled experience in project oversight, qualifies as the baseline for best practice, and forms the foundation for this book, *The Project Oversight Guide (POG)*.

Although I'm technically a project management professional (PMP), there are only a handful of occasions in which I've been the project manager. That said, I've been the oversight manager on countless projects. The role of an oversight manager is to oversee chartered (outsourced) capital projects led by a general contractor funded to do the work. In this capacity, I've overseen projects as the owner's agent for construction, fabrication of major components, shipping of high-value items, overhaul of nuclear power plants, decommissioning, dismantlement, and outsourced maintenance and operations. From this industry veteran vantage point, I see project oversight as a uniquely separate discipline from project management.

After retiring from naval service and NR, I was hired by the owners of a commercial U.S. nuclear power plant to be the chief architect of their oversight organization. They wanted to oversee the demolition and dismantlement of their power plant, for which they had just recently awarded a third-party general contractor over a billion dollars. In that role, I set out to create a project oversight organization from the ground up.

I began by designing the organization's structure and writing the job descriptions for the oversight staff and manager positions. I then wrote the core protocols and processes, key performance indicators, reporting structure, Project Management Manual, training materials, lesson plans, and more than 20 other governing procedures. I developed an oversight professional certification program and chaired the oral boards for would-be certification candidates. The lessons I learned from this experience were the genesis for this book. Let me share two important lessons from my experience trying to create an oversight organization.

First, there is no textbook out there on the best practices for project oversight from the perspective of the owner or client. There is no shortage of literature or expertise on the art of project management and its principles, practices, processes, and techniques. However, there is almost nothing on the standards for owner oversight. Owners are

disadvantaged by this asymmetric information deficit, as it gives the contractor project team a built-in and inherent advantage over their clients.

Second, policies, procedures, and protocols are not a substitute for oversight culture. NR fine-tuned its oversight culture for success over its 75-year history. It was, perhaps, a fool's errand to attempt to replicate it over 18 months. You need leadership and staff with a clear mental model of the role of oversight. You need people steeped in oversight principles, with oversight DNA and pedigree. Otherwise, you might find yourself uttering these words: "Mistakes were made."

The *POG* is intended to bridge the gap between knowing how to run a project and knowing how to oversee one. Students of project management, project management professionals, and owners will gain insight into all facets of project oversight, including tools and techniques, organizational design, best practices, behaviors, and processes. The *POG* presents guidance and information through examples based on real situations and real lessons learned from the field.

The *POG* is also written as a foundational guide to be tailored and put into service by its readers. Intending to take readers on a journey, we will explore the concept of oversight and the key considerations for success. We will examine both the structural and cultural elements for that success and lay out the comprehensive framework for an oversight organization. Throughout the *POG*, we've embedded scenario-driven, practical examples to highlight for readers the underlined reasoning for oversight best practices. The later chapters serve as a practical guide to the key processes oversight professionals are likely to encounter.

So, let's get started.

1

INTRODUCTION

1.1 WHAT IS PROJECT OVERSIGHT?

For the purposes of this guide, project oversight is the process by which owners, shareholders, or their agents oversee projects performed on their behalf by a contractor. The term "contractor" refers to the principal entity obligated to execute the work under a binding agreement, whether internal or external.

While the concept and proper execution of project management is well-defined in the globally accepted book on the subject, *A Guide to the Project Management Body of Knowledge* (*PMBOK*® Guide), there is little literature on the concept and proper execution of owner oversight of capital projects. *The Project Oversight Guide* (*POG*) explores and explains the principles, best techniques, and proven practices for mastering owner oversight. The *POG* treats owner oversight of projects as a unique discipline.

1.2 WHY PROJECT OVERSIGHT MATTERS

Oversight Insight: Project Success?

Photo of the cooling towers and nuclear reactor containment building at Plant Vogtle Nuclear Power Plant in Waynesboro, Georgia. Westinghouse Electric Co., the U.S. nuclear unit of Toshiba Corp., Japan, filed for bankruptcy protection on March 29, 2017. *Source:* AP Photo/John Bazemore.

In March 2017, Westinghouse Electric Company filed for bankruptcy due to a colossal project failure. Westinghouse commissioned the construction of two nuclear power plants in South Carolina and Georgia that were billions of dollars over budget and at least three years behind schedule.

"The cause of this latest problem seems to have nothing to do with nuclear power and everything to do with incompetent business practices, particularly Toshiba's construction contractor," *Forbes* magazine journalist James Conca reported in the article "Westinghouse Bankruptcy Shakes the Nuclear World."

Westinghouse selected the Shaw Group to spearhead construction. The Shaw Group had never built a nuclear plant and had limited nuclear capability. As the project fell behind, the leadership at the Shaw Group was able to sell the company to Chicago Bridge & Iron Company for an overpriced $3.3 billion. Project success?

While the Shaw Group was able to unload its liabilities, Westinghouse bore the consequences of the project failure and bankruptcy. Although there were multiple factors that led to the failure, this example is illustrative of two things. One, the implementation of a strong owner-oversight program staffed by well-trained oversight professionals could have saved Westinghouse time and money. Two, a project can be both a success for the contractor and a failure for the owner.

In this example, the success of the project was not guaranteed by the selection of a "good" contractor. Project oversight starts with contractor selection, but it is equally imperative to create an oversight program that effectively represents the owner's interests through real-time, non-intrusive, and independent assessment of contractor performance.

As the *POG* logo above suggests, project oversight combines the precision of a magnifying glass with the power of a telescope. To stay on target during major projects, a successful owner needs to invest in a program that will inspect project details with clarity, expertise, and a competitive edge, while maintaining a comprehensive "big picture" scope to identify risks. When done correctly, quality project oversight is an investment that pays for itself while maintaining healthy, productive business relationships for future projects—a net positive benefit to the owner and the contractor.

1.3 OVERVIEW AND PURPOSE OF THIS GUIDE

The purpose of this guide is to supply owners, shareholders, or their agents with a comprehensive set of standards for overseeing projects performed on their behalf by a contractor. Throughout the *POG*, terms highlighted in bold and red font are defined in the glossary at the very end.

The best capital projects establish a clear understanding of the relationship between owner oversight and the project team ahead of project execution. The project management organization needs to know the role of oversight, how oversight will be conducted, what to expect, and how issues will be handled. To this end, the *POG* provides a framework of best practices that owners and contractors can use to tailor a common understanding of the owner's oversight role.

Although the foundation of trade rests on the assumption that reputable parties engage in commerce as a win-win proposition, even with the best of intentions, projects do fail. In 2016, a study conducted by PricewaterhouseCoopers found 97% of organizations believe project management is critical to organizational success and business performance.[1] Despite this, the reports below illustrate that poor project performance is a significant problem.

- In 2013, PMI's Pulse of the Profession® reported, "research, which is consistent with other studies, shows that fewer than two-thirds of projects meet their goals and business intent (success rates have been falling since 2008), and about 17 percent fail outright."
- In 2016, for every $1 billion invested in the United States, $122 million was wasted due to lackluster project performance. This was a 12% rise over the previous year, demonstrating a growing industry-wide problem.[2]

When a project fails, the owner shares in the responsibility of that failure. By distinction, the measures of a project's success or failure from an owner's perspective are not the same as those contracted to perform it. This difference in expectations inevitably leads to differences in incentives, risk management, and decision-making behavior. Table 1.1 below illustrates how owners and contractors are likely to be motivated by different project objectives.

Owners and contractors will have different interests and incentives with respect to scope, risk, execution, and conflict. As illustrated in Table 1.1, even the best contractor will likely measure project success differently from that of an owner. Therefore, an owner cannot just pick the contractor they deem best, then sit back and drink piña coladas until informed of project completion. Some level of oversight is required by the owner. It is especially true when making a capital investment into a project that is critical to the business's future success or survival. A well-executed project oversight program maintains a healthy tension between the diverging interests of owners and contractors, while not losing sight of the fact that the contractor has the right to complete the work free of undue interference.

Early identification of substandard contractor performance can save millions of dollars. On the other hand, overly intrusive oversight can also be costly and result in avoidable **change requests** and work delays. This can lead to an unhealthy and adversarial relationship with the contractor, resulting in avoidable disputes and even lawsuits. It can also lead to "oversight project paralysis," wherein progress grinds to a halt as workers try to avoid the consequences of aggressive oversight or resist making decisions for fear of being second-guessed.

In general, the contracted entity's project management team is responsible for delivering on project scope as agreed to under the conditions of the contract. As such, the project management team has decision rights and governance over the management of the project and execution of the work. If an owner-oversight team does not respect these decision

[1] Project Management Institute, "The High Cost of Low Performance," PMI's Pulse of the Profession®, 8th Global Project Management Survey 2013 (2013): 4.
[2] Project Management Institute, "The High Cost of Low Performance," PMI's Pulse of the Profession®, 8th Global Project Management Survey 2016 (2016): 5.

Table 1.1 Differences in Owner and Contractor Motivations

Owner	Contractor
Project Outcome ◆ Project not abandoned by contractor ◆ Realize future benefit of the project ◆ Realize future value of the project ◆ Meet schedule requirements ◆ Maintain reputation	**Project Outcome** ◆ Meet profit objectives ◆ Extend knowledge and expertise ◆ Extend staff learning and growth ◆ Extend market penetration ◆ Generate future business ◆ Develop future project innovation ◆ Maintain performance track record
Scope ◆ Minimize impact of change requests ◆ Broadly interpret project scope ◆ Conservative change request estimation	**Scope** ◆ Maximize change request revenue ◆ Narrowly interpret project scope ◆ Liberal change request estimation
Project Execution ◆ Advocate for owner interests ◆ Validate contract compliance ◆ "Trust but verify" contractor performance	**Project Execution** ◆ Control costs ◆ Minimize stakeholder interference ◆ Maintain productivity rate ◆ Minimize rework ◆ Maintain project autonomy
Risk ◆ Minimize owner's risk burden	**Risk** ◆ Minimize contractor's risk burden
Conflicts ◆ Advocate for owner interests in disputes ◆ Initiate legal claim when in owner's interest ◆ Negotiate settlements to the owner's favor	**Conflicts** ◆ Advocate for contractor interests in disputes ◆ Initiate legal claims when in the contractor's interest ◆ Negotiate settlements to the contractor's favor

rights or attempts to share or usurp them, the project is doomed to fail. The true role of project oversight is to detect and intervene when one of the following situations occurs:

- The condition is unsafe.
- The condition is noncompliant with the contract or applicable laws, statutes, rules, permits, and so on.
- The condition demonstrates a lack of stewardship of funds or other assets of the owner.
- The condition is imprudent under the principle of a **reasonable and prudent operator** as defined in Section 2.5.

Therefore, a quality owner-oversight program requires the adoption of these six essential elements:

- Promote trust and preserve credibility when performing owner oversight, from contract inception through all *PMBOK* project management knowledge areas and process groups.
- Seek out and assemble oversight professionals with the right pedigree and maturity.
- Establish a culture within the owner-oversight organization that respects the contractor's leadership role and avoids usurpation.
- Avoid undue interference by ensuring **comments** regarding contractor performance are correct, reasonable, and relevant.

- Encourage contractor self-governance and problem identification.
- Respect the contractor's right to have an unfettered project execution. Limit intervention, intrusiveness, and interference to that necessary to perform the oversight role and protect the owner's legitimate interests.

As shown in Table 1.1, owner oversight is crucial when managing the tension derived from differences in objectives. The following should be considered:

- Owners should understand that the tensions caused by these imperfectly aligned objectives occur even when both parties are operating in good faith.
- Owners should be reasonable when advocating for their interests and expect the same reasonableness in return.
- Owners should expect project management teams to act consistent with their incentives.
- Owners should anticipate that there will be circumstances in which the contractor will make decisions that are contrary to the owner's interests.
- Owners should expect the project management team to be loyal agents of their principal (i.e., the contractor) and advocate on behalf of their principal's interests.
- Likewise, owners should expect their oversight team to zealously advocate on their behalf.

The consequences of project failure are not the same for owners and contractors. An owner may have to "invest the farm" to finance a project. The project may be critical to the company's future survival and failure could result in the company's demise, whereas for the contractor, a single underperforming project is not likely to pose a major existential threat. Their project team may be free to document the lessons learned from the failed project and move on to the next one.

Furthermore, using a contractor does not necessarily insulate owners from being held responsible for the contractor's actions. This is foundational to understanding why owners have the authority to oversee work performed on their behalf and should exercise that authority in good faith. In the case of *Snyder v. Southern California Edison Co.* (1955), the California Supreme Court ruled owners bear the ultimate responsibility and liability for compliance with safety rules and regulations and could not delegate that responsibility to a contractor.

Oversight Insight: *Snyder v. SCE*

Snyder v. Southern California Edison Co.
44 Cal.2d 793, 799-801 (1955)

Employees of an independent contractor performing work on behalf of Southern California Edison Company (SCE) incorrectly installed a utility power pole at a depth of 4 feet instead of the required 6 1/2 feet. The pole fell on a worker who suffered major injuries. Although an SCE inspector oversaw the installation, the SCE inspector neglected to verify the installation depth of the pole.

The California Supreme Court held SCE liable for the injuries on the basis that California Edison had a nondelegable duty to see that the poles were set as required by law. In so holding, the court noted that the statutes were promulgated for the safety of the workmen as well as for the public. The court reasoned that since construction and maintenance of lines, including poles, is a necessary part of the utility's business, these tasks may not be delegated without an express provision permitting such delegation. In that case, the California Supreme Court ruled that the duty imposed on a utility could not be delegated to an independent contractor to insulate the utility from civil liability.