Power Breakout

Strategic Considerations of Major Capital Projects

Mark Cohen, *Moderator*
Director
Deloitte Transactions and Business Analytics LLP
Table of Contents

• Session Overview
• Panelists Introductions
• Setting the Stage
• Evolving project delivery systems and inherent risks
• Interactive Discussion
• Questions
Session Overview

Mark Cohen
Introductions

Mark Cohen
## Introductions

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mark W. Cohen, PE, PMP</strong></td>
<td>Deloitte Transactions &amp; Business Analytics LLP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Harborside Plaza 10</td>
<td>Jersey City, NJ 07311</td>
</tr>
<tr>
<td></td>
<td>Telephone: 212-436-7206</td>
<td>E-mail: <a href="mailto:markwcohen@deloitte.com">markwcohen@deloitte.com</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Mark is a Director in the Capital Projects Practice in the Jersey City Office of Deloitte Transactions &amp; Business Analytics LLP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• He is a registered professional engineer and certified project management professional with over 20 years of dispute resolution, project advisory, and risk management experience spanning a wide range of domestic and international engineering and construction projects. He has managed the performance of construction and engineering analyses including schedule delay, disruption, acceleration, early completion, change orders, productivity and inefficiency, causation and responsibility, cumulative impact, differing site conditions, workmanship, damage quantification, lost revenue/business interruption, project controls and management systems, termination, and other issues.</td>
</tr>
<tr>
<td><strong>Albert Bates, Jr.</strong></td>
<td>Duane Morris LLP</td>
<td>600 Grant Street, Suite 5010</td>
</tr>
<tr>
<td></td>
<td>Pittsburgh, PA 15219-2802</td>
<td>Telephone: 412 497 1053</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:abates@duanemorris.com">abates@duanemorris.com</a></td>
<td>• Albert is a Partner with Duane Morris LLP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• He is the Chairman of the Duane Morris Construction Group. While Mr. Bates focuses his practice on the resolution of domestic US and international construction claims, he also advises clients on project planning and execution strategies, project management and project controls strategies, and change management on large construction projects. He has significant experience with megaprojects, EPC projects, and alternative project delivery systems, particularly in power generation, infrastructure, and heavy industrial process facilities.</td>
</tr>
<tr>
<td><strong>Jimmy Addison</strong></td>
<td>SCANA Corporation</td>
<td>220 Operation Way, MC D-304</td>
</tr>
<tr>
<td></td>
<td>Cayce, SC 29033</td>
<td>Telephone: 312-486-2311</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:JADDISON@scana.com">JADDISON@scana.com</a></td>
<td>• Jimmy is the Chief Financial Officer for SCANA Corporation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• As CFO, he is responsible for planning, directing, and overseeing the organization’s finance functions, along with oversight of information services and technology. He has seven years past experience working at Deloitte in Charlotte and Columbia, as well as one year of experience at a Columbia CPA practice.</td>
</tr>
<tr>
<td><strong>Melissa Jones</strong></td>
<td>Bechtel Power Corporation</td>
<td>5275 Westview Dr.</td>
</tr>
<tr>
<td></td>
<td>Frederick, MD 21703</td>
<td>Telephone: 301-228-6000</td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:majones@bechtel.com">majones@bechtel.com</a></td>
<td>• Melissa is the CFO of Bechtel Power Corporation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• As business manager and chief financial officer (CFO) of Bechtel Power Corporation, Melissa Jones is responsible for commercial management of all work performed by Bechtel’s Power global business unit (GBU). She establishes and reports on the operating plans and forecasts for Power and is the primary conduit of financial analysis and reporting to the Power president. She also works closely with Power’s business line presidents, providing consultation and guidance to ensure that financial reporting aligns with accounting practices and procedures.</td>
</tr>
</tbody>
</table>
Setting the Stage

Mark Cohen
Setting the stage

• This discussion will focus on the evolution of the marketplace through an owner, EPC, and legal perspective

• Through this discussion, we will cover multiple topics including: nuclear, gas-fired, T&D, contracting, and claims management

• Evolution of the marketplace
Evolving Project Delivery Systems and Inherent Risks
Strategic Considerations of Major Capital Projects

Jimmy E. Addison
Executive Vice President and CFO
SCANA Corporation
AP 1000

- Two 1,117 MWs units
- Signed EPC in May 2008
- PSC Approval in February 2009
- NRC License received March 2012
- 55% SCANA
  45% Santee Cooper (State of SC)
Key Factors

- Customer Driven
- CAPEX Funding
- Regulatory Pre-Approval
- Recovery Mechanism
Customer Driven

- Economic expansion in state
- > 50% of SC electricity from nuclear already

**SCE&G O2 Emissions**

Note: Reflects emissions as filed February 2014 in the 2014 Integrated Resource Plan.
CAPEX Funding

- Designed to be financed in public markets
- 11% of SCANA stock held by insiders
- Incremental equity <10% of market cap
Regulatory Pre-Approval

NRC
Combined License:
- Construction
- Operating

SC PSC
Combined Approval:
- Construction
- Operating
Recovery Mechanism

**SC Base Load Review Act (BLRA)**

- Up front prudency
- Annual cash rate increase for financing costs
- Minimizes capitalized interest (<5%)
- Allows for escalation
- Quarterly public filings of status, areas of focus, etc…
How are we doing?

- 2/3’s of the contract are fixed or firm with escalators

Note: Reflects new nuclear projected costs as estimated for May 2014 BLRA Quarterly Report; SCE&G 55% share

* SCE&G’s additional 5% ownership interest in the New Nuclear project does not impact the BLRA Projected Cost Calculation
Post concrete pour and placement of CR-10 module

Placement of the Containment Vessel Bottom Head

Nuclear Island Walls
Unit 2 CA-04 Reactor Vessel Cavity Lift
Post concrete pour and placement of CR-10 module

Unit 3 Nuclear Island
(1st Nuclear Concrete Pour)
Managing Project Risk: The Importance of the Project Delivery System and the Project Controls Strategy

Albert Bates Jr.
Duane Morris LLP
Project Risk Management Considerations

- Select appropriate contracting structure
- Define project scope
- Allocate “All” risks by contract
- Develop project controls systems
- Integrate the project controls system requirements into the contract
- Ensure adequacy of project management resources
Typical Project Delivery Systems

- “Traditional” or General Contractor Model
- “Turn Key” or EPC Model
- Cost Reimbursable Model
- “Hybrid” Model - Multiple Prime Contractors
EPC Model

Advantages

✓ Reasonable cost certainty at time of contracting
✓ Typically performed on lump sum, target price or guaranteed maximum price basis
✓ Preferred by Lenders
✓ Lower risk profile for the Owner
✓ Contractor responsible for overall delivery of engineering, procurement, and construction
✓ Owner is insulated from most construction claims
✓ Project duration is typically reduced

Disadvantages

➢ Owner typically pays a “Risk” premium
➢ Owner cedes control of various aspects of the Project to EPC Contractor
   ➢ Selection of Engineer
   ➢ Equipment vendor & technology selection
   ➢ Constructor & Subcontractors
➢ Fewer potential bidders
➢ “All of the eggs are in one basket”
➢ Potentially catastrophic consequences if EPC Contractor or a Major Supplier Defaults
Prudency – Initial Considerations

1. Have appropriate processes and approvals been established for technology selection, initial scope, budget and schedule development, and financing decisions?

2. Which project delivery systems are appropriate for this project?

3. Which project delivery system was selected?

4. Were reasonable alternatives considered?

5. Has each step of the decision-making process been adequately documented?

6. Have appropriate internal controls and procedures been implemented?

7. Has an appropriate internal project management team been selected and staffed?

8. Should outside expertise be engaged to assist the internal project management team (legal, project management, scheduling and project controls, engineering, auditing, risk management, document retention, and other functions)?
Claims Mitigation

• “E and P Come Before C”
• Establish project controls that allow “Real-Time” project status monitoring
• Proactively mitigate impacts to schedule, cost, and performance
• Early identification and mitigation is the key to effective claims management
Interactive Discussion

Mark Cohen
Consortium Challenges

All Panelists:

• Advantages/Disadvantages
Proactive Risk Management & Control Frameworks

• What cutting edge methods and/or technologies is your organization using? (i.e. data management, reporting systems)

• How is the portfolio of projects managed with respect to risk?
Project Prudency

• What kinds of systems and processes are in place to ensure that project costs are recoverable?

• Legal perspective
Questions?