James Short

Senior Vice President
Chief Operating Officer

303.762.7062
jim.short@e3co.com

EXPERTISE

- Permitting power facilities
- Environmental compliance
- Project financing/acquisition due diligence reviews
- Financial modeling / pro forma development
- Database development

EDUCATION

BS Chemical Engineering
Oklahoma State University

EXPERIENCE

E3 Consulting
Senior Vice President
Chief Operating Officer
1999-present

Harris Group, Inc.
Director, Consulting Services
1996-1999

R.W. Beck
Supervising Engineer
1988-1996

Techlaw, Inc.,
Staff Associate
1987-1988

QUALIFICATIONS

As Chief Operating Officer, Mr. Short is responsible for the day-to-day management of the company, and to meet the goals and objectives set by the Chief Executive Officer and the Board of Directors. To that end, Mr. Short has developed E3's overall management and project management systems that ensure that the company's goals and objectives are met at all levels. Mr. Short, a co-founder of E3 Consulting has been providing consulting services including independent engineering review of both power and non-power projects for over 17 years. He specializes in financial model development, project feasibility studies, due diligence, and environmental permitting. He has developed financial models projecting operating results for discounted cash flow valuations; and for projects seeking public offerings non-recourse loan facilities, and equity placements. Mr. Short has extensive experience permitting power projects utilizing combustion turbines, diesel engines, and fluidized bed combustion, including all aspects of environmental impact assessments and stationary source permitting. He is also experienced in environmental site assessments, environmental compliance, and contingency and risk management planning.

REPRESENTATIVE EXPERIENCE

Financial Model Development. For a gas storage project, Mr. Short developed a financial pro forma model that allows for changing loan dates, interest rates, base O&M amounts, and all other key input variables from one easy-to-read assumptions page. Project sensitivity scenarios are automated through an intuitive, user-friendly menu.

Due Diligence. During the course of a due diligence review for a combined-cycle facility, it came to our attention that the EPC contract did not include a heat rate guarantee for duct firing – a significant concern for the lender at the time. Rather than taking several days and using a more traditional approach of technical analysis based on thermodynamic modeling, Mr. Short demonstrated in a matter of hours that the impacts would be insignificant under worst-case heat rate conditions using the project's pro forma.

Air Permitting. Mr. Short prepared an application for a major modification under PSD rules for a Guam power plant using both diesel engines and combustion turbines. The project, which was reviewed both by the Guam EPA and the USEPA, included both the addition of new generating equipment and changes to the operating regimes of the existing equipment. Mr. Short received a draft permit from the USEPA in less than 90 days without a single comment.