

# *Best Practices for Risk Analysis, Quantification and Control*

*(Contingency, Escalation, Reserves, and Allowances)*



**AACE International  
Montreal Section Presents**



**A Special One-Day Workshop June 1, 2012**  
**With John K. Hollmann, PE, CCE, CE**

The AACE International, Montreal Section is pleased to present this One Day Risk Management workshop entitled **Best Practices for Risk Analysis, Quantification and Control**. This one day workshop is based on AACE International's Recommended Practices and industry research.

*John Hollmann has over 30 years of experience, including all practice areas of cost engineering and project control including risk management (and many years as a mining engineer). As owner of Validation Estimating LLC since 2005, John helps owner companies improve their Cost Engineering capabilities. Previously, he managed the downstream cost and schedule metrics and research programs of Independent Project Analysis, Inc. (IPA.) John is a Fellow and Life Member of AACE International and recipient of AACE's highest honor--the Award of Merit. He was lead author of AACE's **Total Cost Management (TCM) Framework; An Integrated Approach to Portfolio, Program and Project Management**. Since TCM's publication, John has co-chaired a task force to enhance AACE's quantitative-focused risk management technical foundations and, building on that foundation, develop a Decision and Risk Management Professional specialty certification (DRMP) planned for beta testing in November 2012.*



## **Introduction:**

As projects become larger and more complex and Owner organizations and Consultants undertake mega projects around the globe, often in developing countries, inherent risks are a part of project reality. Over the last decade many companies have endeavoured to develop the process and tools to better understand, identify, analyze and mitigate and control project risks. However, there remain differing views on terminology and the definitions of cost and schedule contingency, project reserves and other allowances. Furthermore, most of the focus has been on qualitative rather than quantitative risk analysis. The lines in the estimate for allowances (design, quantity, and growth), contingency, and escalation and risk reserves add up to a considerable sum and need to be better understood when evaluating capital estimates.

This special one day workshop will set the stage by providing the necessary foundation knowledge of the risk management process and an expose based on empirical reality showing common Industry practices and the results. This will be followed by discussion and workshops on risk quantification, communicating results and capturing history to improve future practice. Participants will gain practical knowledge, and the latest developments as well as reference material.

## **Agenda:**

### **Morning Session: (8:30 to 12:00)**

- Terminology – Risk Management, Contingency, Reserves, Project Allowances, Escalation
- Risk Management Process Map in TCM (Identifying, Planning, Assessment, Treatment & Control)
- Risk Assessment: Risk Registers, Identification, and Qualitative Risk Analysis
- Bias Considerations for Risk Facilitators and Analysts
  - Workshop Exercise 1: Given a simple risk register and ratings, categorize and prioritize risks for treatment and respond to challenges and opportunities
- Estimate Accuracy: Dealing With Reality

# Best Practices for Risk Analysis, Quantification and Control (Contingency, Escalation, Reserves, and Allowances)

## Afternoon Session: (1:00 to 4:30)

- Failed Risk Quantification Methods (why they don't work but are still commonly used)
- Recommended Practices for Risk Analysis and Quantification (Cost and Schedule Contingency and Escalation)
- Monte-Carlo simulation techniques and Probability Analysis
- Outputs from Risk Analysis and Contingency Estimating/Risk Communication
  - Workshop exercise 2: given findings from a risk analysis session, manually prepare an expected value contingency estimate and respond to a few challenges
- Conclusions and lessons learned

*Join us for breakfast from 8:00 am and lunch at 12:00 included in the workshop fees.*

**Reservation deadline: May 25, 2012**  
**Spaces are limited. Please reserve early by contacting:**  
**Sophie Metras [smetras@bh.com](mailto:smetras@bh.com)**

Please confirm your presence by May 25, 2012 to Sophie Metras  
by fax: 450-437-6382 or by email: [smetras@bh.com](mailto:smetras@bh.com)

Name : \_\_\_\_\_

Job Title : \_\_\_\_\_

Company : \_\_\_\_\_

email address: \_\_\_\_\_

AACEI Member \_\_\_ PMI Member \_\_\_ Student Member \_\_\_ Non-Member \_\_\_

PAYMENT BY CASH OR CHEQUE MADE TO THE ORDER OF AACEI MONTREAL

Payment is accepted in cash or cheque at the door before the opening session

## Workshop Fees:

|             |       |
|-------------|-------|
| Non Members | \$200 |
| Members     | \$150 |
| Students    | \$ 40 |

## Fees include:

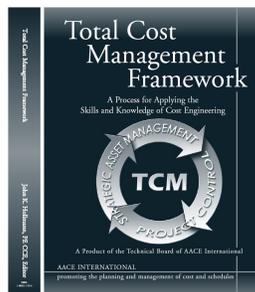
A CD copy of AACE Recommended Practices, breakfast and lunch. Attestation certificate and PDUs will be issued.

*Proceeds from these courses go into the AACE Montreal training and scholarship fund for award of scholarships to local University students.*

## Location:

**Concordia University**  
1515 St-Catherine St. West  
(Corner of Guy St.)  
Montréal, Québec  
Room 3.309 (3<sup>rd</sup> floor)

Presentation is in English



Please visit our website at [www.aaceimontreal.org](http://www.aaceimontreal.org) and the AACEI website at [www.aacei.org](http://www.aacei.org)