

**Technical Meeting Presentation, October 15<sup>th</sup>, 2020, Thursday, 7:00 PM**

**Location: Online**

**TOPIC: IS IT IMPORTANT TO SCIENTIFICALLY DERIVE PROJECT  
CONTINGENCY?**



**ABSTRACT:**

Capital projects often than not experience significant cost over-runs and schedule delays, eroding project' commercial values or profitability. One of the many researched reasons why major projects have such bad reputation is lacking robust and diligent project risk management practice, not only qualifying risks but to quantify the aggregated impacts of such foreseeable risks to the project.

Contingency is an essential element of project budget that is deemed to be spent by project team. In addition, risk reserve funds are supplementary to cover the extraordinary and rare-event driven risks during project execution. How to derive the contingency and risk reserve funds in a scientific way is not a well-known to many project controls personnel. This presentation illustrates how a Monte Carlo simulation technique is used to simulate appropriate contingency at a given confidence level and fits into cost estimate classification.

**Presenter: JOHN ZHAO**

With a total of 30 years' experience in heavy construction industry of petrochemical and oil & gas sector, John spent 8 years with international contractors (Far/Middle East), 7 years with EPC consulting firms (Canada) and past 12 years with major oil & gas companies (North America and Europe), his knowledge, skills and experiences always add values to project organizations in the specialty area of Project Management, Cost Controls and Risk Management.

Holding MSc. (Distinction) and BSc. (Honors) from England, John developed a proprietary RISCOR simulation model to evaluate the probability of major projects' cost overruns at a given budget / AFE in consideration of potential delays and systemic risks. He has presented on the world stages in many occasions on the topic of risk management, contracting strategy and project contingency simulations. His presentation included talks at Canadian Institute conferences in Calgary 2014 & 2013, SPE in Denver 2011, Palisade in London 2010 and in Miami in 2007, IQPC in Abu Dhabi 2008, and AACE in Las Vegas in 2005.