# **Table of Contents**

# **ADVERSE CONDITIONS (ADV)**

	ADVEKSE CONDITION	S (ADV)
ADV-4603	Quantifying the Impact of Supply Chain Disruptions on Critical Lifelines and Near-Site Logistics in Construction Projects	Dr. Sashi Kanth Tadinada; Vishwambhara Kumbharathi, CEP PSP
	BUILDING INFORMATION MO	ODFLING (BIM)
BIM-4565	The Next Level of Analytics: BIM and Power BI Integration	Jeancarlo Duran Maica, CCP EVP; Gino Napuri, EVP
	CLAIMS AND DISPUTE RESO	LUTION (CDR)
CDR-4463	Intricacies and Factors To Consider When Performing a Half-Step Schedule	Stanko Pavlovic, PSP; Greg M. Hall, PSP
CDR-4471	CAPES Methodology: A Tool for Experts Analysis of Claims	Beatriz Vidigal Xavier da Silveira Rosa; Luis Otavio Rosa
CDR-4478	Past Performance Can Be a Good Indicator of Future Results: Part 2	Tara L. Hannebaum; Tucker Dezelan
CDR-4491	Periodic Schedule Updates, Can They Be Trusted?	Aaron W. Fackler, PSP
CDR-4498	The Devil's In the (Contract) Details: How 'No Damages for Delay' Clauses Shape Forensic Schedule Methodologies and Damage Calculations	Rachel Domingo, PSP; Chloe Mandell
CDR-4500	Using Trend Graphs to Analyze Labor Productivity	Amar Majid; Dr. Tong Zhao, PE CCP CFCC PSP
CDR-4503	Digital Transformation (DX) Trends in Construction Forensic Analysis	Dr. Wael El Ghandour; Belkacem Foura
CDR-4520	Understanding Time-Related Overhead Claims on Federal Projects	Michael P. Ryan, PE PSP; Saimir Bici, PSP; Alexander Leland Zimmet
CDR-4535	Developing a Persuasive Cause and Effect Link in Disruption Claims	Suleiman Al Rai, PE PSP; Dr. Hatem Ibrahim PE; Khaled Aziza, EVP PSP
CDR-4541	Bridging the Gap: A New Take on As-Planned vs. As- Built Methodology using Performance-Driven Delay Analysis	Hussain Chizari
CDR-4548	The Reality Check: A Comparison of Retrospective Delay Analysis Methods on Terminated Projects	Alessio Loreti, PE PSP; Mikaela Hutchison
CDR-4557	Circumstantial Silence in Construction Projects	Waleed El Nemr; Maged Raouf Fayek
CDR-4560	Impact Damages: Fact or Fiction?	James G. Zack, Jr. CFCC FAACE Hon. Life
CDR-4562	Resource Planning Essential to Forensic Performance Assessment	Eric Anthony, CFCC PSP
CDR-4584	System Dynamics Modelling for Quantifying a Disruption Claim Caused by Scope Changes in Water and Sewer Construction Projects	Pool Eduard Astete Meza, CCP
CDR-4590	Effective Approach for Time Impact Analysis When Dealing With Claim Blitz	Edward Kucher, CCP PSP; Christopher W. Carson, CEP DRMP PSP FAACE
CDR-4605	Beyond a Single Method: The Various Approaches to As-Planned vs. As-Built Schedule Analysis	Patrick M. Kelly, PE PSP; Javier Arniella, PSP
CDR-4618	The Risks and Implications of Forecasting an Early Completion in a Baseline Schedule	Anthony Springer, PSP; Keefe Mulligan
CDR-4634	Mastering Concurrent Delays: A Case Study Guide for All Construction Stakeholders	Roy Abdollahi; Gayathri Shetty; Robert Freas
CDR-4643	Nailing Down Construction Costs Like a Fraud Examiner	Rachel Weinthal; Nicole Kelly
CDR-4675	Enhancing As-Built Data Reliability for Forensic Delay Analyses	Murat Kilic, CFCC PSP; Hamed Arabzadeh, PSP; Mohammad Reza Farzad, PSP
CDR-4679	Principles of Forensic Schedule Analysis:	Patrick M. Kelly, PE PSP

A Framework for Reliability and Credibility

CDR-4687	Living With Uncertainty: Allowances, Cost Contingency, and Dispute Resolution	Roger Nelson, PE PSP; Steve Purugganan; Adam Troscinski			
COST AND SCHEDULE CONTROL (CSC)					
CSC-4476	Concurrency as a Metric: A Simple Leading Indicator for Project Delay	Matthew Hayek, PE PSP			
CSC-4554	Applying Quality Management Principles to Cost Control: A Study on Soft Commitments	Amir Jafari Dehdari			
CSC-4564	Controlling Costs on Major Construction Projects Executed on Reimbursable Basis	Moses Y. Nkuah, CCP EVP; Seth Agyepong-Wiafe, CCP EVP			
CSC-4612	Sailing Successfully through Bow-Wave Impacts	Shiv M. Pathak			
CSC-4625	Unlocking Success by Leveraging Cost and Scheduling in Design-Build Projects: Enhancing Efficiency and Predictability	David Johnston; David Chigne, CCP CEP PSP			
CSC-4698	Harnessing the Power of Bow Wave Reports	Kyle Palmer, EVP PRMP; Tim Boatwright, EVP			
PROFESSIONAL DEVELOPMENT (DEV)					
DEV-4567	Consequences of a Bad Estimate, or a Bad Estimator – Does it Warrant Having a Professional	Vishwambhara Kumbharathi, CEP PSP; Saumil H. Maniar, PE			
DEV-4622	Board of Cost Estimators? Driving Career Success: The Power of Effective Leadership in Project Controls	Ernesto Llorens, CCP			
	DATA SCIENCE AND ADVANCED	ANALYTICS (DSAA)			
DSAA-4501	Turn Around on the Future of Construction: The Power of AI in Construction Planning and Scheduling	Mauricio Schneider; Wesley Ferreira Barbosa			
DSAA-4511	Harnessing Generative AI and Chatbots for Enhanced Project Controls and User Experience	Kiran Kumar Galla; Virgilio T. Monton, II PEng CCP			
DSAA-4524	Breaking Data Silos: Business Intelligence Tools in Project and Program Management	Jigar Thakkar; Joshua Langevin			
DSAA-4531	Functional Requirements for Machine Learning Modeling in Total Cost Managements	H. Lance Stephenson, CCP FAACE Hon. Life			
DSAA-4532	Using Machine Learning to Enhance Cost Predictability and Minimize Profit Loss	H. Lance Stephenson, CCP FAACE Hon. Life; Joseph Lozada; Kaylyn Mickelsen, PSP			
DSAA-4559	Leveraging Business Intelligence Platforms for Data Analytics in Forensic Schedule Analysis & Quantification of Damages for Construction Projects	Marc A. Pichon; Tanner S. Weil, PSP			
DSAA-4577	The Prediction of Residuals Impact of Pacing Delays by Machine Learning	Mohamed Ashraf Ahmed Mahmoud			
DSAA-4609	Unveiling the Future of Risk Management: AI Meets Monte Carlo	J. Gustavo Vinueza			
DSAA-4619	Graph Databases for Project Controls	Jake Williams			
DSAA-4621	AI-Driven Body of Knowledge: Optimizing Custom Chatbots for Project Specialists	Robert C. Butler			
DSAA-4629	AI Applications in the AEC Industry: A Systematic Literature Review	Dr. Vijayeta Malla; Teja Pulla, CCP CEP EVP PRMP PSP; Dr. Chaitanya Poolla			
DSAA-4646	Leveraging Computer Vision AI to Drive Cost Efficiency	Joseph Lozada			
DSAA-4677	Using Advanced Analytics and Data Visualization for KPI Development in Project Delivery	Stephanie Zerkel; Dr. Nakisa Alborz; H. Lance Stephenson, CCP FAACE Hon. Life			
DSAA-4693	Using AI to Generate and Iterate Schedules Based on Scope Documents	Gerard Cardoso; Damian Borowiec; Rhys Phillips; Leonie Anna Mueck; Dev Amratia			

	ESTIMATING (ES	ST)
EST-4488	A Study of Project Owner's Costs in the Canadian Hydropower Industry	John K. Hollmann, CCP CEP DRMP Hon. Life; Raminder S. Bali, PEng; Alexandra Gagnon; Terrance K. Ginter; Kenneth Ng; Nader Rahmaty, PEng; Nick Sebastian, PEng; Kevin Tong, PEng
EST-4504	Theme Parks & Attractions – A Call for Standard Cost Breakdowns	Asif Parkar, CCP CEP EVP PSP
EST-4523	Developing an Integrated Preconstruction Approach for Collaborative Project Delivery	Amanjeet Singh
EST-4550	Early-Stage Cost and Schedule Growth Methodology Development	Dr. Gabriel Sandler; Hannah Lee; Charles Loelius; Cash Fitzpatrick
EST-4566	Overcoming Challenges in Estimating Capital Costs for Green Hydrogen Plants	Kenia Kalsum-Feunekes, CCP
EST-4581	Do You Really Know the Difference Between Estimate Classification and Accuracy?	Jordan Beckel, CCP CEP
EST-4602	From Maturity to Readiness: A Systems Approach to Cost Classification	Jareth Reeves
EST-4659	Measurement and Communication of Estimate Maturity and Accuracy from Update to Update	Shoshanna Fraizinger, CCP FAACE
EST-4663	Tools and Techniques for Enhancing Program-Level Check Estimates at Federal Sites Throughout their Life Cycle	Dan Melamed, CCP EVP FAACE; Rodney Lehman; Richard Schassburger; James Moore; Bryan A. Skokan, CCP; Kevin Lee; Elizabeth Barnett
EST-4671	Basis of Estimate Presentation to Client: It is Not Just Numbers	Hetali Doshi Joglekar; Douglas W. Leo, CCP CEP FAACE Hon. Life
	EARNED VALUE MANAGEN	MENT (EVM)
EVM-4626	Time Prediction in Construction Projects with Integral Earned Schedule	Mojtaba Z. Kesheh, PSP
	IT/IM in PROJECT AND COST M	ANAGEMENT (IT)
IT-4518	Cost Management System - Why it is Not a Complete Solution to Your Cost Management Problems	Kirti Khanna, CCT; Martin Atchison
	OWNER ISSUES (O	WN)
OWN-4457	Cost Control Maturity Model	Ghaith Al-Hiyari, CCP
OWN-4480	Cost-Effective Capital Project Insurance Strategies	Neil D. Opfer, CCP CEP PSP FAACE
OWN-4502	Owners Challenges in Managing Contractor Driven Extension of Time and Disruption Claims: A Framework for Prevention and Resolution	Dr. Wael El Ghandour, PEng; Belkacem Foura, PEng
OWN-4521	The Impact of Engineering Deficiencies on Change Orders and Cost Estimate Accuracy	Abdulaziz Haqawi, CEP; Saeed Alhajri; Mujahad Alarfaj, CEP
OWN-4526	Open-Book Guaranteed Maximum Price Negotiations: Case Study Analysis	Dr. Douglas D. Gransberg, PE; Marko Pala; Dr. Nils J. Gransberg
OWN-4529	Capital Cost Escalation: Interpreting Bid Premiums in Evolving Market Conditions	Razan Al Taleb, CEP; Mahmoud Sobahy, CEP; Bassam Ogayil, CEP
OWN-4547	Procurement Matrix for the Theme Park Project at Shanghai	Lan Zhang[ Zhitao Fan

OWN-4558	Scheduling Permits for Large Resource Projects	Andre Kin Wai Chong
OWN-4569	Railway Network Upgrade Programs (Part 1 – Challenges Overview)	Dr. Ali Montaser, PEng CCP PSP EVP; Ahmed Montaser, EVP
OWN-4571	Legal Considerations in Proving Disruption Claims	Dr. Rania Fayed;Kareem M. Khattab, PE PSP
OWN-4580	Owner Organization Readiness: Key Elements for Capital Project Success	Noé Saenz
OWN-4648	Optimizing Program Governance in Complex Environments: Navigating the Matrix Structure for Maximum Efficiency and Control	Armando Sanchez; David A. Chigne, CCP CEP PSP
OWN-4651	Owner Project Control Alignment at Project Authorization	Stephen L. Cabano, FAACE
OWN-4700	Railway Network Upgrade Programs (Part 2 – Program Integration Overview)	Dr. Ali Montaser, PEng CCP EVP PSP; Ahmed Montaser, EVP
	PROJECT MANAGEME	NT (PM)
PM-4477	How to Manage Successful EPC Oil & Gas Projects with Competitive and Risk Management Strategies	Arnaldo M. Angelini, PE CCP; Apostolos Chatzisymeon, PE; Sean T. Regan, CCP CEP EVP PSP FAACE; Grigorios Anagnostopoulos, CCP
PM-4545	Lessons Learned–A Culture of Moving Forward	Lan Zhang; Yannan Chen; Gaojian Gu
PM-4561 PM-4586	Project Controls Provide Integrated Common Sense  Developing a Construction Contract Playbook	Andre Luiz Siqueira Marques, EVP PSP; Christopher W. Carson, CEP DRMP PSP FAACE Christopher P. Caddell, PE CCP DRMP;
1 101 4300	Developing a construction contract haybook	Adam L. Troscinski
PM-4676	Capturing Geospatially Accurate Videos to Avoid Claims and Improve Project Governance	Dr. Nakisa Alborz; Deborah Ivy Agustin, EVP PSP; Ysi Rodriguez; Osama Mohammad
PM-4692	Using Project Controls Techniques to Measure Sustainability: Principles for Developing Industry Standards	Goutam U. Jois, Esq.
	PLANNING AND SCHEDU	ILING (PS)
PS-4470	Automatic Train Control – Technical Challenges and	Dr. Achintyamugdha Sharma; Dr. Priyanka Deka;
	Project Controls	Goutam Jois, Esq.; Umesh K. Jois
PS-4497	Challenges and Framework for Subcontractor Schedule Development and Management	Dr. Pei Tang, PRMP PSP; Huimin Shi, CCP PSP; Tianxiong Yang, PE; Abraham Naim, PE PSP
PS-4506	Prospective Time Impact Analysis The Perfectly Imperfect Theory	Savannah Kleyla, PSP; John S. Crane, CFCC PSP
PS-4515	Exposing the Risks of Progress Override and Actual Dates in Delay Analysis	John Coker, PSP; John Cleary, PSP
PS-4551	Utilizing AutoCAD and Excel to Generate a Linear Schedule	Huimin Shi, CCP PSP; Benjamin Chan; Matt Kolb
PS-4555	The Top Ten Mistakes Made in Planning a Complex EPC Project	Glen R. Palmer, CFCC PSP FAACE; Christopher W. Carson, CEP DRMP PSP FAACE
PS-4556	Owners, Don't Let Your Modeled Forecasts Grow Up to be Absorbed Claims	Christopher W. Carson, CEP DRMP PSP FAACE; Mark C. Sanders, PE CCP CFCC PSP
PS-4576	Quantitative Schedule and Cost Risk Analysis on Critical Path Method (CPM) Schedule	Abbas Saifi, PEng CCP EVP PSP; Greg M. Hall, PSP
PS-4585	Maximizing Schedule Effectiveness: A Guide to Resource and Cost Loading Methodologies	Delbert E. Bearden, PSP
PS-4607	Implementing Duration Overrun Analysis for Schedule Review and Forecasting	Christopher W. Carson, CEP DRMP PSP FAACE; Antoine Bechaalani, PSP; Shreyas Raghavendra
PS-4630	The Evolution of Scheduling Practices: Gantt Charts to CPM and Beyond!	Teja Pulla, CCP CEP EVP PRMP PSP; Christopher W. Carson, CEP DRMP PSP FAACE;
PS-4644	Complexities of Evaluating Recovery Schedules in a Forensic Delay Analysis	Dr. Vijayeta Malla Eric Schatz, PE CFCC PSP; Phillip Kenny; Haswanth Venkatavijayan

PS-4652	Effective Management and Scheduling of Working Day Contracts	Avi Sharma, PSP; Matthew G. Nichols, PSP; Diego Melchert, PSP
PS-4656	Bridging the Divide: Integrating EPC Schedules to Minimize Delays in Complex Projects	John Coker, PSP; Khaled Aziza, EVP PSP; Evan Lee
PS-4683	Key Scheduling and Reporting Requirements for Collaborative Contracts	S. Farzad Moosavi; Ronn Chester Baluyot; Ashraf Nabil Ibrahim Fahim
	DECISION AND RISK MANAG	GEMENT (RISK)
RISK-4481	Quantitative Schedule Risk Analysis for Upstream	Adalberto Marques da Costa;
	Strategic Plan	Fabio Martins de Rezende;
		Raphael Seixas dos Santos;
		Rodrigo Maia Francisco da Costa
RISK-4494	Statistical PERT™ Analysis Applied to Contingency	Victoria Tillous; Murray Pearson, PEng;
	and Comparative Results with Data for Mining and Energy Projects	Katherine Wong-Cameron, PEng
RISK-4514	Comparison of Quantitative Risk Methodologies for Program and Portfolio Risk Analysis	Rachel A. Fleming
RISK-4522	The Risks in Project Risk Management: An	Justin Jacobsen, PRMP PSP;
	Assessment Using a Fault Tree Analysis Framework	Christopher J. Payne, CFCC PSP
RISK-4572	Fuzzy Set-Based Analysis of Productivity Variations	Dr. Ashraf Salem, PEng; Elsayed Salem; Dr. Emad Elwakil, PE CCP
RISK-4575	Schedule Risk Prioritization in Monte Carlo Simulation	Rasoul Abdolmohammadi, CCP
RISK-4593	Calculating Project Risks Like Financial Market Pros	Austin M. Spina
RISK-4615	Simulation-Based Risk Allocation in Collaborative-	MennatAllah Hammam; Sohiel Hassan;
1113K 1013	Based Projects	Dr. Moe Roghabadi; Dr. Osama Moselhi, PEng
	Buseurrojeets	FAACE
RISK-4616	Checklist for Integrated QRA Modeling	J. Gustavo Vinueza
		Dr. Maniula Disconavaka, CCD
RISK-4672	Premeditatio Malorum: A Stoic Approach to High- Impact, Low-Probability Risk Management in Major	Dr. Manjula Dissanayake, CCP
	Projects	
	TOTAL COST MANAGEM	IENT (TCM)
TCM-4546	Constructability Study Model for a Theme Park Hotel	Lan Zhang; Yi Fang; Weijia Yang
TCM-4606	The Project Controls Manager's Playbook: How to Thrive in the New Era	Leslie E. McMullan, FAACE
TCM-4660	The Benefits of Incorporating AACE Best Practices (In the Age of the Nuclear Renaissance)	Shoshanna Fraizinger, CCP FAACE