R. 21-10-001: Order Instituting Rulemaking (OIR) to Develop Safety Culture Assessments for Electric and Natural Gas Utilities

March 11, 2022, 9:00am- 12:00pm Workshop (Webex)

WORKSHOP AGENDA

Time	Presenter	Topic
OPENING, 9:00AM-9:20AM		
9:00am-9:10am	California Public Utilities Commission (CPUC) Safety Policy Division	Welcome; brief overview of OIR and why we're here
9:10am-9:20am	Commissioners	Opening Comments
SPEAKER PRESENTATIONS, 9:20AM-11:00AM		
9:20am-9:40am	Dr. Mark Fleming *Department of Psychology, Saint Mary's University*	Why safety culture?; measuring, and improving safety culture
9:40am-10:00am	Dr. Paul Schulman *Center for Catastrophic Risk Management, University of California, Berkeley*	Safety culture context and regulatory challenge
10:00am-10:20am	Dr. Dom Cooper *B-Safe Management Solutions (BSMS)*	Safety culture, safety climate, and safety culture frameworks
10:20-10:40am	Dr. Claudine Bradley *Canada Energy Regulator*	Regulator's safety culture journey
10:40-11:00am	Christopher Hart *Former Chair of the National Transportation Safety Board (NTSB)*	Improving safety in the airline industry through the Commercial Aviation Safety Team (CAST)
QUESTIONS & PANEL DISCUSSION, 11:00AM-12:00PM		
11:00am-11:15am	Commissioners	Questions from Commissioners
11:15am-11:45am	CPUC Safety Policy Division	Panel Discussion: How do we know that focusing on safety culture leads to improvement?
11:45am-12:00pm	All	Questions from audience

PARTICIPANT BIOGRAPHIES

MARK FLEMING, Ph.D. is a Professor in the department of psychology at Saint Mary's University in Halifax Nova Scotia. Dr. Fleming has just completed a five-year term as the CN professor of Safety Culture. He is an applied psychologist with nearly 30 years of experience working to enhance safety culture in a range of safety critical industries, including the offshore oil and gas, nuclear power, petrochemical, power generation and construction. He advises regulators (e.g., Canadian Energy Regulator, US Department of Transport, UK nuclear regulator) and large organizations on safety culture assessment and improvement. He is dedicated to developing practical and valid tools to assist organizations to prevent harm. He holds degrees from the University of Aberdeen, and The Robert Gordon University in Scotland.

PAUL R. SCHULMAN, Ph.D.is a Professor Emeritus of Government at Mills College in Oakland, California and a Senior Research Associate at the Center for Catastrophic Risk Management at the University of California, Berkeley. He has written extensively on managing hazardous technical systems to high levels of reliability and safety, within organizations and across networks of organizations. His books include (with Emery Roe), *Reliability and Risk: The Challenge of Managing Interconnected Critical Infrastructures* (Stanford University Press, 2016), *High Reliability Management* (also with Emery Roe) (Stanford University Press, 2008), and *Large-Scale Policy-Making* (Elsevier, 1980). Dr. Schulman's most recent relevant article is "Organizational Structure and Safety Culture" (Safety Science, v.126, 2020). He has been a consultant to the Canadian Nuclear Safety Commission, the California Independent System Operator, the Lawrence Livermore National Laboratory, Invitae, a genetic testing start-up, and was an advisor to the California Public Utilities Commission's Office of the Safety Advocate.

DOM COOPER, Ph.D. is a past professor of both safety and Industrial/Organizational psychology at Indiana University, Bloomington, is CEO of B-Safe Management Solutions Inc., in Greencastle, Indiana operating in the Americas, Asia, Africa, Australasia, Europe, and the Middle East. Dr. Cooper is a renowned award-winning author, and acknowledged behavior-based safety expert, who has researched and written books, scientific papers and professional articles on safety culture, safety leadership, and behavioral safety over the past three decades. His recent safety culture works include "Strategic Safety Culture Roadmap" (2013), "Navigating the safety culture construct: a review" (2016), "Criterion-related validity of the cultural web when assessing safety culture" (2019a), and "The efficacy of industrial safety science constructs for addressing serious injuries & fatalities (SIFs)" (2019b).

CLAUDINE BRADLEY, Ph.D. is a Technical Leader - Human and Organizational Factors for the Canada Energy Regulator, Canada's federal agency responsible for regulating international and interprovincial aspects of the oil, gas, and electric utility industries. Dr. Bradley provides leadership and counsel on management systems, safety culture, and other system safety matters related to activities under the jurisdiction of the Canada Energy Regulator. She is currently Chair of the North American Regulators Working Group on Safety Culture and Vice-Chair of the Canadian Standards Association Z662 Technical Sub-Committee on Management Systems. Prior to joining the CER, she spent 17 years in the aviation industry where she led various airline safety, training, and operations teams. Her work in the private sector included the development and implementation of safety management systems, air crew training, human factors initiatives, quality programs, and flight operations' regulatory compliance. Dr. Bradley holds a Political Science degree from McGill University, a Master's in Leadership from Royal Roads University, and a Master's and Ph.D. in Human and Organizational Systems from Fielding Graduate University. Her doctoral studies focused on safety culture in high hazard industries and regulator safety (oversight) culture research.

CHRISTOPHER HART, J.D. is the Former Chairman of the National Transportation Safety Board (NTSB). He was appointed to the NTSB in 2009, and served as Acting Chair starting in 2014 and then as Chair from 2015 to 2017. He was previously a Member of the NTSB from 1990 to 1993. Before returning to the Board in 2009, Chris Hart was Deputy Director for Air Traffic Safety Oversight at the Federal Aviation Administration (FAA) and previously served as the FAA Assistant Administrator for System Safety. After Christopher Hart retired from the NTSB, the FAA selected him to lead the Joint Authorities Technical Review. This group was created after the two tragic Boeing 737 MAX crashes to bring together aircraft certification experts from the FAA and nine other aviation regulatory authorities around the world, plus NASA, to examine their aircraft certification process and make recommendations to make it more robust. He holds a law degree from Harvard University and Master's degree and a Bachelor's Degree in Aerospace Engineering from Princeton University.