

## AREAS OF EXPERTISE

- Arbitrator
- Change Management
- Claims Prevention
- Contract Administration
- Corporate Governance
- Cumulative Impact
- Damages
- Disruption / Productivity
- Industry Best Practices
- International Contracting
- Mediator
- Megaproject Oversight
- Program / Project Management
- Project Controls
- Prudence / Performance Audits
- Risk Assessment
- Risk Management
- Scheduling / Delay
- Standard of Care

## PROFESSIONAL EXPERIENCE

2008 – PRESENT

CHAIRMAN, PEGASUS-GLOBAL HOLDINGS, INC.

GENERAL: Dr. Galloway has been an international Engineer/Construction Consultant traveling and working in over 100 countries for over 40 years concentrating primarily on megaproject construction. She has also served as an arbitrator since 1987. Dr. Galloway has consulted on matters covering the entire project delivery process in the energy and infrastructure industries, working on behalf of private and public-sector clients globally. She also served as a member of the U.S. National Science Board, appointed by U.S. President Bush with Senate confirmation for a six-year term, serving on its executive committee and as its Vice Chair for two of those years and received an honorary Doctor of Science from the South Dakota School of Mines.

Dr. Galloway's experience includes: strategic advice to boards and senior management concerning governance, management structures and performance, contracting strategies, contract development and risk reviews, contract administration; risk management including corporate-wide enterprise risk management programs, project risk identification, assessment and analysis, trend evaluations and risk reduction plans; auditing including performance, prudence, and management audits; Integrity Generally Accepted Processes & Practices Analysis™ of policies and procedures and benchmarking; and Alternative Dispute Resolution (ADR) services including claims avoidance, non-testifying expert consulting including Testing Expert Evidence,<sup>®</sup> litigation strategy, assistance in legal counsel and arbitrator selection, and serving as an arbitrator and mediator.

Dr. Galloway has extensive global experience having worked on some of the world's largest projects including: over 30 nuclear power plant projects; Ontario Power's Darlington Nuclear Refurbishment Program; Duke Energy's Coal Ash Basin Closure Program; Kemper County IGCC plant; Edwardsport IGCC plant; Vogtle Nuclear Units 1,2,3,4; Kuala Lumpur International Airport; Sakhalin Island, Russia, Oil and Natural Gas Pipeline Project; Cadereyta Refinery Project, Mexico; HBJ Pipeline Project, India; Murrin Murrin nickel-cobalt mine, Western Australia; the Tsing Ma Bridge, Hong Kong; Australia LNG Project; Panama Canal; Seattle Sound Transit Light Rail Program; London's Crossrail Project; Citylink Project, Melbourne, Australia; Venice Lagoon Floodgate Project, Italy; Xiaolangdi Dam, China; and, City of Winnipeg, Canada, Capital Improvement Program.

She serves as an advisor to both owner and contractor clients including board audit and compliance committees and has served as a member of various Independent Review Panels (IRP), including advisor to the New York Thruway Authority for the approximately \$4 billion New Tappan Zee Bridge, her appointment by both the Governors of Washington and Oregon to the IRP for the Columbia River Crossing Project, and by the Washington Legislature and Governor as Chair of the Expert Review Panel for the \$3.5 billion Alaskan Way Viaduct Replacement Program.

Dr. Galloway is often retained as a keynote speaker regarding arbitration, mediation, leadership, women in engineering, and risk management. She has served as a guest lecturer at multiple universities including: Manhattanville College, the University of Melbourne; UCLA; New York Institute of Technology (NYIT); Central Washington University (CWU); University of Wisconsin; Harbin University of Technology in Harbin, China; the University of Bologna, Italy; the Old Master's Program at Purdue University; University of British Columbia and the West Virginia's University Center for Women's Studies Programs.

#### ENERGY:

- Substantial experience working with Merchant Utilities, Regulated Public Utilities, Public Service Commissions, FERC, Independent Power Producers, Wind and Solar Developers, and major oil and gas companies
- Multiple types of energy projects including oil and gas (refineries, LNG, steam-flood, pipelines, offshore platforms), alternative and renewable energy (wind power, solar power, geo-thermal, biomass, hydro power, nuclear power), transmission and distribution, storm hardening and resilience, electric base-load generation (over 67 power plants [nuclear, combined cycle, coal, IGCC and hydro] involving construction, outages and decommissioning)
- Extensive experience in evaluating and assessing construction claims, including issues of delay, productivity, standard of care, terminations and fraud; auditing and assessment of prudent decision-making, corporate policies and procedures and/or processes; contract risk reviews; advising re: transmission support agreements; power purchase agreements/cost-sharing agreements including curtailment issues; coal asset and production leases; decommissioning; and coal-ash removal/cleanup
- Independent Monitor regarding new capital megaprojects
- Arbitrator

#### TRANSPORTATION/HEAVY INFRASTRUCTURE:

- Extensive experience with multiple types of transportation projects including airports, bridges, highways, mass transit (both light and heavy rail), canals, and ports. Heavy infrastructure projects include mining (coal, iron-ore, gold, and cobalt/nickel), process plants, and tunnels
- Substantial experience in analyzing and assessing claims: contract issues (FIDIC, ENAA, EJCDC, AGC, AIA, Standard Forms and Agreement), Contract Delivery Issues (Design-Build, EPC, P3, Progressive Design-Build, Design-Bid-Build), breach of contract, contract interpretation, contract termination, schedule delay/acceleration, cumulative impact, standard of care, productivity/disruption, accounting and financial issues, fees, lost profits, errors and omissions, construction defects, construction failures, engineering issues, delay damages, quantum meruit, consequential damages, subsurface utility engineering, and fraud
- Independent Review Panels for megaproject execution
- Advisor for Program and Project Management, Program and Project Execution Plans, and Governance
- Extensive experience with Dispute Review Boards, Mediation, Settlement Negotiations and Arbitration

1978 – PRESENT  
INDUSTRY ACTIVITY

Dr. Galloway is an internationally recognized leader in the engineering and construction arena. In 2004, she served as the first woman President of the American Society of Civil Engineers (ASCE). She has been recognized by her peers and is a Fellow of the College of Commercial Arbitrators (CCA), becoming the first non-lawyer to be elected to the College; a Fellow and a Chartered Arbitrator of the UK Chartered Institute of Arbitrators; the National Academy of Construction; the Pan American Academy of Engineering; and the position of Fellow in several professional organizations.

Dr. Galloway's achievements have been highlighted by: TED with her TEDx talk on "Are Engineers Human?"; on Sky News Australia TV; ADR Perspectives; PM Network; Time magazine; CNN Lou Dobbs; Discovery Channel; Engineering News Record; and Federal Technology Watch. She was also a blog writer for Engineering News Record discussing current trends, challenges, and hot topics in the construction industry.

1981 – 2008  
CEO and PRINCIPAL, THE NIELSEN WURSTER GROUP, INC.

Prior to joining Pegasus-Global, Dr. Galloway was the Chief Executive Officer and Principal of The Nielsen Wurster Group Inc. (Nielsen-Wurster), an international management consulting firm which specialized in management consulting, risk management and dispute resolution. She served as both a consulting and testifying witness in numerous arbitration forums regarding projects throughout the world: refineries, offshore platforms, oil depots, LNG facilities, petrochemical plants, gas pipelines and compression modules, power plants (wind, nuclear, fossil fuel, gas-fired, combined-cycle, hydroelectric, waste-to-energy, transmission), hotels, casinos, stadiums, commercial offices, hospitals, universities, civic and convention centers, parking garages, process plants, wastewater treatment plants, landfills, airports, highways, bridges, tunnels, mass transit, railroads, port facilities, dams, bulk pharmaceutical plants, manufacturing and other projects.

Her executive roles prior to becoming Chief Executive Officer included President and Chief Financial Officer. She was also the Chief Executive of Nielsen-Wurster Asia Pacific, a Nielsen-Wurster subsidiary corporation, which was located in Melbourne, Australia. In addition, Dr. Galloway served as President of another Nielsen-Wurster subsidiary Nielsen-Wurster ESB, a joint venture with the Electricity Supply Board of Ireland that specialized in power plant maintenance software.

1978 – 1981  
CH2M Hill

Before joining Nielsen-Wurster, Dr. Galloway was employed by CH2M Hill assigned to the \$1.6 billion Milwaukee Water Pollution Abatement Program (MWPAP). Her responsibilities at CH2M Hill on the MWPAP involved project controls including estimating and CPM scheduling; inspection; and assistance to the Program Director. In her last role at the MWPAP as the Master Program Scheduler, her responsibilities included the preparation and updating of the Program Master Schedule, coordination of all project schedules, involvement with cost engineering functions, preparation of all program / project schedule progress reports for public and client presentations and monitoring compliance with court orders imposed on the Program. Other activities at the MWPAP included authoring a scheduling manual; preparation of bid documents, on-site tunnel inspection, and coordination of a project manager's training series.

## REGISTRATIONS / CERTIFICATIONS

- Chartered Arbitrator, Chartered Institute of Arbitrators (CIArb)
- Board Leadership Fellow, National Association of Corporate Directors (NACD)
- Certificate in Dispute Resolution, Pepperdine Law School at Straus Institute
- Diploma in International Commercial Arbitration, Jesus College, Oxford, CIArb
- Certificate of Director Education, NACD
- Professional Engineer in the following U.S. and global locations:
  - Arizona, No. 16978
  - Colorado, No. 28566
  - Florida, No. 44498
  - Georgia, No. 031939
  - Kansas, No. 19495
  - Kentucky, No. 17690
  - Mississippi, No. 25328
  - New Hampshire, No. 12184
  - Australia, Institution of Engineers Australia, CPEng No. 1194740
  - Ohio, No. 72520
  - New Jersey, No. GE-29321
  - New York, No. 060684-1
  - Pennsylvania, No. PE-046146-R
  - Washington, No. 28262
  - Wisconsin, No. 21786-006
  - Wyoming, No. PE-4974
  - Canada, Province of Manitoba No. 15061
- International Registry of Professional Engineers in the discipline of Civil Engineering, Construction Management by the United States Council for International Engineering Practice, No. 131
- Certified Examiner, National Council of Examiners for Engineering and Surveying, No. 12046
- Certified Project Management Professional, No. 0012-84
- Professional Member of the Royal Institution of Chartered Surveyors, Faculties of Project Management and Risk Management

## ARBITRATION EXPERIENCE

Dr. Galloway is a member of the Academy of Distinguished Neutrals, a Fellow and Chartered Arbitrator of the CIArb and a Fellow of the CCA where she was a past co-chair of its construction committee. She is a member of the American Arbitration Association's (AAA) Board of Directors and past chair of the AAA's National Construction Dispute Resolution Committee. Her ADR panel memberships include:

- AAA: Mega Projects, Large Complex Cases, Construction, Energy, and Commercial Panels (Member of AAA Board of Directors and Past Chair of its National Construction Dispute Resolution Committee)
- The International Center for Dispute Resolution (ICDR) Panel of Arbitrators including its International Energy Arbitrators List
- CIArb Panel of Arbitrators
- London Court of International Arbitration (LCIA) North America Users Council
- International Council for Commercial Arbitration
- International Institute for Conflict Prevention & Resolution (CPR) Energy, Construction and Cross Border Panels
- The United States Council for International Business Chamber of Commerce Panel

She has served as a sole arbitrator, chair and member of three-member panels arbitrating a large number of disputes involving commercial, construction and energy issues of private and governmental facilities in the energy, process and building industries. Dr. Galloway has experience with numerous arbitration forums including ICC,

UNCITRAL, Singapore International Arbitration Center, and the LCIA, with disputes ranging from \$1 million to \$6 billion.

## BOARDS AND DIRECTORSHIPS

### Publicly Traded Boards

- Granite Construction, Inc., Chair of Nominating and Governance Committee and Member of Executive and Audit Committees, 2017 – Present

### Privately Held Boards

- Pegasus-Global Holdings, Inc., Chairman, 2000 – Present

### Former Publicly Traded and For-Profit Boards

- SCANA Corporation, Chair of Special Litigation Committee, 2018 – January 2019
- Bergmann and Associates, 2012 – 2016
  - Governance Committee (2015-16)
  - Future Leaders Development Committee (2013-16)

### Former Government Boards

- National Science Board, 2006 – 2012
  - Vice Chair (2008-10)
  - Executive Committee (2010-11)
  - Sustainable Energy Task Force Committee (2007-09)
  - Audit & Oversight and Polar Research Committees (2006-12)
  - Committee on Strategy & Budget (2006-12)
  - International Task Force Committee (2006-08)

### Current Non-Profit Boards

- American Arbitration Association, 2009 – Present
  - Executive Committee (2014-16)
- Life Support Board of Trustees (Philanthropic Organization), 2010 – Present

### Former Non-Profit Boards

- CWU Foundation Board of Trustees, 2012 – 2018
  - Treasurer (2013-15)
- Pacific Science Center, 2012 – 2017
  - Development Committee (2013-17)
  - Co-chair CEO Search Committee (2014-15)
  - Co-chair of the Festival of Fountains (2014)
  - Chair of the Foundations of Science Breakfast (2015) and Co-chair (2014)
  - Finance and Audit Committee (2012)
  - Science & Education Advisory Committee (2012-15)
- Pan American Academy of Engineering, 2006 – 2011

### Former Advisory Boards

- University of North Carolina Charlotte National Ash Management Advisory Board, 2015 – 2018
- Duke Energy's Coal Ash Basin Closure Program Management Oversight Board, Chair, 2015 – 2017
- Seattle Chamber of Commerce Community Development Roundtable, 2013 – 2014
- Discovery Channel, Science Channel Board of Advisors, 2009 – 2012
- Roebing Global Technical School, 2012 – 2015
- Independent Expert Review Panel for Alaskan Way Viaduct Replacement Project, Chair, 2011 – 2015
- SR520 Strategic & Technical Advisory Panel, 2011 – 2014
- NYIT Engineering Dean's Advisory Council, 2011 – 2016

- Eastern Washington Governor’s Business Advisory Council, 2007 – 2012
- IRP for Columbia River Crossing Bridge Project, 2010
- Construction Industry Institute Advisory Board, Co-chair, 2006 – 2010
- Construction Superconference Advisory Board, 2007 – 2010
- ASCE Industry Leadership Council, 2008 – 2010
- University of Nebraska, Charles W. Durham School of Architectural Engineering and Construction Academic Review Team, 2009
- Extraordinary Women in Engineering Project, 2004 – 2009

#### Editorial Boards

- ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Practice Board, 2009 – Present

## AWARDS AND HONORS

- Albert Nelson Marquis Lifetime Achievement Award, Marquis Who’s Who as a Leader in the Engineering Industry, 2019
- Chartered Arbitrator - CI Arb, 2018
- Leadership Fellow - NACD, 2017
- Academy of Distinguished Neutrals, 2017
- Fellow - CCA, 2014
- Outstanding Director - AAA, May 2014
- The Center for Computer-Assisted Legal Instruction Excellence for the Future Award in Arbitration and Advocacy - Pepperdine Law School, March 2013
- Profiles in Leadership - NYIT, 2013
- Honorary Doctor of Science - South Dakota School of Mines, December 2011
- Women’s Enews.org, 21 Leaders for 21<sup>st</sup> Century Honoree for “Architect of Spaces for Women in Engineering and Science”, May 2011
- *ASCE Journal of Legal Affairs and Dispute Resolution in Engineering and Practice* Best Scholarly Feature, Case Study Paper Award for “Design Build/EPC Contractor’s Heightened Risk – Changes in a Changing World”, July 2010
- National Association of Professional Executive Women “Woman of the Year” in Prudence Audit Consultation, 2008
- G. Brooks Ernest Award, Cleveland (Ohio) Chapter of ASCE, 2007
- Engineering Excellence and Leadership Award, George Mason University, 2007
- CSI Michelangelo Award Panel of Judges, 2006-2007
- Pan American Academy of Engineering, 2006
- Sigma Kappa Colby Award, 2006
- “Who’s Who in America,” Edition 68, 2005-Present
- Key Women in Energy-Global Awards, Energy Leaders Council, 2005
- National Academy of Construction, 2005
- “Who’s Who of American Women,” 2004-Present (listed since 1983)
- “Who’s Who in the World,” 2004-Present
- “Who’s Who in Science and Engineering,” 2002-Present
- YWCA Tribute to Women Honoree, 2004
- Society of Women Engineers’ Upward Mobility Award, 2003
- Kentucky Governor’s Award - Kentucky Colonel, 2004
- Lafayette High School Hall of Fame, Inducted 2001
- National Academy of Engineering: Celebration of Women, 2000

- Professional Leadership Award, National Professional Women in Construction, 1995
- Purdue University Distinguished Engineering Alumni Award, 1991
- Mercer County Engineer of the Year Award, 1990
- White House Fellowship Regional Finalist, 1990
- Glamour Magazine's "Ten Outstanding Young Working Women for 1988," February 1988
- Somerset County's Outstanding Women in Business and Industry, October 1987
- "Who's Who in America's Emerging Leaders," 1987-Present
- Engineering News Record, "Top Women in Construction," October 1986
- "Distinguished New Engineer," Society of Women Engineers, 1980

## EDUCATION AND COURSES

- Diploma in International Commercial Arbitration, Jesus College, Oxford, CI Arb, 2015
- Certificate in Dispute Resolution, Pepperdine Law School at Straus Institute, Malibu, CA, 2014
- PhD in Infrastructure Systems Civil Engineering, Kochi University of Technology, Kochi, Japan, 2005
- MBA – Magna cum Laude, NYIT, New York, NY, 1984
- BS in Civil Engineering, Majors in Structures and Construction Management, Purdue University, West Lafayette, IN, 1978

## INDUSTRY / ACADEMIC RESEARCH

- Co-chair and member of research team, *CII Guide to Reimbursable Contracting, Implementation Resource 260-2*, Construction Industry Institute (CII), The University of Texas at Austin, 2011
- Co-chair and member of research team, *CII Construction Industry Institute Reimbursable Contracts, Research Summary 260-1*, CII, The University of Texas at Austin, 2008 – 2010
- National Research Council Committee for Advancing the Productivity and Competitiveness of the U.S. Construction Industry Workshop, 2008 – 2009

## AUTHORED BOOKS / FORWARDS / CHAPTERS

- *Managing Gigaprojects-Advice from Those Who've Been There, Done That*, co-authored with the late Dr. Kris R. Nielsen and Jack L. Dignum, ASCE Press, Reston, VA, 2013
- "Interview: Patricia Galloway," *Connecting Students to STEM Careers, Social Networking Strategies*, Camille Cole, International Society for Technology in Education, 2011
- Foreword to Lunsden, Reese, *The View from Here, Optimize Your Engineering Career from the Start*, Illumina Publishing, 2011
- *Engineering in Government and Public Policy*, Section 4.5.3, UNESCO Report, Engineering: Issues, Challenges and Opportunities for Development, United Nations, UNESCO Publishing, Paris, France, 2010
- Galloway's 21<sup>st</sup> Century Engineer: An Essay Review, Robert Calfee, Stanford University, Thomas Stipanowich, University of California, Riverside, CA, Vol. 12, No. 14, 08 October 2009
- Foreword to Kusayanagi, S.; Niraula, R.; and Hirota, Y., *Principles and Practice of International Construction Project Management*, Tokyo, Japan, 2009
- Foreword to Williams, F. Mary and Emerson, Carolyn J., *Becoming Leaders*, ASCE Press, Reston, VA, 2008
- *The 21st Century Engineer: A Proposal for Engineering Education Reform*, ASCE Press, Reston, VA, 2007
- Foreword to Hatch, Sybil E., *Changing our World: True Stories of Women Engineers*, ASCE Press, Reston, VA, 2006

- *Anticipating Problems: Project Risk Assessment and Project Risk Management*, co-authored with K. Nielsen, Chapter 6, Collaboration Management, New Project and Partnering Techniques, edited by H. Shaughnessy, John Wiley & Sons 1994

## MEMBERSHIPS

- American Bar Association, 2013 – Present
  - Forum Committee on the Construction Industry
  - Dispute Avoidance & Resolution Committee
  - International Construction Committee
  - Section of International Law
- American Nuclear Society
- American Society of Civil Engineers, Fellow
  - President, 2004-05
  - National President, 2003-04
  - National President-Elect, 2002-03
  - International Director of the Board, 1992-95
- Association for the Advancement of Cost Engineering International, Fellow
  - Chair of National Committee – Women in Project Controls, 2004-05
  - Member of National Planning and Scheduling Committee, 2003-11
  - Member of Executive Director Search Committee, 2009-10
- Association for International Arbitration
- Chartered Institute of Arbitrators
- College of Commercial Arbitrators, 2015 – Present
  - Construction, International and Energy Committees
- Construction Institute
- Dispute Review Board Foundation
- Institute of Civil Engineers, United Kingdom, Fellow
- Institute of Engineers, Australia, Fellow
- International Bar Association
  - Member of International Construction Projects Committee
- Inter-Pacific Bar Association
- National Academy of Construction
- National Association of Corporate Directors
- National Council of Examiners for Engineering and Surveying
- Order of the Engineer
- Pan American Academy of Engineers

## TECHNICAL PAPERS AND PRESENTATIONS

Dr. Galloway is a prolific writer and world-renowned speaker having authored over 130 papers, approximately 30 peer reviewed journal articles and nearly 200 public speaking (including over 45 keynote addresses) engagements regarding leadership, corporate governance, ethics and professionalism, communication, risk management, dispute resolution, contract administration, program and project management, project controls, women in engineering and other topics.