

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

DIRECT TESTIMONY OF

KRIS R. NIELSEN

**ON BEHALF OF
KANSAS CITY POWER & LIGHT COMPANY**

**IN THE MATTER OF THE APPLICATION OF
KANSAS CITY POWER & LIGHT COMPANY
TO MODIFY ITS TARIFFS TO CONTINUE THE
IMPLEMENTATION OF ITS REGULATORY PLAN**

DOCKET NO. 10-KCPE-415 -RTS

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Dr. Kris R. Nielsen. My business address is 1750 Emerick Road, Cle Elum,
3 Washington 98922.

4 **Q. WHAT IS YOUR OCCUPATION?**

5 A. I am the President and Chairman of Pegasus Global Holdings, Inc. (Pegasus-Global), a
6 management consulting firm that provides services to the utility industry and other
7 industries. I am the Director of this engagement for Pegasus-Global.

8 **Q. DR. NIELSEN, HAVE YOU PROVIDED TESTIMONY BEFORE THE KANSAS**
9 **CORPORATION COMMISSION ON BEHALF OF KANSAS CITY POWER &**
10 **LIGHT?**

1 A. Yes I have. I provided Testimony in the Iatan Unit 1 proceeding in Docket No. 09-
2 KCPE-246-RTS (“246 Docket”). That testimony is attached hereto as Schedule
3 KRN2010-1.

4 **Q. And in that testimony, did you previously testify as to your education, experience
5 and employment history?**

6 A. Yes.

7 **Q. Does that testimony remain accurate today?**

8 A. Yes.

9 **Q. What was the nature of your testimony in the 246 Docket?**

10 A. Pegasus-Global was asked by KCP&L to perform an independent and objective
11 evaluation of the effectiveness of KCP&L management regarding Iatan Unit 1 and the
12 prudence of the decisions made by the Project Leadership Team.

13 **Q. What is the purpose of your direct testimony in this case?**

14 A. The purpose of my testimony is to place into the record of this docket my testimony from
15 the 246 Docket regarding the Iatan Unit 1 facility. I am doing that by attaching my
16 testimony from the 246 Docket to this testimony as an exhibit.

17 **Q. Does that conclude your testimony?**

18 A. Yes, it does.

PUBLIC VERSION “[REDACTED]**” DESIGNATES
CONFIDENTIAL INFORMATION HAS BEEN REMOVED**

DIRECT TESTIMONY OF

DR. KRIS R. NIELSEN

**ON BEHALF OF KANSAS CITY POWER & LIGHT (KCP&L) IN THE MATTER OF
APPLICATION OF KCP&L TO MODIFY ITS TARIFFS TO CONTINUE THE
IMPLEMENTATION OF ITS REGULATORY PLAN**

DOCKET NO. 09-KCPE-246-RTS

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A.** My name is Dr. Kris R. Nielsen. My business address is 1750 Emerick Road, Cle Elum,
3 Washington 98922.

4 **Q. WHAT IS YOUR OCCUPATION?**

5 **A.** I am the President and Chairman of Pegasus Global Holdings, Inc. (Pegasus-Global), a
6 management consulting firm that provides services to the utility industry and other
7 industries. I am the Director of this engagement for Pegasus-Global.

8 **A. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 **Q.** Kansas City Power & Light (KCP&L) asked Pegasus-Global to perform an independent
10 and objective evaluation of the effectiveness of KCP&L management regarding the Iatan
11 Unit 1 and the prudence of the decisions made by the Project Leadership Team. In
12 developing the study scope, the following objectives were established:

- 13 • Assessment of the management processes used by KCP&L to plan, execute and
14 control functional activities.

- 1 • Identification of management strengths and positive actions which may have had
2 an impact on cost and/or schedule.
- 3 • Identification of any management shortcomings which may have had an impact
4 on cost and/or schedule.
- 5 • Determination of the effectiveness of overall Design, Procurement and
6 Construction Management practices and the extent to which these practices
7 avoided, mitigated or resulted in cost and/or schedule impacts.

8 In addition, Pegasus-Global was requested to read, evaluate and critique the Vantage
9 report prepared for the Kansas Corporation Commission (K.C.C.) Staff. I, Dr. Kris
10 Nielsen, am the “sponsor” of the Pegasus-Global analysis. I directed and actively
11 participated in the evaluations and preparation of this testimony.

12 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**
13 **PROFESSIONAL EXPERIENCE.**

14 **A.** I have earned a doctorate in Infrastructure Systems (Civil) Engineering from Kochi
15 University of Technology in Kochi, Japan in 2005, a Doctorate of Jurisprudence from
16 George Washington University Law School in Washington D.C. in 1970, and a Bachelor
17 of Mechanical Engineering degree from Princeton University in 1967. I have over 40
18 years of experience, including 27 as a management consultant in utility prudence and
19 management reviews, evaluations and audits. I have authored over 100 papers and
20 publications including the area of prudence and utility management. My power plant
21 experience includes nearly 90 power plants. I have testified 90 times of which over 40 of
22 those testimonies involved power plant projects.

23 I have performed extensive work on behalf of both public and private sector clients, on a
24 wide-range of complex, global engagements involving the construction, engineering, and
25 procurement of large projects with long-lead times. I have an extensive background in
26 engineering, construction and project management, including controls and scheduling. I

1 have also presented expert witness testimony in legal proceedings around the world
2 including numerous Commission dockets regarding the prudence of multiple power
3 plants. As a senior Pegasus-Global leader or member on risk management or strategic
4 consulting engagements, and I have undertaken and led performance and prudence audits,
5 evaluations and assessments of project-specific and corporate risk.

6 I have been involved with pre-design, engineering, procurement, construction, and
7 commissioning work for mega and large projects like the development of Iatan Unit 1,
8 which includes significant experience in bidding and bid solicitation for such projects,
9 procurement, constructability reviews, schedule resource loading and activity evaluation,
10 code and permitting processes, due diligence studies, overhead calculations, quality
11 assurance and control, startup and operations, commissioning, testing and maintenance. I
12 have worked on engineering and construction projects in over 60 countries.

13 I have performed prudence audits, management and performance audits, and technical
14 analyses and provided expert testimony before regulatory bodies, in court and in
15 arbitration hearings in the following areas:

- 16 • Utility Management Prudence
- 17 • Corporate/Utility Management
- 18 • Economics of the Construction and Utility Industries
- 19 • Project Controls
- 20 • Engineering/Procurement Management
- 21 • Project/Construction Management
- 22 • Nuclear/Fossil Licensing/QA/QC
- 23 • Cost Engineering/CPM Scheduling

- 1 • Construction Law/Disputes Analysis

2 My work experience and publications, including management and prudence audits is
3 described in my curriculum vita, which I have attached as Exhibit 1 (KRN-1). My nuclear
4 power plant experience is attached as Exhibit 2 (KRN-2). My non-nuclear power plant
5 experience is attached as Exhibit 3 (KRN-3). My prior testimony is attached as Exhibit 4
6 (KRN-4).

7 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY**
8 **PROCEEDINGS REGARDING UTILITY PRUDENCE PRIOR TO THIS KCP&L**
9 **CASE?**

10 **A.** Yes, I have testified on the following utility power projects for the party indicated:

- 11 • Vogtle Nuclear Power Plant, Units 3 &4, Georgia Public Service Commission, for
12 the Georgia Power Company
- 13 • Connecticut Yankee Nuclear Power Plant, Federal Energy Regulatory
14 Commission, for the Northeast Utilities Company
- 15 • South Texas Nuclear Plant, Public Utility Commission of Texas, for Central
16 Power & Light Company
- 17 • Trojan Nuclear Power Project, Oregon Public Utility Commission, for the
18 Portland General Electric Company
- 19 • Comanche Peak Nuclear Power Plant, Public Utility Commission of Texas, for
20 the staff of the Texas Public Utilities Commission
- 21 • Pilgrim Nuclear Power Plant, Massachusetts Department of Utilities, for the
22 Boston Edison Company

- 1 • Waterford 3 Nuclear Power Plant, City of New Orleans, for the staff of the City of
2 New Orleans City Council, the utility regulatory body within the corporate limits
3 of the City of New Orleans.
- 4 • Vogtle Nuclear Power Plant, Units 1 & 2, Georgia Public Utility Commission, for
5 the Georgia Power Company
- 6 • Perry Nuclear Power Plant, Public Utilities Commission of Ohio, for the staff of
7 the Public Utilities Commission of Ohio
- 8 • Perry Nuclear Power Plant, Pennsylvania Public Utility Commission, for the staff
9 of the Pennsylvania Public Utility Commission
- 10 • Scherer Fossil Power Plant, Georgia Public Utilities Commission, for the Georgia
11 Power Company
- 12 • Millstone Nuclear Power Plant, Unit 3, Connecticut Department of Public
13 Utilities Control, as the management prudence auditor for the Department of
14 Public Utility Control.
- 15 • Millstone Nuclear Power Plant, Unit 3, Vermont Public Service Board, for
16 Central Vermont Public Service Company
- 17 • Clinton Nuclear Power Station, Illinois Commerce Commission, for the staff of
18 the Illinois Commerce Commission
- 19 • Seabrook Nuclear Station Unit 2, Massachusetts Department of Utilities, for the
20 Massachusetts Attorney General
- 21 • Seabrook Nuclear Station Unit 1, New Hampshire Public Utilities Commission,
22 for the staff of the New Hampshire Public Utilities Commission

1 **Q. HAVE YOU BEEN INVOLVED IN OTHER UTILITY POWER PROJECTS**
2 **THAT INVOLVED THE REVIEW OF PRUDENCE?**

3 **A.** Yes, with respect to power projects involving prudence investigations in which I have
4 either provided testimony in a forum other than regulatory hearings and/or the parties
5 involved entered into a settlement agreement, thus eliminating the need for a public
6 hearing include the following along with the respective client:

- 7 • 2003 Energy Black-Out in the Northeastern U.S. and Canada, U.S Federal District
8 Court, Ohio, for First Energy
- 9 • Indian Point Nuclear Power Plant, Unit 3, State Court, New York, for
10 Consolidated Edison
- 11 • Peach Bottom Atomic Generating Station, U.S Federal District Court, for Public
12 Service Electric & Gas
- 13 • Cooper Nuclear Station, State Court of Nebraska, for the Nebraska Public Power
14 District
- 15 • Millstone Nuclear Power Plant, Unit 3, American Arbitration Association, for
16 Northeast Utilities
- 17 • Salem Nuclear Power Plant, U.S. Federal District Court, Philadelphia, for the
18 Public Service Electric & Gas
- 19 • Diablo Canyon Nuclear Plant, Units 1 & 2, California Public Utilities
20 Commission, for the Attorney General of California
- 21 • Comanche Peak Nuclear Power Plant, U.S Federal District Court, Texas, for
22 Texas Utilities

- 1 • Maine Yankee Nuclear Plant, for Stone & Webster regarding prudent
2 management of the decommissioning for utility report to the Maine Public
3 Utilities Commission
- 4 • Shoreham Nuclear Power Plant, U.S. Federal Court, New York, for the Counsel
5 for Suffolk County, the primary intervenor before the New York Public Service
6 Commission
- 7 • Wolf Creek Nuclear Power Plant, State Court, for Bechtel Corporation
- 8 • Calvert Cliffs Nuclear Plant, Maryland Public Service Commission, for Baltimore
9 Gas & Electric
- 10 • Turkey Point Nuclear Power Station, Unites 3 & 4, for Florida Power & Light
- 11 • Palo Verde Nuclear Power Plant, State Court, Arizona, for Combustion
12 Engineering, the Nuclear Steam Supply System vendor
- 13 • Palo Verde Nuclear Power Plant, State Court, Colorado, for Ernst & Young, the
14 Prudence Auditor for the Arizona Corporation Commission
- 15 • Pleasant Prairie Nuclear Generating Station Unit 2, U.S Federal District Court,
16 Wisconsin, General Contractor for the plant
- 17 • Reid Gardner Coal-Fired Generating Station, Unit 4, for the California
18 Department of Water Resources

19 **Q. WHO WERE THE OTHER PEGASUS-GLOBAL TEAM MEMBERS WHO**
20 **ASSISTED YOU IN YOUR REVIEW OF THE VANTAGE REPORT AND**
21 **EVALUATION OF PRUDENCE ON THE IATAN UNIT 1 PROJECT?**

1 A. Under my direction, the following Pegasus-Global principal consultants assisted me in
2 the prudence evaluation on the Iatan Unit 1 Project and review of the Vantage Consulting
3 report:

- 4 • Dr. Patricia D. Galloway, Chief Executive Officer, Pegasus-Global
- 5 • John L. Owen, Specialist Consultant, Pegasus-Global
- 6 • Gerald W. Tucker, Specialist Consultant, Pegasus-Global

7 **Q. DR. NIELSEN, WILL YOU DESCRIBE THE GENERAL QUALIFICATIONS OF**
8 **THESE PRINCIPAL CONSULTANTS?**

9 A. Yes. In Exhibit 5 are the detailed resumes of Dr. Galloway, Mr. Owen and Mr. Tucker. In
10 a summary manner, however, the following information is provided regarding their broad
11 and applicable experience:

12 A. *Dr. Patricia D. Galloway* is a licensed professional engineer in fourteen U.S.
13 States (Including Kansas), Canada and Australia, a certified project management
14 professional, and a certified forensic claims consultant. Dr. Galloway is known
15 for her experience and expertise in global engineering and construction. Her
16 industry experience spans over 30 years and includes power, oil and gas,
17 transportation, infrastructure, process and specialty structures. She is a globally
18 recognized expert in risk management, project management, project controls, and
19 management issues. She has conducted prudence audits on over 25 different
20 power plants and has testified extensively in public rate hearings on her work, on
21 behalf of both public utility commissions and regulated public utilities. She has
22 served as an arbitrator and is a prolific author and presenter of technical papers on
23 prudence, project management, project controls, and related topics. She is an
24 elected member of the National Academy of Construction and the Pan American
25 Academy of Engineering. She is currently the Vice Chair of the National Science

1 Foundation and Past President of the American Society of Civil Engineers. She
2 holds a PhD in Infrastructure Systems Engineering from the Kochi University of
3 Technology in Japan, an MBA from the NY Institute of Technology and a B.S. in
4 Civil Engineering, specializing in structural design and construction management
5 from Purdue University.

6 Dr. Patricia Galloway Testimony List:

- 7
- 8 • Sound Transit Light Rail System, Washington
- 9 • Sacramento Municipal Utility District Cosumnes Combined Cycle Power Plant,
10 California
- 11 • BHPB Minerva Project, Australia
- 12 • New Jersey Transit - Light Rail System, New Jersey
- 13 • Covert Combined Cycle Power Plant, Michigan
- 14 • Fresno Airport, California
- 15 • Grizzly Stadium, California
- 16 • Alameda Hospital, California
- 17 • Sludge Drying Facility, New Jersey
- 18 • Alameda Hospital, California
- 19 • POSVEN Hot Briquette Iron Project, Puerto Ordaz, Venezuela
- 20 • PET Production Plants - Argentina, Holland, Spain
- 21 • Anaconda Nickel Cobalt Mine, Western Australia
- 22 • Regents Resort Hotel & Spa, Las Vegas, Nevada
- 23 • Cooper Nuclear Plant, Lincoln, Nebraska
- 24 • Anaconda Cobalt/Nickel Mine, Western Australia
- 25 • Casecan Multi-Purpose Project, Philippines
- 26 • Upgrade of Telecommunications - Black & Veatch v. AT&T / Motorola, Midwest
- 27 • Pharmaceutical Plant, Singapore
- 28 • Demineralization Plant, Mexico
- 29 • Regents Resort Hotel & Spa, Las Vegas, Nevada
- 30 • Idaho National Laboratory TSA-Retrieval Project, Caddell Construction
31 (LMITCO)
- 32 • Idaho National Laboratory TSA Retrieval Project Atlas Construction (LMITCO)
- 33 • Millstone Nuclear Plant 3, Connecticut
- 34 • Millstone Nuclear Plant 3, Connecticut
- 35 • Tsing Ma Bridge, Hong Kong
- 36 • Process Plant, New Jersey
- 37 • Baytown Bridge, Houston, Texas
- 38 • Power Plant Demolition, Marshall Islands

- 1 • Cooper Nuclear Plant, Lincoln, Nebraska
- 2 • Casecanan Multi-Purpose Project, Philippines
- 3 • US Route 290, Texas
- 4 • Republic Engineered Steel Caster Building Project, Canton, Ohio
- 5 • Cooper Nuclear Plant, Nebraska
- 6 • IPSCO Steel Mill, Iowa
- 7 • INCO Recompression Platforms
- 8 • Baytown Bridge, Houston, Texas
- 9 • Highway, West Virginia
- 10 • Big Timber Creek Interceptor, New Jersey
- 11 • Interchange of I-635 and I-35 Overland Park, Kansas
- 12 • South Texas Nuclear Plant, Texas
- 13 • Blue Route, Pennsylvania
- 14 • Kuwait Oil Depot, Kuwait
- 15 • Shoreham Nuclear Power Plant, New York
- 16 • New Smyrna Beach Bridge, Florida
- 17 • Veteran's Expressway, Tampa, Florida
- 18 • Nairn Avenue Bridge, Winnipeg, Canada
- 19 • State Route 21, Florida
- 20 • Seabrook Nuclear Plant, New Hampshire
- 21 • South Texas Nuclear Plant, Texas
- 22 • Vogtle Nuclear Power Plant
- 23 • Perry Nuclear Power Plant, Ohio
- 24 • Millstone Point III, Nuclear Power Plant, Connecticut
- 25 • Clinton Nuclear Power Station, Illinois
- 26 • University Medical Center, Louisiana
- 27 • American Standard Insurance Headquarters, Oklahoma
- 28 • Worcester Civic Center, Massachusetts
- 29

30 B. *Mr. John Owen* is a recognized expert in project and operations management,
31 forensic engineering and operational facility performance. As an electrical
32 engineer, he has led the engineering and design efforts on more than 10 power
33 plant prudence audits in the United States as well as conducting performance
34 audit reviews in the UK and Canada. Mr. Owen has presented testimony before
35 public utility commissions regarding all types of management (project,
36 engineering, commissioning, and operations), scheduling (delay, disruption, etc.),

1 cost damages and other issues. He holds a H.N.C in Electrical Engineering,
2 Salford Technical College, Salford, England. Prior to joining Pegasus-Global, Mr.
3 Owen had 30 years of experience in the engineering, procurement and
4 construction of electrical power facilities. This experience includes five nuclear
5 power plants in North America, South America, Asia and the United Kingdom.
6 His experience also includes coal, oil and hydroelectric power plants and
7 transmission facilities. Other experience includes power system planning and
8 feasibility studies.

9 John Owen Testimony List:

- 10 • Nikiski Cogeneration Facility, Nikiski, Alaska
- 11 • AMOC Lube Oil Expansion
- 12 • Santa Rita Power Plant, Philippines
- 13 • Trojan Nuclear Plant, Oregon
- 14 • Green River Community College
- 15 • Duke Fluor Daniel vs. Dearborn Industrial Generation, Michigan
- 16 • Olmstead Waste-to-Energy Plant
- 17 • Imperial Valley Waste to Energy Plant, California
- 18 • Washington State Convention and Trade Center
- 19 • Power Plant, SMUD v. Campbell Soup
- 20 • Rabigh Power Plant, Saudi Arabia
- 21 • Plant Vogtle, Units 1 & 2, Georgia
- 22 • Plant Vogtle, Units 3 & 4, Georgia
- 23 • National Energy Production Corporation v. Imperial Resource Recovery
- 24 Associates, L.P., et al.
- 25 • Cadereyata Refinery/Pipeline
- 26 • Comanche Peak Texas Utilities
- 27 • Pilgrim Nuclear Power Plant, Massachusetts
- 28 • Fossil Power Plant, Scherer, Georgia
- 29 • South Texas Nuclear Plant, Texas
- 30 • PP9 Power Plant, Saudi Arabia
- 31 • Clinton Nuclear Power Station, Illinois Commerce Commission

32
33
34 C. *Mr. Gerald Tucker* has over 40 years of utility experience and has provided
35 assistance in the development of rate filings on behalf of electric and gas utilities
36 for over 30 years. He previously was employed by Southwestern Electric Power

1 Company as Manager of Accounting Services with responsibility for regulatory
2 filings in four jurisdictions and as Controller and Chief Accounting Officer for
3 Central Power and Light Company, co-owner of the South Texas Nuclear Project.
4 As Controller he was responsible for all accounting functions of a major electric
5 utility including monitoring and recording the company's investment in the South
6 Texas Nuclear Project. The monitoring of construction controls and cost systems
7 were part of his responsibilities as a member of the owners accounting committee
8 and attendance at most meetings of the owners finance committee. He has also
9 testified on behalf of municipal clients in Texas, in exercising their original
10 jurisdiction over electric and gas rates within incorporated areas. Mr. Tucker has
11 also been involved with numerous prudence audits.

12 Gerald Tucker Testimony List:

- 13
- 14 • Duke Fluor Daniel vs. Dearborn Industrial Generation, Michigan
- 15 • Shoreham Nuclear Power Plant, New York
- 16 • Power Authority vs. U.S. Navy – Served as Arbitrator
- 17 • Cooper Nuclear Power Plant, Nebraska
- 18 • Casecan Multi-Purpose Project, Phillipines
- 19 • US Route 290, Texas (Deposition)
- 20 • Public Utility Commission of Texas (PUCT) Docket No. 3716, Southwestern
- 21 Electric Power Company
- 22 • Louisiana Public Service Commission (LPSC) Docket No. U-14250,
- 23 Southwestern Electric Power Company
- 24 • Naim Avenue Bridge, Winnipeg, Canada
- 25 • Arkansas Public Service Commission (APSC) Docket No. U-3136,
- 26 Southwestern Electric Power Company
- 27 • PUCT Docket No. 4628, Southwestern Electric Power Company
- 28 • LPSC Docket No. U-15180, Southwestern Electric Power Company
- 29 • APSC Docket No. 83-064-U, Southwestern Electric Power Company
- 30 • PUCT Docket Nos. 5301,5369,Southwestern Electric Power Company
- 31 • Federal Energy Regulatory Commission (FERC) Docket No. ER83-609,
- 32 Southwestern Electric Power Company
- 33 • LPSC Docket No. U-15753, Southwestern Electric Power Company
- 34 • APSC Docket No. 84-175-U, Southwestern Electric Power Company
- 35 • FERC Docket No. ER85-194, Southwestern Electric Power Company
- 36 • FERC Docket No. ER85-424, Southwestern Electric Power Company

- 1 • APSC Docket No. 85-231-U, Southwestern Electric Power Company
- 2 • PUCT Docket No 7560, Central Power and Light Company
- 3 • PUCT Docket No. 8646, Central Power and Light Company
- 4 • Georgia Public Service Commission Docket No. 14311-U, Atlanta Gas Light
- 5 Company
- 6 • Railroad Commission of Texas (RRC) Docket No. 9400, Allied Coalition of
- 7 Cities
- 8 • PUCT Docket No. 28840, Cities
- 9 • Oklahoma Corporation Commission (OCC) Docket No. 200400187,
- 10 CenterPoint Energy Arkla
- 11 • PUCT Docket No. 28813, Cap Rock Electric Corporation
- 12 • RRC Docket No. 9533, CenterPoint Energy Entex – South Texas Division
- 13 • RRC Docket No. 9534, CenterPoint Energy Entex – East Texas Division
- 14 • OCC Docket No. 200400187, CenterPoint Energy Arkla Rebuttal
- 15 • APSC Docket No. 04-121-U, CenterPoint Energy Arkla
- 16 • PUCT Docket No. 28813, Cap Rock Electric Corporation Rate Case Expense
- 17 • PUCT Docket No. 30706, CenterPoint Energy Houston Electric, Inc.
- 18 • RRC Docket Nos. 9598, 9599, 9603, Atmos Cities Steering Committee
- 19 • RRC, CenterPoint Energy Entex – East Texas Division
- 20 • RRC Docket No. 9625, CenterPoint Energy Entex – South Texas Division
- 21 • RRC Docket 9635, CenterPoint Energy Entex – Tyler
- 22 • PUCT Docket No. 32758, AEP Texas Central Company
- 23 • RRC Docket No. 9670, Atmos Cities Steering Committee
- 24 • City of Port Arthur vs. Entergy et al
- 25 • Saquib Ejaz, et al, vs. Texas A & M University, et al
- 26 • PUCT Docket No. 33309, Cities
- 27 • PUCT Docket No. 33310, Cities
- 28

29 **Q. DO THE PEGASUS-GLOBAL TEAM MEMBERS WHO ASSISTED YOU HAVE**
30 **ANY PRIOR EXPERIENCE TESTIFYING AND/OR EVALUATING PRUDENCE**
31 **OF MANAGEMENT DECISIONS ON POWER PLANTS ON WHICH YOU**
32 **HAVE ALSO TESTIFIED OR EVALUATED?**

33 **A.** Yes, I have been working with Dr. Galloway, Mr. Owen and Mr. Tucker for over 20
34 years evaluating prudent management of power plant projects. I have worked on 19
35 power plants prudence evaluations with Dr. Galloway, 10 power plant prudence

1 evaluations with Mr. Owen and 5 power plant prudence evaluations with Mr. Tucker.
2 Attached as Exhibit 6 is a prudence engagement matrix.

3 **Q. HAVE YOU SPOKEN OR WRITTEN ON THE SUBJECT OF UTILITY**
4 **PRUDENCE AND/OR PROJECT MANAGEMENT (INCLUDING**
5 **ENGINEERING, CONSTRUCTION, PROCUREMENT, ETC.)?**

6 **A.** Yes. In Exhibits 1 and 5 to this testimony are complete lists of papers and articles and
7 lectures on prudence and other matters for the four of us. With respect to prudence, the
8 following articles that have been authored/co-authored by Dr. Galloway and Dr. Nielsen
9 are noted:

- 10 • “Design-Build/EPC Contractor’s Heightened Risk-Changes in a Changing World”,
11 P. Galloway, *Journal of Legal Affairs and Dispute Resolution in Engineering and*
12 *Construction*, American Society of Civil Engineers, Volume 1, February 2009
- 13 • “A Management System for Infrastructure Construction, Meeting the Needs of the
14 Next Two Decades,” K. Nielsen, *International Symposium on Social Management*
15 *Systems, Annual Conference for the Society of Social Management Systems*, Kochi,
16 Japan, March 5-8, 2009
- 17 • “The Multi-Billion Dollar Issue Facing the Nuclear Power Industry:
18 Decommissioning Versus Life Extension,” K. Nielsen, *The Future of the U.S. and*
19 *International Environmental Industry*, Washington, D.C., November 10 - 12, 1997
- 20 • “Multiple Jeopardies,” *Cogeneration & Resource Recovery*, Volume 8, No. 3,
21 April 1990
- 22 • “Combining PURPA, Prudence and Avoided Cost Rate Design; A New Cost
23 Engineering Environment,” co-authored with P. Galloway, *AACEI Professional*
24 *Practice Guidelines, No. 7, 2nd Edition, 2007, American Association of Cost*
25 *Engineers 9th Annual Mid-Winter Symposium Transactions*, San Francisco,

- 1 California, February 1987; Reprinted, *Cost Engineering*, Volume 31, No. 1, p. 16,
2 January 1989
- 3 • “Outages Different Regulatory Technical Standards,” K. Nielsen, *American*
4 *Association of Cost Engineers, 10th Annual Mid Winter Symposium Transactions*,
5 Phoenix, Arizona, February 1988
 - 6 • “Effect of Current State Regulatory Environment on Outage Management,” K.
7 Nielsen, *6th Annual Project /2 Outage Symposium*, Cambridge, Massachusetts,
8 June 29 July 1, 1987
 - 9 • “The 5-Year Living Schedule,” P. Galloway, co-authored with R. Cochran, *AACEI*
10 *Professional Practice Guidelines, No. 7, 2nd Edition, 2007, American Association*
11 *of Cost Engineers Annual Convention*, Atlanta, Georgia, June 1987
 - 12 • “Preparing for the Utilities’ Future-Managing the Prudence Issues,” co authored
13 with P. Galloway, *Electric Potential*, Volume 2, No. 4, July-August 1986
 - 14 • Interview with Kris R. Nielsen, President, The Nielsen Wurster Group, Inc., *The*
15 *Advisory*, July 3, 1986
 - 16 • “Utilities Forced Delays-Controllable or Uncontrollable,” co-authored with P.
17 Galloway, *AACEI Professional Practice Guidelines, No. 7, 2nd Edition, 2007,*
18 *American Association of Cost Engineers Annual Convention Proceedings*,
19 Chicago, Illinois, June 1986
 - 20 • “Preparing for the Utilities’ Future An ‘Attack Plan’ for Minimizing Disallowable
21 Costs In Outage and Future Capital Construction,” co-authored with P. Galloway,
22 *American Association of Cost Engineers, 8th Annual Mid Winter Symposium*
23 *Transactions*, New Orleans, Louisiana, February 1986; Project 2, 5th Annual
24 Outage Symposium Proceedings, Cambridge, Massachusetts, May 1986

- 1 • “New Directions in Project Control for the Utility / Construction Industries,” K.
2 Nielsen, *8th Annual Mid Winter Symposium Proceedings*, New Orleans, Louisiana,
3 February 13 -14, 1986
- 4 • “Preparing for Utilities Future An ‘Attack Plan’ for Minimizing Disallowable
5 Costs in Outage and Future Capital Construction,” co-authored with P. Galloway,
6 *American Association of Cost Engineers Utility Conference Proceedings*, New
7 Orleans, Louisiana, February 1986
- 8 • “Second Guessing the Engineer,” co-authored with P. Galloway, *Civil
9 Engineering*, American Society of Civil Engineers, November 1985
- 10 • “Calculating Utility Prudence Issue Costs,” K. Nielsen, *AACEI Professional
11 Practice Guidelines, No. 7, 2nd Edition, 2007, 1985 American Association of Cost
12 Engineers Annual Convention Transactions*, Denver, Colorado, July 1985
- 13 • “Utility Prudence Time Impact Evaluation,” P. Galloway, *AACEI Professional
14 Practice Guidelines, No. 7, 2nd Edition, 2007, American Association of Cost
15 Engineers Annual Convention Transactions*, Denver, Colorado, July 1985
- 16 • “The Prudence Management Audit: A New Challenge For the Civil Engineer,” co-
17 authored with P. Galloway, *American Society of Civil Engineers Spring
18 Convention Proceedings*, Denver, Colorado, April 1985
- 19 • “Performance Audits,” P. Galloway, co-authored with D. Law, *Proceedings,
20 Project Management Institute Symposium*, Toronto, Ontario, Canada, October
21 1982

22 **Q. WHAT STANDARDS OF ANALYSIS DID YOU EMPLOY IN PERFORMING**
23 **THE EVALUATION?**

1 A. In evaluating Iatan Unit 1, Pegasus-Global employed a prudence definition consistent
2 with that applied in Kansas and most other jurisdictions. The prudence concept, which
3 has been published in numerous publications as noted previously and under which I have
4 testified in multiple cases is best articulated as follows:

5 *Decisions are prudent if made in a reasonable manner in light of conditions and*
6 *circumstances which were known or reasonably should have been known when*
7 *the decision was made.*

8 Prudence cannot be judged from a hindsight perspective. The substantive decision
9 quality is only an element to be considered. The issue is whether the decision was
10 reasonable when made, not that the result of that decision is less desirable than other
11 results. Thus, there is a zone of reasonableness, as prudence is not a test of optimality.

12 The evaluation focus is initially on the decision-making process and the decision
13 implementation to determine whether or not the decision was reasonable. The prudence
14 evaluation process typically includes:

15 *Data Development*-What information was available; were the management
16 systems and procedures organized and implemented to produce information to
17 enable analysis; was the data reliable; what was the timeliness of the data to the
18 decision?

19 *Information Flow*-To whom and when was data transmitted; what available data
20 was communicated; in what format was the information made available?

21 *Analysis*-What does the information mean; what alternatives were identified or
22 where possible; what benefits and impacts are projected; how does the decision
23 mesh with project and corporate needs?

1 *Decision*-What decision was made; when was the decision made; how was the
2 decision made; was the decision reviewed as assumptions and circumstances
3 changed?

4 Thus, Pegasus-Global has applied a definition and approach widely recognized. Prudence
5 is not merely the application of a test that accepts just any rational basis for acceptability
6 of a decision but rather rigorous evaluation of concurrent context, process, and
7 performance. In fact, Pegasus-Global uses generally as a guide the Government Auditing
8 Standards issued by the U.S. General Accounting Office (GAO) as appropriate to
9 prudence audits, especially with respect to capital projects (see Government Auditing
10 Standards, United States General Accounting Office, GAO-03-673G, June 2003 – the so-
11 called “Yellow Book” standards). With respect to auditing, the GAO has issued the
12 following guidance:

13 *Performance audits provide an independent assessment of the performance and*
14 *management of government programs against objective criteria or an assessment*
15 *of best practices and other information. Performance audits provide information*
16 *to improve program operations, facilitate decision making by parties with*
17 *responsibility to oversee or initiate corrective action, and contribute to public*
18 *accountability. The term performance audit is used generically to include work*
19 *classified by some audit organizations as program evaluations, program*
20 *effectiveness and results audits, economy and efficiency audits, operational*
21 *audits, and value-for-money audits.*

22
23 Pegasus-Global conducts audits internationally and one of the primary elements adopted
24 by Pegasus-Global from the GAO standards is that of the auditor’s responsibilities:

25 *Auditors should act in a way that will serve the public interest, honor the public*
26 *trust, and uphold their professionalism. A distinguishing mark of a profession is*
27 *acceptance of its responsibilities to the public. This responsibility is critical when*
28 *auditing in the government environment.*

1 Prudence is not synonymous with efficiency and does not require that decisions be made
2 and executed in the most efficient manner. While Pegasus-Global had found that
3 KCP&L actions generally fell within a zone of reasonableness, and are therefore prudent,
4 Pegasus-Global has drawn no conclusion either as to whether KCP&L fulfilled all of its
5 obligations to the other Iatan Unit 1 Owners, or whether another reasonable course of
6 conduct would have resulted in different consequences or costs. An auditor/reviewer, and
7 especially a prudency auditor/reviewer, should never substitute their judgment for that of
8 the organization it is auditing/reviewing.

9 Prudence also recognizes and relies on the concept of foreseeability in two ways: First, an
10 action or lack of action of a utility manager is not unreasonable or imprudent if it
11 involves or is affected by events which were unforeseen and unforeseeable at the time;
12 and second, the cost calculations for any imprudence found properly reflect only the
13 foreseeable consequences of the imprudent decision-making processes or performance.

14
15 **Q. ARE THESE STANDARDS CONSISTENT WITH PRIOR STANDARDS USED IN**
16 **KANSAS?**

17 **A.** Yes. The standards I have referred to above are consistent not only with Kansas law but
18 are also consistent with the laws of most other jurisdictions. We have reviewed those
19 standards in a number of articles that we have published and in presentations we have
20 made. For examples see "*Preparing for the Utilities Future*", Electrical Potential, Vol. 2,
21 No. 4, July-August 1986, which I co-authored with Dr. Galloway and, more recently a
22 peer-reviewed article, "*Design-Build/EPC Contractors Heightened Risk – Changes in a*
23 *Changing World*," published in the "Journal of Legal Affairs and Dispute Resolution in
24 Engineering and Construction," American Society of Civil Engineers, Vol. 1, Feb 2009,
25 authored by Dr. Galloway.

26 In trying to assure that we were using standards consistent with Kansas law I reviewed
27 the testimony and Exhibit WPD-1 filed by Walter P. Drabinski of Vantage Consulting,

1 Inc. (Vantage), on behalf of the K.C.C. staff relating to the prudence standards he
2 employed in his analysis, the Kansas statutory prudence standards which he referenced,
3 particularly K.S.A. 66-128g which sets forth the nonexclusive prudence factors which the
4 Commission shall consider in evaluating prudence, the Commission's Wolf Creek
5 decision in Dockets 120,924-U and 142,098-U and the Kansas Supreme Court Wolf
6 Creek decision, 239 Kan. 483, 720 P 2d 1063 (1986). Like Mr. Drabinski, I also
7 consulted with experienced regulatory legal counsel.

8 **Q. BASED ON THAT REVIEW, DO YOU AGREE WITH THE VANTAGE**
9 **DESCRIPTION OF WHAT THEY CONSIDER TO BE THE PROPER**
10 **PRUDENCE STANDARD TO APPLY IN THIS CASE?**

11 **A.** Only in part. It may be helpful if I was clear about points of agreement and points of
12 disagreement.

13 First, Vantage equates Wolf Creek with Iatan 1 and states that the K.C.C. should treat
14 them the same because they are "large, high-cost power plant construction projects". I
15 disagree that these two projects are the same and that they require identical treatment. As
16 the K.C.C. and Kansas Supreme Court decisions both point out, Wolf Creek was a
17 massive project that had the potential for massive rate increases creating huge economic
18 and political implications for the state of Kansas. Both the timing and the content of the
19 statutory factors to be considered by the Commission indicate that this legislative
20 enactment was designed to address a very specific problem – Wolf Creek. In fact, as was
21 pointed out by Chief Justice Schroeder in dissent, this legislation was referred to
22 specifically by Robert Vancrum as the "*Wolf Creek Excess Cost – Excess Capacity Bill*"
23 in 33 Kan. L.R. 475 (1985), 239 Kan at 518. Iatan 1 has no such economic or political
24 impact and there has been no special legislative action directed at Iatan. To the contrary,
25 Iatan 1 is a clean air project approved as part of a negotiated and agreed-to
26 Comprehensive Energy Plan.

1 Second, Vantage rightfully acknowledges the special “Wolf Creek Nuclear” nature of the
2 statute in selecting 5 of the 12 legislative factors that it suggests be applied to Iatan, while
3 ignoring other factors, most of which we agree are Wolf Creek specific and not
4 applicable here. However, Vantage goes too far and ignores too much in failing to
5 consider two factors which are applicable and which should be considered by the
6 Commission in this case. These two factors are:

7 (3) a comparison of the final cost of the facility under consideration to the final
8 cost of other facilities constructed within a reasonable time before or after
9 construction of the facility under consideration, K.S.A.66-128g(3)

10 (6) a comparison of any overruns in the construction cost of the facility under
11 consideration with any cost overruns of any other electric generating facility
12 constructed within a reasonable time before or after construction of the facility
13 under consideration, K.S.A.66-128g(6)

14 The Vantage prudence formulation – “whether a knowledgeable person in the industry
15 would have made the same or similar decisions with the information and resources
16 available at the time (Drabinski, page 7, line 12-14) is very similar to the standards I
17 articulated above – “*decisions are prudent if made in a reasonable manner in light of*
18 *conditions and circumstances which were known or reasonably should have been*
19 *known...*” (Nielsen, page 17, line 5-7). Under both or either of these standards you have
20 to do a comparison with similar projects being completed within the same time period for
21 two reasons: First, the mean of the universe of the other project managers provides a base
22 for determining what the standard is for “the knowledgeable person in the industry”, and,
23 second, identification of issues and solutions to problems on other projects allows you to
24 determine what was “known or should have been known” and to evaluate actions taken in
25 response. These comparisons are an important part of a prudence review, as recognized
26 by the Kansas legislature and other jurisdictions, should have been included in the
27 Vantage review and is included in the Pegasus-Global analysis below.

1 **Q. WOULD YOU DESCRIBE THE APPROACH YOU UTILIZED IN**
2 **CONDUCTING THIS REVIEW?**

3 **A.** The approach we utilized in the review of Iatan Unit 1 was consistent with that adopted in
4 each of the previous reviews conducted by our team. We conducted a qualitative review
5 which focused on the management processes employed by KCP&L and supplemented
6 this with a quantitative review of the cost and schedule impacts of certain events. Within
7 this overall approach we requested, obtained and reviewed substantial amounts of project
8 documentation. This information was not meant to be exhaustive, but would be sufficient
9 to reasonably assure that we could derive supportable conclusions there from.
10 Documentation consisted of reports, correspondence, meeting minutes, presentations and
11 other written material and data related to project events, decisions, responses and actions.
12 The documents that provide the primary support for the conclusion of Pegasus-Global are
13 listed throughout this testimony as well as listed in Exhibit 7.

14 Our review, for instance, included the review of various independent third party audit
15 reports that were prepared over the course of the Iatan Unit 1 project. It is Pegasus-
16 Global's experience that owners regularly retain outside consultants to review, audit and
17 make recommendations relative to findings and facts at the time within the scope of the
18 audit review. We find that the conducting, use, and review of findings of audits to be
19 prudent management practice. The fact KCP&L extensively employed and used audits
20 on the Iatan Unit 1 project represents prudent management. That being said, audit
21 findings contained within audit reports are not necessarily conclusive of prudent actions.
22 Audits are conducted for many purposes. The purposes can be as diverse as providing
23 "reasonable assurance" of: accounting practices, financial reporting, engineering quality
24 practices, construction execution such as for welds, potential risks, and project
25 management performance. And, in the context of regulated utilities, prudence audits
26 which provide reasonable assurance that a utility management was prudent in their
27 decision making regarding capital expenditures. Audit reports are specifically designed to
28 look at potential management issues or problems and/or to confirm the reasonableness of

1 approaches. Audit recommendations typically are designed to improve performance and
2 execution in the future. But audits are merely one of a selection of sources of
3 information that a utility should and does take into account in making decisions.

4 Let me illustrate with a discussion of how audit reports are one documentary source
5 which we consider in judging the prudence of management decision making. Review of
6 audit reports must begin with an understanding of the audit purpose and scope, and how
7 the audit was performed. Especially important is an understanding of the timeframe of
8 data that was used in performing the audit. Great Plains Energy (GPE) formed a CEP
9 Oversight Committee in October 2006 upon the recommendation of GPE's CEO, M.
10 Chesser, and GPE's internal audit department. The CEP Oversight Committee was
11 formed to provide program management assurance to minimize the risk of program
12 failures. The responsibilities, structure and attributes were established at that time for the
13 Comprehensive Energy Plan (CEP) Oversight Committee by Mr. Chesser in an
14 attachment to his communication to KCP&L CEO, Bill Downey:

Oversight Committee

Committee Structure and Responsibilities

- Be chaired by the Chief Executive of Utility.
- Be comprised of a selection of executives of the organization who are affected by the change or have responsibility for its outcome.
- Confirms the project in terms of strategic alignment, overall costs, benefits, deliverables and scope.
- Work closely with the Project Executive to ensure that the project's progress is on schedule.
- Objectively review the direction and progress of the project at key intervals to ensure that the aims of the project are being met and that the Benefits Plan is on schedule to realize expected benefits.
- Make decisions pertaining to the project's external influences.
- Assess resource requirements and team's performance throughout the course of the project.
- Constantly review and evaluate the Project as it may become necessary to re-direct or stop the project (mid-stream) if it becomes clear that it is no longer relevant to the company objectives or is unlikely to deliver the expected benefits.
- Ensure that the project follows the corporate policies and procedures of the organization.
- Ensure the project complies with the performance criteria defined in the Project Business Case.
- Monitor the decision making process.
- Designate an individual to organize the Oversight Committee meetings, take notes and distribute minutes and action items.

Attributes

- Be accountable for achieving planned benefits within budget, on schedule and within scope.
- Exercise organizational leadership with regard to the project and all parties involved.
- Contribute to finding solutions if access to resources falters.
- Manage all internal and external business issues related to the project.

1 The CEP Oversight Committee started functioning in October 2006 and was formally
2 approved at the beginning of February 2007. The oversight committee arranged with the
3 GPE Internal auditor and Ernst & Young (E&Y) to provide one source of input to allow
4 KCP&L executive management to monitor project decision making to assist in the
5 normal conflicts of competing stakeholders, including external influences and project
6 management executives. The proposal of the audits was proactive on the part of KCP&L
7 management and indicative of good, prudent management process.

8 ** [REDACTED]
9 [REDACTED]
10 [REDACTED]
11 [REDACTED]

12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]

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[REDACTED]

[REDACTED] **

In addition, the CEP Oversight Committee, reviewed reports from Schiff Hardin, who provided KCP&L with outside expertise with respect to the CEP program and specific projects. Schiff Hardin reports provided even more detailed, operating level recommendations with respect to specific project management, such as, for Iatan Unit 1. Again, this is a process of decision making that we look for – the seeking out of potential risks and possible solutions regularly from outside sources which exemplifies good and prudent management.

Consideration must also be given to the particular point in the execution period. For example, KCP&L was delayed from their 2004 plans by the need to obtain permits from various jurisdictions agencies and by the regulatory process leading to formal approval of the CEP. Once the overall CEP program was approved, KCP&L found themselves faced

1 with a considerably different construction market. Today, KCP&L is faced with
2 construction market conditions that were unforeseeable just six months ago. I point this
3 out because circumstances and conditions seldom remain the same over the extended
4 durations of major capital construction. When judging the prudence of decision making,
5 we place decision making in the factual context of what could reasonably be known at the
6 time. Once the decision is made, there also must be recognition of the time to implement
7 or respond to the decision, during which circumstances and conditions are not static.
8 From the end of 2005 to today the shifting issues and resulting circumstances have gone
9 through many changes. For that reason we place the decision making process into time
10 context or continuum that existed at the time the decision was made.

11 In addition to the review of documentation, we also identified and interviewed a number
12 of project personnel, including key Iatan Unit 1 project team members and executives
13 charged with direct oversight of the project. The interviews were conducted to establish
14 the basis or underlying explanation for decision making. In our opinion, the conduct of
15 these interviews is a necessary element of a comprehensive review to provide the
16 rationale or justification not otherwise determinable solely from review of documentation.
17 Interviewees consisted of:

- 18 • Carl Churchman – Vice President - Construction
- 19 • Terry Bassham – Chief Financial Officer & Oversight Committee Member
- 20 • Brent Davis – Project Director
- 21 • Steve Jones – Senior Procurement Director
- 22 • Terry Foster - Director of Project Controls

23 Likewise, Pegasus-Global also toured the Iatan 1 site as further input for our evaluations.

24 In finalizing decisions on prudence, Pegasus-Global looks at the decision-making process
25 and the decisions from the perspective levels of management, taking into account each of
26 the documents and interviews. The prudence of decisions is not made with the advantage
27 of 20-20 hindsight. Thus, we judge prudence from the position of utility management and

1 based upon the varying sources of input that they had or reasonably could have had at the
2 time of making a decision. Never does management have the time or luxury of having all
3 information that they desire. The very essence of management is making decisions on
4 less than perfect information, and then putting in place techniques and systems to monitor
5 performance and use that information to continue to improve performance. Nowhere is
6 this truer than in major capital construction projects and especially for capital
7 construction programs, such as, KCP&L's CEP program.

8 The final approach step is to relate causally to the specific actions, if any, that Pegasus-
9 Global finds imprudent and quantify the cost of such imprudence. This step is as
10 important as the prior steps. Often times where we find imprudent decision making, it has
11 no or minimal impact or the impact is "cut off" by subsequent decisions that were
12 prudent. Quantification must be tied to a real cause for which the utility has culpability.

13 **Q. ARE POTENTIAL OR ACTUAL CONSTRUCTION CLAIMS A PROPER**
14 **MEASURE OF PRUDENCE?**

15 **A.** No, they are not. Contracts are the foundation of claims, that is, the parties measure their
16 obligations through their contract, especially so in relation to the large number of
17 documents which are used in construction. That document can be the payment by one
18 party for meeting the promised delivery by the other party. In engineering, procurement
19 and/or construction contracts, the performing party (the contractor) commits to the owner
20 to engineer, or manufacture, or construct the facility according to parameters that are
21 established in the contract. These parameters are embodied in requirements or
22 specifications. In the case of power plants these requirements and/or specifications can be
23 quite detailed. But even in spite of the detail, the parties can reasonably disagree whether
24 the required engineering, manufacture or construction is included within their contract
25 obligations. Whether the contract is services, delivery or construction, it is the actual
26 result judged with the measure of hindsight that is used. You must look to the contract
27 documents to determine the obligation. You examine that obligation in light of actual

1 performance and determine whether the party performed. The proper measure or damage
2 is to place the injured party (the party asserting the claim) in the position that it would
3 have been if the other parties performance had been as required. What makes
4 construction claims so difficult is complexity, duration, number of parties, the number of
5 conditions defined in an equally large number of documents, and changing circumstances
6 over the engineering-construction execution duration. Construction is one of the most
7 party and document intensive commercial transactions that can be undertaken. And the
8 execution duration adds a complexity seldom found in other types of commercial claims.
9 I can truly say that no power plant has ever been constructed exactly as planned at first.

10 Construction claims arise from many issues. For example, an engineer may omit a
11 portion of the project, commit errors, or have to meet changing design requirements. In
12 that instance, the vendors and contractors must be paid for the resulting changes. A
13 vendor or contractor may err in the equipment or construction from that was specified.
14 They would not be entitled to additional compensation for such error. Likewise, an owner
15 can change their requirements, and both the engineering and the vendor or contractor
16 would be entitled to more compensation. That appears easy to ascertain, but it is not.
17 Despite the detail in purchase orders and contracts for power plant construction, issues
18 such as these arise, and disputes or the interpretation are very complex and difficult to
19 resolve.

20 From a management perspective, you can undertake many actions which are appropriate
21 at the time and under the circumstances. But circumstances and party actions may make
22 such decisions inappropriate later on. Construction claims cannot be prevented.
23 Ultimately, parties may seek to settle their differences through some form of
24 contractually agreed dispute resolution, or ultimately parties can turn to the courts to
25 resolve differences. But under the conditions and circumstances of construction, one
26 result is the longer claims and disputes take to resolve, the more costly they become, even
27 if one party is ultimately found to be correct. I would like to say, in my experience over
28 the last 40 years, seldom is a construction claim or dispute "clear cut." Thus, the potential

1 of expending more money to resolve claims and disputes and the potential to divert
2 management from other issues lead to many “commercial” settlements of their
3 differences.

4 As a result of all of these factors, merely relying on claims and allegations is not
5 appropriate to make prudency judgments because they are primarily “after the fact” type
6 of issues, such as, delay and/or cost issues. In addition, even the validity of a claim may
7 have been corrected in the context of the whole project or program, not just one party.

8 **Q. PLEASE DESCRIBE THE SCOPE OF YOUR REVIEW OF THE**
9 **REASONABLENESS AND PRUDENCY OF THE KCP&L MANAGEMENT**
10 **WITH RESPECT TO THE IATAN UNIT 1?**

11 **A.** Pegasus-Global’s review is to present its independent evaluation of the conclusions
12 expressed regarding the prudence of KCP&L’s management of Iatan Unit 1 as presented
13 in the testimony and report of Mr. Drabinski of Vantage filed February 3, 2008 on behalf
14 of the Staff of the Kansas Corporation Commission. ** [REDACTED]

15 [REDACTED]

16 [REDACTED]

17 [REDACTED]

18 • [REDACTED]**

19 In its efforts to find the facts related to these three areas, Pegasus-Global has examined
20 thousands of pages of project records which were available to Vantage or were requested
21 by the K.C.C. staff. The function of this assessment was to gather the facts as objectively
22 as possible, to gauge those facts against a zone of reasonableness and prudent decision
23 making, and to quantify the costs resulting from any imprudence.

1 The study focused on Iatan Unit 1 and on actions of the KCP&L Board of Directors,
2 Executive Management and Project Management and encompassed the functional areas
3 of Design, Procurement, and Construction. Our opinions are in respect to the
4 performance of KCP&L in executing its management responsibilities over the duration of
5 the project. The review scope in each of these areas was comprehensive and reflects the
6 experience of the study team in the conduct of similar reviews. In its Iatan Unit 1 review
7 of the critical decisions affecting all aspects of the project, Pegasus-Global reviewed the
8 following areas:

- 9 • Project approach, including contracting methodology and its evolution
- 10 • Corporate Management and Project Management organization, staffing and
11 evolution
- 12 • Iatan Unit 1 Project Management of the engineering, vendors and contractors and
13 its evolution
- 14 • Specific Iatan Unit 1 Contract Administration decision making, including Project
15 Budget, Schedule and Change Management, and its evolution
- 16 • Project Monitoring (cost and schedule) and its evolution

17 Within each of these areas, an evaluation was conducted with respect to the following
18 subjects:

- 19 • Management concept
- 20 • Roles and responsibilities
- 21 • Organization and staffing
- 22 • Procedures

1 • Control Systems and processes

2 • Execution

3 These subjects thus relate to the development of a management framework for
4 implementation on the Iatan Unit 1 project and performance execution within that
5 framework by KCP&L and its contractors which encompasses the three areas found
6 imprudent by Vantage. The conduct of this review addressed each of the above subjects
7 and provides adequate breadth and depth of review to support the presentation of an
8 objective and independent evaluation of each functional area.

9 **Q. FROM YOUR REVIEWS, WHAT AREAS HAVE YOU DETERMINED WERE**
10 **CRITICAL TO THE ENGINEERING AND CONSTRUCTION OF IATAN UNIT 1?**

11 **A.** Pegasus-Global found key decision making involving issues in the following areas which
12 were criticized in the three Vantage general management areas:

- 13 • Management and Contracting Approach
- 14 • Project Management Organization and Staffing
- 15 • Selection and Management of the Owner's Engineer
- 16 • Project Controls (Monitoring and Controls)
- 17 • Project Time Management (Schedule)
- 18 • Project Cost Management
- 19 • Project Scope and Change Management

20 **Q. WHAT DID YOU CONCLUDE WITH RESEPCT TO KCP&L'S IATAN UNIT 1**
21 **MANAGEMENT AND CONTRACTING APPROACH?**

1 A. ** [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]
5 [REDACTED]
6 [REDACTED]
7 [REDACTED] **

8 Pegasus-Global concluded that KCP&L management showed a good understanding of
9 the initial conditions and circumstances, and the management effort required in regards to
10 Iatan Unit 1, made appropriate adjustments to the decisions as the project unfolded, and
11 found KCP&L's management to be prudent and reasonable.

12 Q. **WILL YOU EXPLAIN WHY YOU FOUND THE INITIAL IATAN UNIT 1**
13 **MANAGEMENT AND CONTRACT APPROACH PRUDENT?**

14 A. In discussing Iatan Unit 1, it is important to understand the evolution of KCP&L's
15 planning and the relationship of Iatan Unit 1 project decisions to the permitting process.
16 Thus, to evaluate KCP&L's decisions with respect to Iatan Unit 1, it is first necessary to
17 understand its relationship with Iatan Unit 2. ** [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
24 [REDACTED]
25 [REDACTED] **

26 In early 2004 a Project Definition Report (PDR) was commissioned and completed in
27 August 2004 that focused solely on Iatan Unit 2. (Iatan 2 Project Definition Report).

1 This Report provided a defined plant configuration to support initial cost estimating and
2 permitting. During the process of developing this report the decision was made to change
3 the design of Iatan Unit 2 to maximize the value of a two unit site with common facilities
4 and remove the expectation of independent operation of the new plant. As a result of
5 these changes it became evident that environmental permitting of Iatan Unit 2 would
6 potentially impact both units.

7 In developing the Environmental Assessment for Iatan Unit 2 for submission to the U.S
8 Army Corp of Engineers, KCP&L determined that the most effective method to complete
9 the permitting process, with the least impact on schedule, would be to net emission levels
10 of the two units. This netting of emission levels (SO_x, NO_x, PM 10 and Hg) from Iatan
11 Unit 1 and Iatan Unit 2 would be at or below the existing emission levels for just Iatan
12 Unit 1. KCP&L then prepared and submitted a revised Environmental Report
13 incorporating the netting concept. A consequence was that the resulting permit
14 requirements were more stringent on both Iatan Unit 1 and the overall site operation than
15 had been initially anticipated. These more stringent requirements required changes to the
16 current Iatan Unit 1 operations as well as the need to modify the scope of the emissions
17 control equipment. These changes were necessary to ensure long term compliance once
18 the permit took full effect for each of the Iatan units.

19 The environmental permitting and other required state regulatory permitting for Iatan
20 Unit 1 occurred in the latter half of 2005, and the project began in November 2005. In the
21 last quarter 2005 KCP&L reviewed various delivery methods and contracting options in
22 light of the then current economic conditions. KCP&L engaged Schiff Hardin (with
23 engineering and construction expertise) to advise on steps that could be taken in order to
24 ramp up to handle the CEP program of which Iatan Unit 1 was a part. KCP&L
25 recognized that their internal resources were being stretched. For that reason they
26 engaged consultants, including Schiff Hardin and others, and sought continual input used
27 to develop an initial strategy. As part of that strategy KCP&L determined that they would

1 seek and obtain early bids on major equipment (discussed more extensively below
2 regarding the Owner's Engineer). In reviewing project delivery options, KCP&L found
3 that demand for engineering and construction services had risen from what had existed in
4 early 2004, forcing them to include a variety of options in their review. Strategically,
5 KCP&L had a range of delivery method options, ranging from EPC (single source
6 responsibility for engineering and construction) to separate contracts for engineering and
7 various contracts for vendors and contractors (typically called a multi-contract approach).
8 In analyzing this overall strategy KCP&L management determined that the recently
9 approved CEP program (by the Kansas and Missouri Commissions in mid 2005) would
10 require enhanced project management personnel and staff (explained in more detail
11 below).

12 ** [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED] ** These results

19 indicate that these companies were making decisions based on their own particular
20 circumstances, including their evaluation of competitive options, and that there is no
21 single "prudent" choice for project construction during this time period. (B-McD survey
22 of coal plants 090207)

23 Pegasus-Global found that KCP&L not only solicited expert advice but also took this
24 advice into account in evaluating project delivery options. KCP&L concluded that project
25 completion could be accomplished within the approved CEP program schedule by
26 engaging in a combination of EPC and multi contract delivery methods for Iatan Unit 1.
27 KCP&L further recognized that such a strategy necessitated enhancing their project
28 management staff and organization to assume the owner's role during the execution of

1 this strategy. KCP&L acted appropriately at initiation of the project and the CEP program
2 and established appropriate cost and schedule metrics for measuring their performance
3 and the success of initial program objectives. These early KCP&L decisions and the
4 decision making process exhibited good management and fell within a zone of
5 reasonableness. Pegasus-Global concludes these decisions and decision making processes
6 were prudent.

7 **Q. YOU DESCRIBED THE INITIAL DECISIONS REGARDING KCP&L. DID**
8 **KCP&L EVOLVE AND ALTER THIS MANAGEMENT AND CONTRACT**
9 **APPROACH DURING IATAN UNIT 1 EXECUTION?**

10 **A. **** [REDACTED]
11 [REDACTED]
12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED] **

20 As I pointed out earlier, KCP&L formed the CEP Oversight Committee in October 2006
21 so that every one of the CEP Projects in the program was strategically aligned in terms of
22 scope, quality, cost and schedule. The Oversight Committee met, received reports, and
23 made corporate level decisions approximately every 2 to 3 weeks and the Iatan Unit 1
24 Project was addressed at every single meeting.

25 For example, the CEP Oversight Committee was very involved in interface and claims
26 issues that arose between B&McD and Alstom, and various adjustments that were made
27 to attempt to get both firms to live up to their obligations. The failure of a contractor to

1 perform at the expected level is, in and of itself, not evidence of imprudence. At this
2 stage of a project a proper prudence review looks at the facts and circumstances known to
3 management at the time (such as stage of the project, causes for non-performance, other
4 commercial options available, budget impact, connective action plan, etc.) to determine
5 whether the response to non-performance was appropriate and prudent. Here, when
6 project management determined at the beginning of 2006 that the strategic plan
7 requirement of a schedule driven project would be enhanced by limiting the multi
8 contract approach to equipment procurement only, the CEP Oversight Committee
9 concurred. Kiewit was engaged under a Limited Notice to Proceed (LNTP) to serve in
10 this role while Kiewit and the Project Management staff work out details of Kiewit's
11 contract to handle all field construction required for the Balance of Plant (BOP) work and
12 outage work required. ** [REDACTED]

13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED]
23 [REDACTED] **

24 The evolution of project strategy structure and organization and the constant follow up
25 that Pegasus-Global observed is evidence of management attention and action. Decisions
26 by KCP&L were timely and based upon timely information. New decisions cannot be
27 implemented immediately, but the project documents show steady improvement and
28 further refinement as more information was received. One of the decisions that stand out

1 is the decision to use Kiewit under a LNTP while the parties took the time necessary to
2 appropriately establish definitions and scope to enable a contract. Pegasus-Global finds
3 the evolution of the Iatan Unit 1 management and contract approach and the decision
4 making process reflected appropriate management practices that fell within a zone of
5 reasonableness. Pegasus-Global concludes these decisions and decision making processes
6 were prudent.

7 **Q. WHAT DID YOU CONCLUDE WITH RESPECT TO IATAN UNIT 1 PROJECT**
8 **MANAGEMENT ORGANIZATION AND STAFFING?**

9 **A.** The early decisions regarding organization and staffing reflected the fact that KCP&L
10 had a limited construction program for almost 20 years. In fact, KCP&L had shifted their
11 corporate strategy early in this decade from growth through unregulated subsidiaries to a
12 future where the dominant business model was the vertically integrated state regulated
13 electric utility. KCP&L recognized that the change in corporate strategy brought with it
14 the certainty of rate cases and the expectation of broad public review of decisions that
15 such rate cases meant.

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Pegasus-Global concludes that KCP&L identified timely that the project management organization and staffing needed to be increased. KCP&L further recognized that a strategy that was schedule driven did not allow time for the recruitment and training of an all KCP&L staff. KCP&L decided appropriately to enhance their project management staff and organization with experienced consultants while the KCP&L PMT was fully developed. These decisions seem reasonable, appropriate and prudent.

Q. DID KCP&L CONTINUE TO MONITOR AND ADJUST THE PMT AND PROJECT MANAGEMENT PROCESS AS THE NEEDS OF THE IATAN UNIT 1 PROJECT GREW AND THE PROJECT PROGRESSED?

1 A. Yes they did. The PMT and KCP&L CEP program management recognized and received
2 from various sources information identifying potential risks with respect to the project
3 opportunities to further improve effectiveness. The Iatan Unit 1 organization and staffing
4 progressed in a manner that Pegasus-Global has observed on other major capital projects,
5 leading us to conclude that this type of organization development is normal and to be
6 expected as a project progresses. The PMT was effective and identified a number of
7 contract compliance issues that are typical on any project. After identifying these issues,
8 the PMT explored various options, again, as we would expect. Once an option was
9 chosen, the PMT implemented solutions and monitored further developments. If the
10 desired result were not achieved, the PMT made adjustments.

11 Pegasus-Global concludes that KCP&L continued project management organization and
12 staffing decisions and decision making processes exhibited good management and fell
13 within a zone of reasonableness. Pegasus-Global concludes these decisions and decision-
14 making processes were prudent.

15 **Q. DO YOU AGREE THAT KCP&L IATAN UNIT 1 INITIAL DECISIONS WERE**
16 **IMPRUDENT AND CAUSED INCREASES IN PROJECT COSTS?**

17 A. I do not agree with Vantage for reasons I present above.

18 **Q. WHAT DID YOU CONCLUDE WITH RESPECT TO IATAN UNIT 1**
19 **SELECTION AND MANAGEMENT OF THE OWNER'S ENGINEER?**

20 A. KCP&L utilized Burns & McDonald (B&McD) to perform Owners Engineer (OE)
21 services for the Iatan project early in the evolution of the project. In this early period
22 B&McD worked under a "General Services Agreement", which is common practice in
23 the industry. However, as would be expected the B&McD duties evolved over time. This
24 is normal and appropriate with a project of the size and complexity of Iatan Unit 1. As
25 early as 2004 KCP&L had B&McD develop the Project Definition Report for Iatan II.

1 Specifically with respect to Iatan Unit 1, KCP&L released B&McD to proceed with the
2 engineering for Unit 1 AQCS in December 2005.

3 In late 2005 KCP&L decided to formalize a commercial relationship with an OE and to
4 evaluate OE options. It then requested proposals from both B&McD and Black & Veatch,
5 another qualified power plant engineer.

6 KCP&L announced the selection of B&McD in November 2005 and KCP&L finalized
7 negotiations with B&McD on a new contract in February 2007. This period of
8 negotiations allowed for both parties to develop specifics on scope, which included
9 design engineering services, staff augmentation and OE services, obligations and
10 performance factors and risk incentives. During negotiation of the contract B&McD
11 continued to provide Unit 1 design services under a “general services” agreement.

12 KCP&L’s use of B&McD early in the project under a “general services” contract was
13 appropriate and is normal in the industry and provided KCP&L the services of a qualified
14 power plant engineering organization for the continued Unit 1 design evolution,
15 preparation of equipment and construction specifications and detailed designs. This
16 arrangement provided KCP&L flexibility, from both a scope and schedule perspective,
17 until the project definition and contracting approach were finalized. The start of the
18 AQCS engineering in late 2005, many months prior to completion of the air and site
19 permitting, reduced the risk of having to delay the Unit 1 completion date and minimize
20 cost risk that would have been incurred in delaying until completion of the permitting
21 process.

22 B&McD has continued to provide the OE services for Iatan Unit 1. Therefore the project
23 has benefited from the continuity of a single engineering firm. Pegasus-Global concludes
24 that KCP&L decisions and decision making process exhibited good management and fell
25 within a zone of reasonableness. Pegasus-Global concludes these decisions and decision
26 making processes were prudent.

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5 A. [REDACTED]
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Q. PLEASE DISCUSS THE PROJECT CONTROLS IN EFFECT FOR THE IATAN PROJECT.

A. The project control systems used to manage the Iatan project in the initial stages were existing KCP&L systems and internal controls. Where it was determined that existing systems and internal controls had to be improved to reduce potential risk for specific projects, KCP&L enhanced those systems and internal controls to function appropriately for the Iatan Unit 1 project as needed. Project controls consists of three major components, cost controls, scheduling, and reporting. The purpose of cost controls is to identify, trend, analyze, and report the status of project costs in a timely manner to support corrective actions by management as appropriate. The purpose of the scheduling

1 function is to prepare a schedule showing the major sequence of activities required to
2 complete the project, assure adequate planning and execution of the project by the
3 contractors and assure coordination of the project by all vendors. In addition the
4 schedule provides management with information necessary to manage the project and
5 make necessary adjustments to meet the CEP program goals. The reporting function is
6 necessary to create various documents to effectively manage the project.

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11 **A.** [REDACTED]
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21 [REDACTED] ** This is evidence of
22 appropriate management attention to changing conditions. Pegasus-Global finds the
23 evolution of the Iatan Unit 1 project controls decisions and the decision making process
24 fell within a zone of reasonableness. Pegasus-Global concludes these decisions and
25 decision making processes were prudent.

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Q. WHAT DID YOU CONCLUDE WITH RESPECT TO IATAN UNIT 1 PROJECT TIME MANAGEMENT (SCHEDULE)?

A. Pegasus-Global’s review of KCP&L Iatan Unit 1 project scheduling illustrates the process and reporting were appropriate and evolved with the evolution of the project and project management needs.

KCP&L utilized Primavera (P3) scheduling software, which is widely used in the industry, to plan and manage Iatan Unit 1 design, procurement and construction.

In the initial phase of the project KCP&L relied upon B&McD to develop an Iatan Unit 1 master schedule. This master schedule included engineering specifications for the major equipment, site preparation, construction activities and outage start. Thus KCP&L had a

1 detailed master schedule on which to plan and manage the project many months prior to
2 the start of major construction activity.

3 As the project evolved KCP&L integrated contractor's schedules, including B&McD and
4 vendors, into the master schedule. Overall, KCP&L ultimately issued level 1, 2 and 3
5 schedules for management of Iatan Unit 1 construction, which integrated up to 25
6 separate detailed schedules. (CEP OC Presentation 2007-05-23 Level 1 Schedules)

7 An example of early identification of potential Iatan Unit 1 schedule issues and the
8 options available to KCP&L is the chimney foundation, a critical path activity. Use of the
9 project schedule facilitated KCP&L decision without compromising the overall project
10 schedule.

11 It was use of the integrated schedule that was the basis of KCP&L's negotiations with
12 Alstom which resulted in obtaining Alstom's commitment to support the Revised Iatan
13 Unit 1 schedule and the Final Iatan Unit 1 schedule.

14 KCP&L's schedule management concept was to set contractor and project milestones
15 based on the CP schedule early dates, thereby ensuring the float in the schedule was
16 available as a contingency for the inevitable issues that arise on complex projects. As the
17 project progressed KCP&L initiated daily critical path meetings where schedule issues
18 were reviewed and actions promulgated with contractors and other parties. Throughout
19 the project schedule status reports were issued to construction and senior management
20 were informed on timing of important project events and milestones.

21 The master schedule was periodically updated which integrated contractor progress. This
22 integrated master schedule facilitated overall management of the project, including
23 development of "work around" plans that inevitably are required on a project of this
24 complexity.

1 In early 2008 KCP&L developed a resource loaded critical path start-up schedule
2 integrating construction completion with the outage activities, an important tool in the
3 management of this critical transition period.

4 ** [REDACTED]
5 [REDACTED]
6 [REDACTED] **

7 Pegasus-Global finds the Iatan Unit 1 schedule management decisions and the decision
8 making process fell within a zone of reasonableness. Pegasus-Global concludes these
9 decisions and decision making processes were prudent.

10 **Q.** ** [REDACTED]
11 [REDACTED]

12 **A.** [REDACTED]
13 [REDACTED]
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15 [REDACTED]
16 [REDACTED]
17 [REDACTED] **

18 **Q. WHAT DID YOU CONCLUDE WITH RESPECT TO IATAN UNIT 1**
19 **PROJECT COST MANAGEMENT?**

20 **A.** Pegasus-Global finds the evolution of the Iatan Unit 1 cost management decisions and the
21 decision making process fell within a zone of reasonableness. Pegasus-Global concludes
22 these decisions and decision making processes were prudent for the reasons described
23 below.

24 **Q. PLEASE DESCRIBE THE DEVELOPMENT OF THE BUDGET FOR IATAN**
25 **UNIT 1 OVER THE LIFE OF THE PROJECT.**

1 A. The development of the budget for Iatan Unit 1 progressed from an initial high level
2 estimate in the 2002 time frame to a detailed estimate first developed in spring 2006 and
3 updated as necessary in following periods. This development is consistent with other
4 projects I am familiar with and shows that the Company was diligent in updating cost
5 estimates as the project progressed. It is important to understand the development of the
6 budget for Iatan Unit 1 in light of the evolution of the permitting events surrounding Iatan
7 Unit 2 as I described earlier and in light of economic conditions affecting all utility
8 projects during this period of time.

9 Q. PLEASE DESCRIBE THE INITIAL HIGH LEVEL ESTIMATE FOR IATAN
10 UNIT 1.

11 A. The initial high level estimate for Iatan Unit 1 was developed in 2002 and targeted total
12 project costs (excluding financing costs) of \$210.7 million. This high level estimate was
13 revised in conjunction with the development and negotiation of the CEP program with
14 the Kansas and Missouri Commissions. This new plan was based on estimates and
15 schedules that were developed in late 2004 and reflected some of the changes that
16 occurred in early 2005 to reflect permit application revisions.

17 Q. WHEN WAS THE FIRST DETAILED ESTIMATE PRODUCED FOR IATAN 1?

18 A. The first detailed estimate for Iatan 1 was provided to management on May 15, 2006.
19 This detailed estimate reflected significantly more information about the project based on
20 actual contract values and more information about commodity costs that could not have
21 been known at the time the high level estimates were prepared.

22 Q. WHAT WERE THE PERMITTING ISSUES THAT IMPACTED THE COST
23 ESTIMATE DURING AND AFTER THIS PERIOD?

24 A. ** [REDACTED]
25 [REDACTED]

1 [REDACTED]
2 [REDACTED]** He emphasized that many of the
3 changes associated with the permitting process were not known until much later and thus
4 were not reflected in the initial estimates contained in the CEP. (Iatan Projects Cost
5 Estimate and Schedule 07-17-06)

6 This environmental permitting process implementing emission netting resulted in a
7 permit, but the permit requirements were more stringent on both Unit 1 and the overall
8 site operation than had been initially anticipated. These more stringent requirements
9 required changes to both the current operations as well as the need to modify the scope of
10 the emissions control equipment. These changes were necessary to ensure long term
11 compliance once the permit takes full effect for each of the units. Any increases in costs
12 due to “netting” decisions are not, in and of itself, evidence of imprudent management.
13 To the contrary, KCP&L management evaluated options and made a decision which
14 produced more energy and lower emissions. This type of decision by management is well
15 within the zone of reasonableness.

16 **Q. WHAT WERE THE REASONS FOR THE COST INCREASES FROM THE**
17 **HIGH LEVEL ESTIMATES TO THE DETAILED ESTIMATE?**

18 **A.** The major changes were caused by increases in escalation resulting from commodity cost
19 increases, permit limits likely to require additions to Low NOx Burners, and demolition
20 of the existing electrostatic precipitators.

21 **Q. PLEASE DESCRIBE THE CHANGES IN COMMODITY COSTS THAT**
22 **IMPACTED THE DETAILED ESTIMATE.**

23 **A.** KCP&L found that there had been a major shift in the market from the preliminary
24 estimates to the detailed estimate. In 2005 the Environmental Protection Agency (EPA)
25 issued both the Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule
26 (CAMR) that required all coal fired plants in the Eastern half of the United States to

1 install a SCR, Wet Scrubber and a Baghouse by 2009 or buy credits. These new
2 requirements caused a flurry of projects across the country, all of which are on the same
3 general timeline. In turn, this increase in demand stressed the material and labor supplies,
4 thus causing pricing to increase and lead-times to extend. ** [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED] **

9 **Q. HOW DOES IATAN UNIT 1 COST CHANGES COMPARE WITH COST**
10 **CHANGES ON OTHER UTILITY PROJECTS BEING COMPLETED DURING**
11 **THIS TIME FRAME?**

12 **A.** The Iatan Unit 1 budget was affected, in large part, by commercial and economic
13 conditions that were impacting a wide range of other utility projects that were under
14 construction during this time frame.

15 We have reviewed specific industry reports and publications published during this same
16 time period. For instance, the Edison Foundation commissioned the Brattle Group to
17 study the costs of building infrastructure in the 2000-2007 timeframe. Chupla, Marc W.
18 and Basheda, Gregory, Rising Utility Construction Costs, Sources and Impacts, Edison
19 Foundation, September, 2007. The study authors also published their findings in "*Sticker*
20 *Shock*", Public Utility Fortnightly, December, 2007, pages 56-61. Among the findings
21 reported:

- 22 • The rapid rise in construction costs was not predicted and not predictable.
23 The U.S. Energy Information Administration "2007 Annual Energy
24 Outlook" contained projected cost assumptions dramatically under actual
25 costs incurred. (PUF, p. 57)

- 1 • A surge in demand for construction services, coupled with constraints in
2 component manufacturing capacity, engineering, material procurement
3 and construction EPC services all “exacerbate cost pressure” (PUF, p. 57)
- 4 • Between January 2004 and January 2007 costs for steam generation
5 equipment, transmission facilities and distribution equipment rose by 23 to
6 35 percent while inflation rose only 8 percent. (PUF, p. 57)
- 7 • For one class of plants, combined cycle, the data shows that average costs
8 increased gradually from 2000 to 2003, with significant increases in 2004
9 and a very significant escalation in 2006. (PUF, p. 59)
- 10 • Four factors have driven costs for all utility projects. (1) material costs
11 including both manufactured components and commodities like steel and
12 cement; (2) limited shop and fabrication capacity; (3) costs for
13 construction field labor; and (4) a competitive market for large
14 construction project management and EPC services. (PUF, p. 59)

15 These common elements were identified in the B&MCD study, the PUF article, and also
16 identified by Pegasus-Global at other projects where we were engaged.

17 We believe, as did the Kansas legislature, that these types of comparisons with other
18 projects are critical in evaluating the prudence of KCP&L management. The fact that
19 costs increased is not, again, in and of itself, evidence of imprudence. In this situation,
20 reasonable and prudent managers on scores of projects were making the same or similar
21 decisions based on the same knowledge, facts and conditions and incurring similar results
22 – cost escalation that could not be avoided and had to be reflected in revised budgets.

23 **Q. HAVE THERE BEEN REVISIONS TO THE DETAILED ESTIMATE SINCE**
24 **THE MAY 2006 PRESENTATION?**

1 A. Yes, there have been additional estimates required as a result of ongoing reviews of the
2 cost to complete the project. This process is evidence of prudent management of the
3 project to insure that responsible management is aware of the progress of the plant and
4 can make necessary changes to address changed conditions, such as described above.

5 **Q. WHAT IS THE RELATIONSHIP OF SCHEDULE AND COST IMPACTS**
6 **IMPACTING IATAN UNIT 1 WITH ACTIVITIES ON IATAN UNIT 2?**

7 A. The Iatan Unit 1 activities are integrated into the Iatan Unit 2 schedule since these
8 projects are managed in an integrated fashion. However, the only hard constraints on
9 Iatan Unit 1 completion deal with the tie-in outage and the Iatan Unit 2 start up activities.

10 **Q. **** [REDACTED]
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15 [REDACTED]

16 **A.** [REDACTED]
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25 [REDACTED] **

1 **Q. WHAT DID YOU CONCLUDE WITH RESPECT TO IATAN UNIT 1 PROJECT**
2 **SCOPE AND CHANGE MANAGEMENT?**

3 **A.** I conclude that the KCP&L management of the cost and scope change process at Iatan
4 Unit 1 was appropriate in a project of this nature falls squarely within a zone of
5 reasonableness and thus is prudent.

6 **Q. WHY IS SCOPE AND CHANGE MANAGEMENT AN IMPORTANT PART OF**
7 **THE MANAGEMENT OF A PROJECT SUCH AS IATAN?**

8 **A.** In any project such as Iatan Unit 1 it is necessary to provide clarity as to the
9 responsibilities that each party has to complete the project. As changes in the project are
10 recognized the identification of the responsibility for implementing the change and
11 incorporating it into the project schedule and cost is required in order that unnecessary
12 delays and costs can be avoided. These changes can be the result of scope changes in the
13 contracting process or in the management of change orders as cost and schedule impacts
14 are recognized during the construction execution period. If scope changes are not
15 understood by the appropriate parties, the number and amount of change orders requests
16 will also be increased. If scope changes and change orders are not proactively managed,
17 projects experience submission of claims at the end of the project when the chance to
18 mitigate the impact on project cost is limited.

19 **Q. HAVE YOU INVESTIGATED THE MANAGEMENT OF SCOPE AND CHANGE**
20 **PROCESSES ON THE IATAN PROJECT?**

21 **A.** Yes, I have. In the review of project documentation I have seen numerous examples of
22 efforts to identify and respond to scope changes and to deal with change order issues.
23 ** [REDACTED]
24 [REDACTED]
25 [REDACTED]
26 [REDACTED] **

1 Another example of management attention to the change order process is found in a
2 review of Oversight Committee Meeting presentations. In each of the presentations the
3 Committee was provided a listing of change orders that were under review or had been
4 resolved. This provided management information about the issues that were being
5 addressed by the Iatan Unit 1 PMT and insured that KCP&L Senior Management was
6 aware of the importance of the change process through the CEP Oversight Committee
7 presentations.

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10 **A.** [REDACTED]
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1 **Q** **WHAT IS THE OVERALL ASSESSMENT OF THE PRUDENCY OF KCP&L'S**
2 **MANAGEMENT OF IATAN UNIT 1?**

3 **A.** Pegasus-Global concluded that KCP&L management showed a good understanding of
4 the initial conditions and circumstances, and the management effort required in regards to
5 Iatan Unit 1, made appropriate adjustments to the decisions as the project unfolded, and
6 found KCP&L's management to be prudent and reasonable. Pegasus-Global has found no
7 imprudent costs incurred by KCP&L related to the nine issues addressed above.

8 **Q.** **DOES THIS CONCLUDE YOUR TESTIMONY?**

9 **A.** Yes.

EXHIBIT 1



Areas of Expertise

- Arbitrator/Mediator/DRBs
- Executive Management
- Corporate Governance
- International Contracting and Management
- Financial /Investment Funds
- Mergers and Acquisitions
- Feasibility Studies / reviews
- Trend Evaluations / Analytics
- Management Consulting
- Industry Best Practices
- Contracts
- Instruction and Training
- Risk Management
- Risk Assessment and Audits
- Change Management
- Prudence Analysis / Audits
- Compliance Review / Audits
- Engineering & Construction Management
- Project / Program Management
- Standard of Care
- Project Delivery and Constructability
- Project Control Systems
- Project Management Audit
- Strategic Planning
- Design – Build Consulting
- Operations Management
- Damages Calculation
- Fraud / Abuse / Waste
- Claims Prevention
- Claims Analysis / Negotiation

Background

Dr. Nielsen is the Chairman and President of Pegasus Global Holdings, Inc. He provides strategic direction to the firm's operations, as well as direction and participation on engagements throughout its Risk Management, Management Consulting and Strategic Consulting business areas. Dr. Nielsen has served as an Engagement Director and Primary Team Member on wide-ranging, complex engagements involving the entire project delivery process – cradle to grave – in the following industries: power; oil and gas / petrochemical; process; transportation; infrastructure; and buildings. He has worked on behalf of private and public sector clients globally. With an extensive background in engineering, construction and project management, including project controls, he has advised Board committees, Owners Engineers, and Contractors relative to Execution Management, Corporate Governance and Enterprise Risk Management issues. He has also presented expert witness testimony in legal proceedings around the world and served as a chairman and member on dispute review boards, as well as an arbitrator and mediator on dispute matters.

On Management Consulting engagements, Dr. Nielsen leads a variety of audits and assessments of executive and operational management process, performance, prudence and related project-specific and corporate issues. His Management Consulting experience includes comprehensive project management design and development, management evaluations, change management, contract negotiations, administration, feasibility studies, partnering, value engineering, project management instruction and training.

Dr. Nielsen serves as a senior member on Risk Management engagements, leading and undertaking audits, evaluations and assessments of project-specific and corporate risk. Further drawing upon his extensive Dispute Resolution experience, Dr. Nielsen also consults on claims prevention, management and negotiation. As a global innovator in the development and application of Risk Management techniques, he has developed and led training and instructional programs for a variety of private, multinational and public agency clients.

On Strategic Consulting engagements, Dr. Nielsen leads many evaluations and training for private firms, government entities, financial/investment funds, etc. with respect to such wide ranging issues as mergers & acquisitions, markets, and project specific issues.

His engagement experience also includes pre-design work, bidding and bid solicitation, procurement, estimating (conceptual through bid and change), constructability reviews, schedule resource loading and activity evaluation, code and permitting process, due diligence studies, overhead calculations, quality assurance and control, startup and operations, commissioning, testing and maintenance.

Megaprojects, by industry definition, are very large investment projects that attract a high level of public attention or political interest because of substantial direct and indirect impacts on the community, environment and budgets. They are generally defined as major infrastructure projects that cost more than \$1 billion.

Dr. Nielsen has significant global experience with megaprojects costing several times this minimum definition. He has been a member of and led teams on engagements such as Crossrail Project, London, United Kingdom at £10 billion; L.A. Metro Rail Operations Management System, California, North America at \$6.5 billion; Consortium Contractor, Marine Facility, Europe at \$6 billion; Guri Dam and Hydroelectric Complex, Venezuela at \$4.5 billion; Xiaolangdi Dam, China at \$3.5 billion; Parramatta Rail Link Project, New South Wales, Australia at \$2.7 billion; Sound Transit Project, Washington, North America at \$2.6 billion; Melbourne Citylink Project, Victoria, Australia at \$2 billion; Siemens PEMEX-Cadereyta project at \$1.6 billion; Milwaukee Water Pollution Abatement program, Wisconsin, North America at \$1.5 billion; United Rail Group Tender Risk Review, New South Wales, Australia at \$1.3 billion; Seminole Fossil Fuel Plant, Florida, North America at \$1.2 billion; Rockport Works Steel Mill Facility, Rockport, Indiana, North America at \$1.1 billion; Refinery Upgrade and Pipeline Project, North America at over \$1 billion; International LNG Terminal, North America at \$1 billion; HBJ Pipeline Project, India at \$1 billion; Murrin Murrin Nickel-cobalt Project, Western Australia at \$1 billion; Vancouver Island Highway Project, British Columbia, Canada at \$1 billion; Mounds Laboratory U.S. Dept of Energy, Ohio, North America at \$1 billion and multiple nuclear power plant projects each costing well over \$1 Billion.

Dr. Nielsen's career has included a variety of project and corporate management positions, including previously as Chairman and a Principal of The Nielsen-Wurster Group, and earlier as Chairman of Nielsen-Wurster ESB, Inc., an international power and process plant management consulting and Software Company and Chairman of Nielsen-Wurster Asia-pacific Pty. Ltd., an Asia-Pacific firm located in Melbourne, Australia, specializing in management consulting, risk management, and dispute resolution

Dr. Nielsen has led and undertaken myriad dispute engagements. He has extensive experience with Dispute Resolution analyses involving issues of management, engineering, construction, controls, scheduling (delay, acceleration, early completion and disruption), productivity, lost revenue / business interruption, change order, differing site conditions, causation and responsibility, cumulative impact, costs, damages, termination, fraud and others. His experience includes overall management and project management, standard of care, evaluation of errors and omissions, measured mile analysis, cost-to-complete calculations, technical issue evaluations and forensic engineering. He also has extensive experience in the review and analysis of asbestos abatement and related dispute issues.

Dr. Nielsen has performed numerous engagements on engineering and construction projects in over 60 countries. Representative examples of his experience are listed in the attached Representative Engagement Experience.

Prior to founding Nielsen-Wurster, Dr. Nielsen served as a project engineer and project manager on process and building projects. At MBM, an international construction management firm, Dr. Nielsen served as Vice

DR. KRIS R. NIELSEN

President of Construction Consulting Services, where he led the development of the United States Government's Construction Management Control System (CMCS) and managed their global consulting division.

At Wood and Tower, Dr. Nielsen served as the Project Manager for the development of the most widely used construction cost and time estimating system and data banks, the CBC System, now owned by McGraw-Hill. He also performed in various project management positions on infrastructure, process and building projects.

Registrations

- Certified Project Management Professional (PMP) #0028-84
- Licensed Attorney, Commonwealth of Virginia
- Private Pilot
- Professional Member of the Royal Institution of Chartered Surveyors, Faculties of Project Management and Risk Management (MRICS) #1177397
- Member of ICOR Panel of Arbitrators
- Member of AAA Panel of Arbitrators

Board of Direction Membership

For Profit Companies

- Pegasus Global Holdings, Inc., 2000 - Present
- The Nielsen-Wurster Group, Inc., 1976 - 2008
- Unionville Vineyards (Partner), 1986 - 2008
- Nielsen-Wurster Asia-Pacific Pty. Ltd., 2001 - 2008

Non-Profit Companies

- Life Support, 2008 – Present
- Construction Institute, 2004 - Present
- Board Alternate to the Construction Industry Institute Board of Advisors, 2007 – Present
- Civil Engineering Forum for Innovation (CEFI), Member of Corporate Advisory Board, 1994 - 2000

Awards

- Pan American Academy of Engineering, Elected in 2008

Education and Courses

Education

- Ph.D., Infrastructure Systems (Civil) Engineering, Kochi University of Technology, Kochi, Japan
- J.D., George Washington University Law School, Washington, D.C.
- B.S.E., Mechanical, Princeton University, Princeton, New Jersey

Courses

- Arbitrator II Training (Advanced Case Management Techniques), American Arbitration Association, Washington, D.C.
- Award Writing, American Arbitration Association, Atlanta, Georgia

- Managing Cases, American Arbitration Association, Scottsdale, Arizona
- Chairing an Arbitration Panel, American Arbitration Association, Web based
- Construction Industry Arbitration Workshop, American Arbitration Association, Philadelphia, Pennsylvania
- International Training for Dispute Resolution, American Arbitration Association, International Symposium in Advanced Case Management Issues, New York, New York,
- Neutrals' Retreat, American Arbitration Association, Atlanta, Georgia
- Neutrals' Retreat, American Arbitration Association, Orlando, Florida
- Neutrals' Retreat, American Arbitration Association, Phoenix, Arizona
- The Dispute Review Board Administration and Practice Workshop, The Dispute Review Board Foundation, Boston, Massachusetts
- Caltrans Dispute Review Board Administration and Practice Workshop

Industry Research

- Construction Industry Institute Research Team RT 260-Reimbursable Contract –Co-Chair, 2008 – Present
- Deutsche Bank, Economic and Market Dynamics with respect to oil & gas, power and infrastructure sectors, 2007 - Present
- Kochi University of Technology, Doctorial Dissertation, Future of the Engineering and Construction Industry and in China and the challenges that both Face, 2005

Technical Papers and Presentations

Dr. Nielsen has authored and presented numerous technical papers and articles on risk management, project controls management; project management, scheduling, engineering management and other management topics (*see attached Technical Papers and Presentations*).

Memberships

- American Association of Engineering Societies
 - Vice Chair of International Activities Commission, 1998 - 2001
- American Bar Association
 - Member of Construction Litigation Committee, Inception - Present
 - Member of Public Contract Law Committee, 1970 - Present
- Academy of Experts, United Kingdom
- American Consulting Engineers Council
- American Nuclear Society
- American Arbitration Association, Panel of Arbitrators (International, New York, and Seattle)
- American Society of Civil Engineers
 - Member, International Activities Committee, 2003 - 2005
 - Chair of National Research Policy Committee, 1996 - 1998
- Association for the Advancement of Cost Engineering (AACE) International
- Civil Engineering Forum for Innovation
 - Corporate Advisory Board, 1994 - 2000
- Construction Institute
 - Member of the Board of Directors, 2004 - Present

DR. KRIS R. NIELSEN

- Construction Industry Institute
 - Corporate Advisory Board Alternate, 2007 - Present
- Dispute Review Board Foundation
- Inter-Pacific Bar Association
 - Member of Major Projects Committee, 1992 - Present
 - Vice Chair of Major Projects Committee, 1997 - 2001, 2008 - Present
- International Bar Association
 - Member of Committee T, Construction, 1999 - Present
- Japan Society of Civil Engineers
- National Association of Corporate Directors
- Order of the Engineer
- Project Management Institute
- Royal Institution of Chartered Surveyors
- Society for Social Management Systems
- Society of Petroleum Engineers

Reference	Authored	Presented	<i>KRIS R. NIELSEN</i> <i>Technical Papers and Presentations</i>
1.	•		“A Management System for Infrastructure Construction, Meeting the Needs of the Next Two Decades,” <i>International Symposium on Social Management Systems, Annual Conference for the Society of Social Management Systems</i> , Kochi, Japan, March 5-8, 2009
2.		•	“ <i>Infrastructure Boom: Potholes Ahead</i> ,” <i>Business Week</i> , January 6, 2009, go to http://www.pegasus-global.com/ and click on News.
3.	•	•	“The Challenge to Sustainable Power Infrastructure Development in a Multinational Environment,” XXXI UPADI Convention, Brasilia, Brazil, December 1, 2008.
4.		•	“Near and Mid Term Economic Impacts from Global Economic Conditions on the O&G Services Sector,” <i>2008 Deutsche Bank Oil & Gas Conference</i> , London, United Kingdom, September 25, 2008
5.		•	“De-Mystifying and Repositioning the Risks Between IOCs, NOCs and E&C Contractors,” The International Construction Superconference, London, United Kingdom, September 4, 2008
6.	•		“European Oil Services,” <i>Pit Stop May</i> , Contributing Author, <i>Deutsche Bank, AG</i> , London, United Kingdom, May 27, 2008
7.	•		“Oil Service Contracts – Re-positioning the ‘Risk’ Pendulum,” Contributing-Author, <i>Deutsche Bank, AG</i> , London, United Kingdom, April 24, 2008

Reference	Authored	Presented	<p style="text-align: center;">KRIS R. NIELSEN <i>Technical Papers and Presentations</i></p>
8.		•	“Large-Scale Railway Projects – Mitigating the Risks,” Panel Chairman, Inter-Pacific Bar Association, Los Angeles, CA, USA, April 29, 2008
9.		•	“Integration of Social Science & Engineering,” <i>International Symposium on Social Management Systems, Annual Conference for the Society of Social Management Systems</i> , Kochi, Japan, March 7, 2008
10.	•		“ <u>Endangered Species, The Japanese Construction Industry</u> ,” Eiko-Sha, Tokyo, Japan, January 2008
11.		•	“Infrastructure Construction in 2008 Global Public and Private Sectors” Seminar, <i>Gearson Leberman Group Institute</i> , New York, New York, December 18, 2007
12.	•	•	“Current Risk Management Issues in the Oil & Gas Industry,” <i>2007 Deutsche Bank Oil & Gas Conference</i> , London, United Kingdom, September 27, 2007
13.	•	•	“Applying Risk Management Techniques to Global Growth in Sustainable Infrastructure Projects,” co-authored with Lia Nielsen, <i>Proceedings of the 4th Civil Engineering Conference in Asia Region</i> , ACCEC, Taipei, Taiwan, June 26, 2007
14.	•		“European Oil Services-Pit Stop May: Eyes Wide Open,” <i>Pit Stop-Deutsche Bank Publication</i> , London, United Kingdom, May 23, 2007
15.	•	•	“Some Practical Thoughts-Risk Allocation Regarding Airport Projects in China,” <i>IPBA Conference: Risk Allocations on Airports Session</i> , Beijing, China, April 23, 2007; also published on the Society of Social Management Systems (SSMS), Internet Journal, 2007
16.		•	Panel Member, “The Engineers Responsibility for Risk Management,” <i>International Symposium on Social Management Systems, Annual Conference for the Society of Social Management Systems</i> , Ying Chang, Hubei, China, March 9 - 11, 2007
17.	•	•	“Observations Regarding Global Oil & Gas Construction, Projects and Contractors-The Changing Picture of Execution Risk,” <i>Shell Construction Law Workshop</i> , London, United Kingdom, January 31, 2007
18.	•	•	“Practical Thoughts Regarding International Arbitrations,” <i>Practical Strategies for Successful International Projects</i> , São Paulo, Brazil, November 20 - 21, 2006
19.	•	•	“Observations Regarding Public, Private, Partnership from Around the World,” <i>Practical Strategies for Successful International Projects</i> , São Paulo, Brazil, November 20 - 21, 2006
20.	•	•	“Experienced Based Recommendations on Risk Allocations for Both Owners and Contractors,” <i>Practical Strategies for Successful International Projects</i> , São Paulo, Brazil, November 20 - 21, 2006
21.	•	•	“Risks Must Be Managed More Than Ever in Today’s Oil & Gas Industry,” <i>Deutsche Bank Global Oil & Gas Conference 2006</i> , London, United Kingdom, September 28, 2006

Reference	Authored	Presented	KRIS R. NIELSEN <i>Technical Papers and Presentations</i>
22.	•		“Risk-Based Processes that Assure Anti-Corruption Processes and Promote Transparency and Governance in Resource Extraction Industries,” co-authored with Patricia Galloway; <i>International Conference on Infrastructure Development and the Environment</i> , Aguja, Nigeria, September 10 - 15, 2006; <i>Society of Social Management Systems (SSMS), Internet Journal</i> , 2007
23.	•	•	“Case Study Summaries: Talk vs. Practice-or the Truth vs. Practice on Risk Management Usage by Contractors and Owners,” <i>Construction Institute Regional Conference</i> , Chicago, Illinois, June 15 - 16, 2006
24.		•	“International Construction Dispute Resolution: Arbitration and Litigation-New Developments and Trends,” <i>Current Trends in Construction Law, International Project Management and Dispute Resolution: The South and Central American Project</i> , São Paulo, Brazil, June 5 - 6, 2006
25.	•	•	“Current Trends in Entitlement in Construction Disputes on Major International Projects,” <i>Current Trends in Construction Law, International Project Management and Dispute Resolution: The South and Central American Project</i> , São Paulo, Brazil, June 5 - 6, 2006
26.	•		“Risk Management Lessons from Six Continents,” <i>Journal of Management in Engineering</i> , Volume 22, No. 2, pp. 61, April 2006
27.		•	Keynote Speaker, “Is Ethics Dead in Project Control Management?,” <i>Second Annual PMI College of Scheduling Conference</i> , Scottsdale, Arizona, May 22 - 24, 2005
28.	•		“New Ways to Build and Manage Projects-Understanding International Claims,” <i>The Associated Owners and Developers’ 2004 National Conference</i> , Atlanta, Georgia, September 27, 2004; New York, New York, October 1, 2004; Miami, Florida, December 3, 2004
29.	•	•	“Risk Management Techniques Evolving Project Management Tools For All Seasons,” <i>The Third Civil Engineering Conference in the Asian Region (The 3rd CECAR)</i> , Seoul, Korea, August 16 - 19, 2004
30.	•	•	“Risk Management Lessons from Six Continents” <i>ASCE Pipeline 2004 Conference</i> , San Diego, California, August 2, 2004
31.	•	•	“Execution Risk Management in Design-Build Infrastructure Projects,” <i>Proceedings of the Construction Institute Atlantic Coast Construction Conference</i> , Tysons Corner, Virginia, May 12 - 13, 2004
32.	•	•	Moderator, “Risks and Challenges to the Successful Execution of Major Offshore Projects,” <i>Offshore Technology Conference-Innovation Without Limits</i> , Houston, Texas, May 3 - 6, 2004
33.		•	Visiting Professor, <i>Project Management, Harbin University</i> , Harbin, Heilongjing, 2004 - Present
34.		•	Visiting Professor, <i>Department of Infrastructure Systems Engineering, Kochi University of Technology</i> , Kochi, Japan, 2003 - Present

Reference	Authored	Presented	KRIS R. NIELSEN <i>Technical Papers and Presentations</i>
35.		•	“How Risk Management is Causing an Evolution in Project Management Consulting,” 2003 <i>Special Lecture Series, Kochi University of Technology, Kochi, Japan, November 21, 2003</i>
36.		•	“Contract Administration Needs in the New Concept of Dispute Review Boards,” 2003 <i>Special Lecture Series, Kochi University of Technology, Kochi, Japan, November 21, 2003</i>
37.		•	“Risk and Legal Perspective-ASCE: In Tune or Out of Touch on Construction Site Safety?” <i>American Society of Civil Engineers (ASCE) Nashville 2003 Civil Engineering Conference & Exposition, Infrastructure Track; ASCE Construction Institute, Committee on Safety, Nashville, Tennessee, November 13, 2003</i>
38.	•		“The Benefits and Challenges in the Globalization of Project Management Knowledge and Usage,” <i>Japan Society of Civil Engineers’ First International Symposium on Construction and Project Management, Tokyo, Japan, October 16 - 17, 2003</i>
39.	•	•	“International Project Risk Ratings and Emerging Trends in Project Management,” <i>Clayton Utz Major Projects Conference 3, Sydney, Australia, April 16, 2002</i>
40.	•	•	“Energy Development and Risk,” <i>Alternative Energy and Environmental Futures, Boston University, Boston, Massachusetts, April 10, 2002</i>
41.	•	•	“Risk Identification and Allocation,” <i>Global Construction Superconference, London, United Kingdom, November 5 - 6, 2001</i>
42.		•	Presenter, “Claims Identification & Management,” <i>Foster Wheeler Law Department Conference, Warren, New Jersey, October 23 - 24, 2001</i>
43.	•		“The Ubiquitous Requirement of Performing to High International Standards,” co authored with P. Galloway, published Proceedings, <i>The Second Civil Engineering Conference in the Asian Region, Tokyo, Japan, April 16 - 18, 2001</i>
44.		•	“Construction Risk Management Simplified,” <i>University of Wisconsin, Madison, Wisconsin, March 26 - 27, 2001</i>
45.	•		“Project Risk is Not Generic and Can be Improved during Conception to Birth of a Project,” <i>Infrastructure 2000, San Francisco, California, June 7, 2000</i>
46.		•	Panelist, “Conception to Birth of a Project,” <i>Infrastructure 2000, San Francisco, California, June 7, 2000</i>
47.		•	“Risk Management in the International Marketplace” <i>International Markets Conference, The International Steering Committee of the American Consulting Engineers Council, Washington, D.C., June 5 - 6, 2000</i>
48.		•	“Dealing with Risks on Nuclear Waste Sites,” <i>The Environmental Superconference, Washington, D.C., April 28 - 29, 1999</i>

Reference	Authored	Presented	KRIS R. NIELSEN <i>Technical Papers and Presentations</i>
49.		•	“Utilities Serving Our Needs: U.S. Experience in Serving its Communities,” <i>National Engineering Forum Energy, Water and Telecommunications</i> , Cooma, NSW, Australia, April 21, 1999
50.		•	“Principles and Practices of Effective Risk Management,” <i>University of Wisconsin</i> , Madison, Wisconsin, April 14 - 15, 1999
51.	•	•	“Management Approaches to Construction Risk on Infrastructure Projects in Latin America,” <i>The Latin American Market, The Fourth Annual Conference</i> , Turnberry Isle Resort & Club, Aventura, Florida, November 17 - 19, 1998
52.	•	•	“The Essence of Construction Risk,” <i>Minimizing Risks in Construction Projects and Resolving Construction Disputes</i> , Hong Kong, September 28 - 29, 1998
53.	•	•	“Quantifying the Damages,” <i>Minimizing Risks in Construction Projects and Resolving Construction Disputes</i> , Hong Kong, September 28 - 29, 1998
54.	•	•	“Construction Risk and Application to AusAID Projects,” <i>AusAID</i> , Canberra, Australia, August 21, 1998
55.		•	Moderator, “Minimizing Risks on International Projects by Developing and Maintaining Effective Project Documentation,” <i>Worldwide Infrastructure Partnerships</i> , New York, New York, June 24, 1998
56.	•	•	“Risk Allocation in Design-Build and BOT Projects,” <i>Civil Engineering International Conference on Asian Infrastructure, Sustainable Development and Project Management</i> , Manila, Philippines, February 19 - 20, 1998
57.	•	•	Panelist, “The Multi-Billion Dollar Issue Facing the Nuclear Power Industry: Decommissioning Versus Life Extension,” <i>The Future of the U.S. and International Environmental Industry</i> , Washington, D.C., November 10 - 12, 1997
58.		•	“Panel Discussions Re: Issues Related to DRB Hearings,” <i>The Dispute Review Board Foundation, Inc. Annual Meeting and Conference</i> , Minneapolis, Minnesota, October 4, 1997
59.	•		“Trends and Evolving Risks in Design-Build, BOT and BOOT Projects,” <i>The International Construction Law Review</i> , Volume 14, Part 2, April 1997
60.	•	•	“Structured Risk Identification and Allocation as a Component of Construction Program Management: A Process that Knows No Boundaries,” <i>ASCE Washington, D.C. Convention, Session: International Contracting Practices</i> , Washington, D.C., November 11, 1996
61.	•	•	“What are Today’s Emerging Risks?” <i>Identifying, Minimizing and Quantifying Construction Risk and Disputes</i> , London, England, October 31 - November 1, 1996
62.	•	•	“Trends and Evolving Risks in Design-Build, BOT and BOOT Projects,” <i>ASCE / ICE Triennial Conference, Session IV: Pitfalls in International Engineering and Construction: What to Watch For</i> , Philadelphia, Pennsylvania, October 17 - 20, 1996

Reference	Authored	Presented	KRIS R. NIELSEN <i>Technical Papers and Presentations</i>
63.		•	Co-presenter, “Panel of Experts-Risks Most Overlooked,” <i>World Conference on Construction Risk III</i> , Paris, France, April 25 - 26, 1996
64.	•		“Risk Management Analysis Techniques for Projects with Significant Environmental Issues,” co-authored with P. Galloway, <i>ASCE-SAS Second Regional Conference and Exhibition</i> , Beirut, November 16 - 18, 1995
65.	•	•	“Overlooked Risks-A Project Risk Manager’s Experience,” <i>World Conference on Construction Risk</i> , Singapore, October 5 - 6, 1995
66.	•	•	“Privatization and the Use of IVHS in the 1990s,” co-authored with P. Galloway and M. Ramey, <i>ASCE Transportation Conference on IVHS</i> , San Diego, California, October 1995
67.		•	Co-presenter, “Construction Scheduling: Preparation, Liability, Claims and Damages,” <i>Panama Canal Commission</i> , June 12 - 16, 1995
68.		•	Co-presenter, “Contract Administration and Management Claim Analysis and Project Risk Management,” <i>In-house Training Course, PT</i> , Wijaya Karya, Jakarta, Indonesia, January 23 - 27, 1995
69.	•	•	“What are Today’s Emerging Risks?,” <i>Nielsen-Wurster Seminar on Emerging Risks in Construction: How to Minimize, Manage & Avoid Disputes</i> , New Orleans, Louisiana, May 10 - 12, 1995; Indian Wells, California, October 19 - 21, 1994
70.			“Project Risk Management: Concepts and Applications,” <i>Nielsen-Wurster Seminar on Emerging Risks in Construction: How to Minimize, Manage & Avoid Disputes</i> , New Orleans, Louisiana, May 10 - 12, 1995; Indian Wells, California, October 19 - 21, 1994
71.			“Proving Damages-The Techniques of Analysis and Pricing of Damages that Flow from Physical or Performance (Breach) Failures,” co-authored with P. Galloway, <i>Nielsen-Wurster Seminar on Emerging Risks in Construction: How to Minimize, Manage & Avoid Disputes</i> , New Orleans, Louisiana, May 10 - 12, 1995; Indian Wells, California, October 19 - 21, 1994
72.	•	•	“Thoughts from the Dispute Review Board (DRB) World,” as part of “A New Era in Job-Site Dispute Resolution: Dispute Review Boards,” <i>University of Kentucky / Dispute Avoidance and Resolution Task Force (DART) Seminar on Charting the Course to the Year 2000 - Together!</i> , Lexington, Kentucky, October 16 - 19, 1994
73.	•	•	“Partnering-Application on International Projects,” <i>Proceedings of the American Society of Civil Engineers Saudi Arabia Section First Regional Conference and Exhibition on Advanced Technology in Civil Engineering</i> , Manama, Bahrain, September 18 - 20, 1994
74.		•	Co-presenter “Project Manager nei settore delle costruzioni” <i>SINNEA University</i> , Bologna, Italy, May 25 - 27, 1994
75.	•	•	“Force Majeure-Managing This Project Risk,” <i>Inter-Pacific Bar Association, 4th Annual Conference</i> , Singapore, May 3 - 6, 1994

Reference	Authored	Presented	KRIS R. NIELSEN <i>Technical Papers and Presentations</i>
76.		•	Co-presenter, “Project Risk Management-A Necessity for Today’s Engineered Projects,” <i>Tarumanagara University</i> , Jakarta, Indonesia, May 2, 1994
77.	•	•	“International Construction Projects-Managing Risk in the Field,” <i>World Conference on Construction Risk</i> , Paris, France, April 28 - 29, 1994
78.		•	Co-presenter, “Project Risk Management,” <i>Panama Canal Commission</i> , Panama, April 20 - 22, 1994
79.	•		“Disruption / Productivity Cost Claim Analyses,” co-authored with P. Galloway, <i>Construction Disputes - Analysis and Management</i> , Winnipeg, Canada, November 1 - 5, 1993
80.	•		“CPM Scheduling Delay: Window Analysis, Concurrency and Proof,” co-authored with P. Galloway and M. Ramey, <i>Construction Disputes-Analysis and Management</i> , Winnipeg, Canada, November 1 - 5, 1993
81.	•		“The Alternative Disputes Resolution Process,” <i>Construction Disputes-Analysis and Management</i> , Winnipeg, Canada, November 1 - 5, 1993
82.	•	•	“Construction Disputes: Framing the Management Issue,” <i>Construction Disputes-Analysis and Management</i> , Winnipeg, Canada, November 1 - 5, 1993
83.	•		“Standard Construction Contracts,” <i>Construction Disputes-Analysis and Management</i> , Winnipeg, Canada, November 1 - 5, 1993
84.		•	Co-presenter, “Project Risk Management & Reviewing and Analyzing Damages” <i>Nielsen-Wurster Seminar on Managing Risk and Minimizing Disputes in Construction Contracts</i> , Hilton Head Island, South Carolina, October 6 - 8, 1993
85.		•	Co-presenter, “Schedule Delay Analysis,” <i>WASHTO Annual Conference</i> , Oklahoma City, Oklahoma, June 23 - 24, 1993
86.		•	Presenter, “Partnering,” <i>Kentucky Department of Transportation</i> , Bowling Green, Kentucky, June 17 - 18, 1993
87.		•	Presenter, “Early Completion Claim Analysis and Expert Delay Analysis,” <i>The Nielsen-Wurster Seminar on Construction Issues Facing the Public Transportation Industry</i> , Sacramento, California, April 28 - 30, 1993
88.	•		“Anticipating Problems: Project Risk Assessment and Project Risk Management,” co-authored with P. Galloway for book <i>Collaboration Management, New Project and Partnering Techniques</i> , 1993
89.	•	•	“Project Risk Management-Achieving Goals and Minimizing Disputes,” <i>Construction Superconference</i> , San Francisco, California, December 3 - 4, 1992
90.	•	•	“Project Risk Management-Preventative Medicine for Your Project,” <i>Resolving Disputes in Construction Contracts through ADR Techniques</i> , Geneva, Switzerland, November 12 - 13, 1992

Reference	Authored	Presented	KRIS R. NIELSEN <i>Technical Papers and Presentations</i>
91.	•	•	Co-Presenter, “International Contract Administration Issues: Project Documentation, Dispute Proofs, Programmes and Productivity,” Training Workshop on International Construction Contracts and Contractor Claims, <i>The International Development Law Institute (IDLI)</i> , Rome, Italy for the Finnish International Development Agency (FINNIDA), Helsinki, Finland, October 13 - 16, 1992
92.	•		“Contract Administration,” Masters Degree Course, SINNEA, <i>Instituto Di Studi Per La Cooperazione E La Piccola E Media Impresa</i> , Bologna, Italy, September 25, 1992
93.	•	•	“Project Risk Management-Achieving Goals,” co-authored with P.D. Galloway, <i>11th INTERNET World Congress on Project Management</i> , Florence, Italy, June 16 - 19, 1992
94.	•	•	“International Contract Administration Issues: Project Documentation, Dispute Proofs, Programmes, Productivity,” co-authored with P. Galloway, <i>IDLI Conference</i> , Rome, Italy, December 12, 1991
95.	•	•	“Overcoming Schedule Delay-Analyzing and Resolving this Project Nemesis,” co-authored with P. Galloway, <i>IIR National Construction Conference</i> in Sydney, Australia, August 28 - 29, 1991
96.	•	•	“International Construction Dispute Proofs,” co-authored with P. Galloway, <i>Nordnet '91 Transactions: The Practice and Science of Project Management</i> , Trondheim, Norway, June 3 - 5, 1991
97.	•	•	“Construction Economics as a Litigation Proof Tool,” <i>Manual for Conference on Construction Dispute Proofs</i> , Princeton, New Jersey, September 1982; Lake Buena Vista, Florida, May 1983; Minneapolis, Minnesota and Denver, Colorado, April 1984; Tampa, Florida and Boston, Massachusetts, May 1984; Seattle, Washington, July 1986; New Orleans, Louisiana, April 1988; New Orleans, Louisiana, April 1989; Scottsdale, Arizona, March 1990; New Orleans, Louisiana, May 1990; San Antonio, Texas, April 1991
98.	•	•	“Project Risk Management-Preventative Medicine for Your Project,” <i>Resolving Disputes in Construction Contracts through ADR Techniques</i> , Geneva, Switzerland, November 12 - 13, 1992
99.	•	•	“Productivity Analyses as a Proof Tool,” <i>Manual for Conference on Construction Dispute Proofs</i> , Minneapolis, Minnesota and Denver, Colorado, April 1984; Tampa, Florida and Boston, Massachusetts, May 1984; Seattle, Washington, July, 1986; New Orleans, Louisiana, April 1988; New Orleans, Louisiana, April 1989; Scottsdale, Arizona, March 1990; New Orleans, Louisiana, May 1990; San Antonio, Texas, April 1991
100.	•	•	“Construction Proof Concepts,” <i>Manual for Conference on Construction Disputes Proofs</i> , Princeton, New Jersey, September 1982; Lake Buena Vista, Florida, May 1983; Minneapolis, Minnesota and Denver, Colorado, April 1984; Tampa, Florida and Boston, Massachusetts, May 1984; Seattle, Washington, July, 1986; New Orleans, Louisiana, April, 1988; New Orleans, Louisiana, April 1989; Scottsdale, Arizona, March 1990; New Orleans, Louisiana, May 1990; San Antonio, Texas, April 1991
101.		•	Co-presenter, “Contract Administration,” <i>West Virginia Division of Energy</i> , Charleston, West Virginia, March 1991

Reference	Authored	Presented	<p style="text-align: center;">KRIS R. NIELSEN <i>Technical Papers and Presentations</i></p>
102.	•		“Schedule Delay Concurrency Issue Analysis & Proof,” co-authored with P. Galloway, <i>The International Construction Law Review</i> , Volume 7, Part 4, October 1990, pp. 386 - 401
103.	•	•	“Evaluating the Contractor’s Right to Finish Early,” co-authored with P. Galloway, <i>Project Management Institute Book of Proceedings</i> , Calgary, Canada, October 1990
104.	•		“Multiple Jeopardies,” <i>Cogeneration & Resource Recovery</i> , Volume 8, No. 3, April 1990
105.	•	•	“Schedule Delay Concurrency Issue Analysis & Proof,” co-authored with P. Galloway, <i>International Cost Congress</i> , Paris, France, April 1990
106.		•	Co-program Leader and Papers, “Schedule Delay: A Productivity Analysis,” <i>Kentucky Transportation Cabinet and Kentucky Transportation Center Critical Path Method Scheduling Course</i> , Lexington, Kentucky, December 1989
107.		•	Co-program Leader and Panelist, “Project Construction, Financing, and Management,” and Paper on “Project Risk Management,” <i>Alternative Power in New England-Opportunities and Risks</i> , Farmington, Connecticut, November 1989
108.	•		“Project Risk Management,” <i>Alternative Power in New England Conference Book</i> , Farmington, Connecticut, November 7 - 8, 1989
109.		•	Program Leader, “Construction Proof Concepts,” “Construction Economics,” “Proving Damages,” and “Productivity Delay Damages Case Illustration,” <i>State of Florida Department of Transportation Construction Disputes Seminar</i> , Tallahassee, Florida, August 1989
110.	•		“Combining PURPA, Prudence and Avoided Cost Rate Design; A New Cost Engineering Environment,” co-authored with P. Galloway, <i>American Association of Cost Engineers 9th Annual Mid-Winter Symposium Transactions</i> , San Francisco, California, February 1987; Reprinted, <i>Cost Engineering</i> , Volume 31, No. 1, p. 16, January 1989
111.		•	“Delivery of the Project from the Deep Pocket’s Perspective,” Keynote Address, <i>Project Management Institute, Southern New England</i> , Hartford, Connecticut, October 26, 1988
112.	•		“The Techniques of Analysis and Pricing of Damages that Flow from a Construction Failure,” co-authored with P. Galloway and R.F. Jacobsen, <i>Construction Failure and Disaster Superconference</i> , New York, New York, March 23 - 24, 1988
113.	•		“Outages-Different Regulatory Technical Standards,” <i>American Association of Cost Engineers, 10th Annual Mid-Winter Symposium Transactions</i> , Phoenix, Arizona, February 1988
114.	•		“Effect of Current State Regulatory Environment on Outage Management,” <i>6th Annual Project / 2 Outage Symposium</i> , Cambridge, Massachusetts, June 29 - July 1, 1987
115.	•	•	“Preparing a Project Control Specification,” co-authored with P. Galloway, <i>Proceedings of Eleventh Annual Project / 2 Utility Users Group Conference</i> , Birmingham, Alabama, November 17 - 19, 1986

Reference	Authored	Presented	KRIS R. NIELSEN <i>Technical Papers and Presentations</i>
116.		•	Panelist, “The Value of Earned Value,” <i>Eleventh Annual Project / 2 Utility Users Group Conference</i> , Birmingham, Alabama, November 18, 1986
117.	•		“Preparing for the Utilities’ Future-Managing the Prudence Issues,” co-authored with P. Galloway, <i>Electric Potential</i> , Volume 2, No. 4, July - August 1986
118.	•		Interview with Kris R. Nielsen, President, The Nielsen-Wurster Group, Inc., <i>The Advisory</i> , July 3, 1986
119.	•		“Utilities Forced Delays-Controllable or Uncontrollable,” co-authored with P. Galloway, <i>American Association of Cost Engineers Annual Convention</i> , Chicago, Illinois, June 1986
120.	•		“Preparing for the Utilities’ Future-An ‘Attack Plan’ for Minimizing Disallowable Costs In Outage and Future Capital Construction,” co-authored with P. Galloway, <i>American Association of Cost Engineers, 8th Annual Mid-Winter Symposium Transactions</i> , New Orleans, Louisiana, February 1986; <i>Project 2, 5th Annual Outage Symposium Proceedings</i> , Cambridge, Massachusetts, May 1986
121.		•	Presenter, “Prudence Issues in the Outage Arena,” <i>PSDI Project 2 Users Conference</i> , Cambridge, Massachusetts, May 1986
122.		•	“New Directions in Project Control for the Utility / Construction Industries,” <i>8th Annual Mid-Winter Symposium</i> , New Orleans, Louisiana, February 13 - 14, 1986
123.		•	Co-presenter, “Preparing for Utilities Future-An ‘Attack Plan’ for Minimizing Disallowable Costs in Outage and Future Capital Construction,” co-authored with P. Galloway, <i>American Association of Cost Engineers Utility Conference</i> , New Orleans, Louisiana, February 1986
124.	•		“Second-Guessing the Engineer,” co-authored with P. Galloway, <i>Civil Engineering, American Society of Civil Engineers</i> , November 1985
125.	•	•	“Calculating Utility Prudence Issue Costs,” <i>1985 American Association of Cost Engineers Annual Convention Transactions</i> , Denver, Colorado, July 1985
126.	•		“Failure Proof Your Projects,” co-authored with P. Galloway, <i>Consulting Engineer</i> , June 1985
127.		•	Co-presenter, “Electric Utility Capital Project Prudence Issues,” <i>National Association of Regulated Utility Commissioners Annual Meeting</i> , Hartford, Connecticut, May 1985
128.	•		“Avoiding Lengthy and Costly Litigation by Negotiation Resolution Methods,” co-authored with P. Galloway, <i>American Society of Civil Engineers Spring Convention</i> , Denver, Colorado, April 1985
129.	•	•	“The Prudence Management Audit: A New Challenge For the Civil Engineer,” co-authored with P. Galloway, <i>American Society of Civil Engineers Spring Convention</i> , Denver, Colorado, April 1985

Reference	Authored	Presented	<i>KRIS R. NIELSEN</i> <i>Technical Papers and Presentations</i>
130.		•	Co-presenter, “Prudence Concepts,” <i>American Association of Cost Engineers</i> , Ramapo Section, April 1985
131.	•		“Damages: The Cost Impact from Failures,” <i>Failures Handbook</i> , Albert Dib, Editor, Clark Boardman, 1985
132.	•		“Proof Development for Construction Litigation,” co-authored with P. Galloway, <i>The American Journal for Trial Advocacy</i> , Volume 7, No. 3, Cumberland School of Law of Samford University, Birmingham, Alabama, Summer 1984, <i>Yearbook of Construction Articles</i> , Volume 4, Federal Publications, 1985
133.	•		“Window Analyses: An Innovative Concept to Schedule Delay Analysis,” co-authored with P. Galloway, <i>Project Management Institute</i> , Philadelphia, Pennsylvania, October 1984
134.	•		“Calculation of Lost Profits from Lost Business Opportunities,” co-authored with J. Galeno, <i>Transactions of the Eighth International Cost Engineering Congress and 28th Annual Convention of the American Association of Cost Engineers</i> , Montreal, Quebec, Canada, June 26, 1984
135.		•	Co-presenter, “Calculation of Lost Profits from Lost Business Opportunities,” <i>Eighth International Cost Engineering Congress</i> , Montreal, Quebec, Canada, June 26, 1984
136.		•	Seminar Leader and Primary Presenter, “CM for 84” Conference, <i>Construction Management Association of America</i> , Madison, Wisconsin, May 31 - June 2, 1984
137.	•		“Managing Risk on CM Projects,” <i>Proceedings of CM Forum 84 Conference</i> , <i>Construction Management Association of America</i> , Madison, Wisconsin, May 31, 1984
138.	•		Monthly issues of the <i>Construction Cost Report</i> , December 1973 - November 1983
139.	•	•	“Construction Failures: Litigation, Experts and Damages,” <i>Manual for American Bar Association/American Society of Civil Engineers Conference on Construction Failures: Legal and Engineering Perspectives</i> , Houston, Texas, October 1983
140.	•	•	“Schedule Delay: A Productivity Analysis,” co-authored with P. Galloway and J. Leverette, <i>Project Management Institute National Convention Proceedings</i> , Houston, Texas, October 1983
141.	•	•	“A Project Management Case Study, The Raul Leoni Dam, Guri Final Stage Venezuela,” <i>Proceedings of 1983 American Society of Civil Engineers Spring Convention</i> , Philadelphia, Pennsylvania, May 1983
142.	•		“Risks and Liabilities of Specifications,” co-authored with M.J. Nielsen, <i>American Society of Civil Engineers, Specialty Conference on Specifications and Inspection Manual</i> , New Orleans, Louisiana, March 1982
143.	•		“Schedule Control for PCM Projects,” co-authored with P. Galloway, <i>Journal of the Construction Division, Proceedings of the Society of Civil Engineers</i> , Volume 107, No. C02, June 1981

Reference	Authored	Presented	<p style="text-align: center;">KRIS R. NIELSEN <i>Technical Papers and Presentations</i></p>
144.	•		“Legal Implications of Professional Project Management,” co-authored with M.J. Nielsen, <i>American Society of Civil Engineers Specialty Conference on Project Management Manual</i> , San Diego, California, February 1981
145.		•	Co-presenter, “Risks and Liabilities of Specifications,” <i>American Society of Civil Engineers Specialty Conference</i> , San Diego, California, February 1981
146.		•	Co-lecturer, “Construction Law,” <i>Iona College Facility Management Program for Minority Contractors</i> , 1981 and 1980
147.	•		“Bid Mistakes,” co-authored with M.J. Nielsen, <i>International Construction</i> , November 1980
148.		•	Co-presenter, “Schedule Control for Professional Construction Management Projects,” <i>American Society of Civil Engineers Spring Convention</i> , Portland, Oregon, April 1980
149.	•		“Contract Management and Claim Prevention,” co-authored with M.J. Nielsen, <i>Journal of Community Management</i> , January 1980
150.	•	•	“Improving Estimating Procedures to Avoid Costly Bidding Mistakes,” <i>Engineering News Record Conference on “Construction Contracting: How to be Successful and Avoid Losses”</i> , January 1979
151.		•	“Construction Claims,” <i>American Association of Cost Engineers</i> , Atlanta Section, September 1978
152.		•	Visiting Professor, “Cost Management,” <i>Polytechnic University</i> , Brooklyn, New York, 1978-1979
153.		•	Visiting Professor, “Construction Cost Management,” <i>Columbia University</i> , New York, New York, 1978 - 1979
154.		•	“Construction Claims Damages Quantification,” <i>Federal Publications Construction Contract Litigation Seminar</i> , October 1977
155.	•		“Construction Claims Litigation,” <i>Conference Manual, MCI Symposia, Inc.</i> Chicago, Illinois, 1976
156.	•	•	“Construction Delay Claim Analysis,” “Life-Cycle Costing,” “Construction Economics,” <i>Conference Manual on Profitable Construction Cost Estimating in Today’s Economy</i> , presented in ten cities in 1976
157.	•		“Reducing Facility Construction Costs,” <i>Klimet’s Reports</i> , October 1975
158.		•	“CPM Network-Based Management Information Systems,” <i>Building Research Advisory Board Conference</i> , National Academy of Engineering, Washington, D.C., July 1975
159.	•		“Construction Cost Management,” Professional Development Seminar Manual, <i>Arizona Society, American Institute of Architects</i> , April 1975
160.		•	“Construction Cost Management,” two-day presentation at <i>Arizona Society of Architects Professional Development Seminar</i> , March 1975

Reference	Authored	Presented	<p style="text-align: center;"><i>KRIS R. NIELSEN</i> <i>Technical Papers and Presentations</i></p>
161.	•		“Quantitative Tools for Assessing the Impact of Energy Price Increases on Construction Costs,” <i>Quarterly Cost Focus</i> , Second Quarter 1975
162.		•	“The Construction Economics,” <i>National Aeronautics and Space Administration Facilities Conference</i> , Lyndon B. Johnson Space Center, Houston, Texas, November 1, 1974
163.		•	Four guest lectures annually from 1974 through 1982, “Construction Management and Construction Law,” <i>Columbia University Graduate School of Architecture</i>
164.	•		“Construction Cost Management, Techniques and Applications,” <i>Textbook for American Institute of Architects and American Society of Civil Engineers Continuing Education Seminars</i> , given eight times 1972 through 1974
165.		•	“Construction Cost Control,” two-day AIA and ASCE Continuing Education seminar, presented eight times in 1974, 1973 and 1972
166.		•	Guest Lecturer “Construction Management,” <i>School of Professional Studies, Pratt Institute</i> , November 21, 1973
167.	•	•	“Management Control Systems in the Construction Industry,” <i>Building Research Institute Fall Conference Proceedings</i> , November 1973
168.	•		“Life-Cycle Cost-What, When & How,” <i>BAC Journal of Continuing Education</i> , September 1973
169.	•		“Tax Considerations in Building Design,” <i>ALA Journal</i> , September 1973
170.		•	“Computer Based Control Systems for Construction Management,” <i>Engineering News Record's Costec II Conference</i> , April 1973
171.	•		“Construction Cost Management and the Computer,” <i>The Valuation Consultant</i> , November 1972
172.		•	“Computerized versus Manual Take-off,” <i>Engineering News Record's Costec Conference</i> , November 1972
173.	•		“Estimating and Cost Analyses Made More Useful with New Computerized Systems,” <i>Florida Builder</i> , October 1971
174.	•		“Management Firms: Watchdog of Construction Costs,” <i>Building Design and Construction</i> , July 1971

KRIS R. NIELSEN <i>Representative Engagement Experience</i>						
DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	BASF / Fina Steam Cracker, United States (Texas)			•	
Power	Nuclear	INEEL Spent Nuclear Fuel Storage Project, United States (Idaho)		•		
Power	Nuclear	Kewaunee Nuclear Plant Replacement Steam Generator, United States	•			
Power	Nuclear	Cooper / Lincoln Electric, United States (Iowa)			•	
Power	Nuclear	Salem and Hope Creek Nuclear Power Plants, United States (New Jersey)			•	
Power	Nuclear	Texas Utilities Stockholder Litigation, United States (Texas)			•	
Power	Nuclear	Nine Mile Power Plant, United States (New York)			•	
Power	Nuclear	Palo Verde Power Plant, United States (Arizona)			•	
Power	Nuclear	Washington Public Power Nuclear Plant, United States (Washington)	•			
Power	Nuclear	Cooper Nuclear Station, United States (Iowa, Nebraska)			•	
Power	Nuclear	Marble Hill Nuclear Generating Station, Indiana (Madison)			•	
Power	Nuclear	Diablo Canyon Units 1 & 2, United States (California)			•	
Power	Nuclear	Indian Point Nuclear Power Plant Unit 3, United States (New York)			•	
Power	Nuclear	Wolf Creek Nuclear Generating Station, United States (Kansas)			•	

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DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Vogtle Nuclear Generating Station, United States (Georgia)			•	
Power	Nuclear	Vogtle Nuclear 3 & 4 , United States (Georgia)			•	
Power	Nuclear	Pilgrim I Nuclear Power Plant, United States (Massachusetts)		•		
Power	Nuclear	Millstone Unit 3, United States (Connecticut)			•	
Power	Nuclear	Millstone Unit 3, United States (Connecticut)			•	
Power	Nuclear	Palo Verde Audit, United States (Arizona)			•	
Power	Nuclear	Hanford, United states, (Washington)			•	
Power	Nuclear	Perry 1 & 2, United States (Ohio)			•	
Power	Nuclear	Bellefonte, United States (Tennessee)			•	
Power	Nuclear	Turkey point 3 & 4, United States (Florida)			•	
Power	Nuclear	Peach Bottom 1 & 2, United States (Pennsylvania)			•	
Power	Nuclear	Satop 3 & 5, United States (Washington)			•	
Power	Nuclear	Marble Hill, United States (Indiana)			•	
Power	Nuclear	Calvert Cliffs, United States (MD)			•	
Power	Nuclear	Maine Yankee, United States (Maine)			•	
Power	Nuclear	Vermont Yankee, United States (Vermont)			•	

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<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Prairie Island 2, United States (MN)			•	
Power	Nuclear	Belene 1, Bulgaria			•	
Power	Nuclear	UK Nuclear Decommissioning Agency, United Kingdom			•	
Power	Nuclear	Reid Gardener 4, United States, Washington			•	
Power	Nuclear	Waterford Unit 3, United States (Louisiana)			•	
Power	Nuclear	Seabrook Power Plant, United States (New Hampshire)			•	
Power	Nuclear	Connecticut Yankee Nuclear Plant, United States (Connecticut)			•	
Power	Nuclear	Millstone Point Nuclear Power Plant, United States			•	
Power	Nuclear	South Texas Nuclear Plant, United States (Texas)			•	
Power	Nuclear	Trojan Nuclear Power Plant, United States (Oregon)			•	
Power	Nuclear	Shoreham Nuclear Plant, United States (New York)			•	
Power	Nuclear	Comanche Peak Steam Nuclear Electric Station, Units 1 & 2, United States (Texas)			•	
Power	Nuclear	Clinton Nuclear Generating Station, United States (Illinois)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Scherer Fossil Power Plant, United States (Georgia)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Sacramento Municipal Utility District Cogent Plant, United States (California)		•		

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DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Conoco Cogeneration Plant, United States (Texas)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Elsta Cogeneration Power Plant, Terneuzen, The Netherlands	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Newington Energy Combined Cycle Plant, United States	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Osborne Cogeneration Gas- Fired Power Plant, South Australia, (New South Wales)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Rabigh Project Combined Cycle Power Plant, Saudi Arabia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Ave Fenix Power Plant	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Omnibus Experts for Covert Power Plant, United States (Michigan)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Princeton University Cogeneration Plant, United States (New Jersey)		•		
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Wolf Hollow Plant, United States (Texas)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Northeastern Power Co., Reading Terminal, United States (Pennsylvania)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Dearborn Power Plant, United States (Michigan)	•			

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Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Geothermal Plant, United States (California)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Spurlock I Fossil Power Generating Station, United States (Kentucky)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Red Hills Power Plant, United States (Mississippi)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Paiton Units 7 & 8, Indonesia (Jakarta)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Indiana & Michigan Electric Breed Generating Station, Coal Boilers, Indiana (Sullivan)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Marshall Islands Power Plant Demolition, United States Territory (Marshall Islands)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Paiton Units 1 & 2, Indonesia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Shawnee Steam Plant, United States (Kentucky)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Consolidated Edison Generating Station, United States (New York)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Jeffrey Energy Center, United States (Kansas)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Cleveland Electric Illuminating Company, United States (Ohio)	•			

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Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Santa Rita Power Plant, Batangas, Philippines	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Sultan Salahuddin Abdul Aziz Power Station	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Fossil Power Generating Plant, United States (Illinois)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Merilectrica Gas Turbine Plant, Colombia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	ISAB Energy S.r.L., Italy (Sicily)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Covert, United States(MI)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Jiangxi, China	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	JEA Northside, United States (Florida)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	PP9, Saudi Arabia	•			
Power	Hydro-Electric	Guri Dam and Hydroelectric Complex, Venezuela		•		
Power	Hydro-Electric	Casecnan Multi-Purpose Project, Philippines	•			
Power	Hydro-Electric	Cirata II, Indonesia	•			
Power	Hydro-Electric	Madeira River Project, Brazil		•		

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DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Hydro-Electric	Bakun Hydroelectric Power Plant, Philippines	•			
Power	Other	Babcock Power, United States (Massachusetts)		•	•	
Power	Other	First Energy, United States (Ohio)			•	
Power	Other	Illinois Power Company, United States (Illinois)		•		
Power	Other	CGE Ford Heights Power Plant, United States (Illinois)	•			
Infrastructure / Transportation	Roadways	Texas Department of Transportation, United States (Texas)	•			
Infrastructure / Transportation	Roadways	City Link, Australia (Melbourne)		•		
Infrastructure / Transportation	Roadways	Texas Department Of Transportation Group 5 Matter, United States (Texas)	•			
Infrastructure / Transportation	Roadways	State Highway U.S. 290 Travis County, United States (Texas)	•			
Infrastructure / Transportation	Roadways	Houston Ship Channel Cable-Stayed Bridge, United States (Texas)		•		
Infrastructure / Transportation	Roadways	Vancouver Island Highway, Canada		•		
Infrastructure / Transportation	Roadways	Interstate 94, United States (Minnesota)	•			
Infrastructure / Transportation	Roadways	U.S. Route 385, Brewster County, United States (Texas)	•			
Infrastructure / Transportation	Roadways	Duluth Freeway / Lief Erikson Tunnel, United States (Minnesota)	•			

KRIS R. NIELSEN <i>Representative Engagement Experience</i>						
DR:	Dispute Resolution	RM:	Risk Management	MC:	Management Consulting	
Other:	Project Management, Engineering Design, Construction Supervision					
Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Roadways	State Route 705 Connector (21st Street to Schuster Parkway), United States (Washington)	•			
Infrastructure / Transportation	Bridges	Transcanada Highway Lions Gate Bridge		•		
Infrastructure / Transportation	Bridges	Nairn Avenue Overpass Project, Canada (Manitoba)	•			
Infrastructure / Transportation	Bridges	Baytown Bridge, United States (Texas)	•			
Infrastructure / Transportation	Bridges	Interstate Highway Bridges, United States (Gary, Indiana)	•			
Infrastructure / Transportation	Airports	Pan Am Maintenance Facility, United States (New York)		•		
Infrastructure / Transportation	Airports	International Terminal, Detroit Metropolitan Airport, United States (Michigan)	•			
Infrastructure / Transportation	Airports	KL International Airport, Malaysia (Selangor)			•	
Infrastructure / Transportation	Telecommunication	Williams-Northern Line Layers, United States (Boston)	•			
Infrastructure / Transportation	Telecommunication	Broadwing-El Paso Global Network, Inc., United States (Texas, Arizona, New Mexico, Nevada, California)	•			
Infrastructure / Transportation	Telecommunication	Williams-Thoroughbred Telecommunication Technology, United States (Illinois, Indiana, Ohio, Pennsylvania, West Virginia, Virginia, Tennessee, Georgia)	•			
Infrastructure / Transportation	Telecommunication	Williams-Weissker, United States (California)	•			

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<p>DR: Dispute Resolution Other: Project Management, Engineering Design, Construction Supervision</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Telecommunication	AT&T Broadband, United States (Illinois, Missouri, Michigan)	•			
Infrastructure / Transportation	Rail	Toronto Transit Commission Subway Line Expansion, Canada (Toronto)			•	
Infrastructure / Transportation	Rail	Rohr Transit Cars, United States (Washington, D.C.)	•			
Infrastructure / Transportation	Rail	Federal Center; SW Station; Smithsonian Station; Capitol South, United States (Washington, D.C.)	•			
Infrastructure / Transportation	Rail	United Group Rail-Citadis & X'trapolis, Australia (Melbourne)		•		
Infrastructure / Transportation	Rail	Tri-Rail Segment 5-Double Tracking Project, United States (Florida)		•		
Infrastructure / Transportation	Rail	Regional Fast Rail Project (RFRP), Australia (Victoria)		•		
Infrastructure / Transportation	Rail	Spencer Street Station Redevelopment Project, Australia (Melbourne)		•		
Infrastructure / Transportation	Rail	Parramatta Rail Link Project for the Director General of the New South Wales Department of Transport, Australia (New South Wales)		•		
Infrastructure / Transportation	Rail	SEPTA Rail Car Refurbishment, United States (Pennsylvania)	•			
Infrastructure / Transportation	Rail	Northeast Highspeed Rail Improvement Program: Dispute Resolution Board Agreement, United States (New York)	•			

KRIS R. NIELSEN <i>Representative Engagement Experience</i>						
DR:	Dispute Resolution	RM:	Risk Management	MC:	Management Consulting	
Other:	Project Management, Engineering Design, Construction Supervision					
Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Rail	Shaw Metro Station, United States (Washington)	•			
Infrastructure / Transportation	Rail	Stamford Railroad Station Stamford, United States (Connecticut)	•			
Infrastructure / Transportation	Rail	Port of Houston Authority, United States (Texas)	•			
Infrastructure / Transportation	Seaport	Seattle Public Utilities (SPU) and SeaTran Management Audit, Seattle (City Of Seattle Transportation Audit), United States (Washington)			•	
Infrastructure / Transportation	Seaport	Panama Canal Transfer Station, Panama	•			
Infrastructure / Transportation	Seaport	Port of Seattle, United States (Washington)		•		
Infrastructure / Transportation	Seaport	Lahad Datu Port Expansion, Malaysia	•			
Infrastructure / Transportation	Seaport	Riofil / Manila South Harbor Pier 5 Extension, Philippines	•			
Infrastructure / Transportation	Wastewater Treatment Plant	Milwaukee Water Pollution Abatement Program, United States (Wisconsin)		•		
Infrastructure / Transportation	Wastewater Treatment Plant	West End Water Pollution Plant, Canada (Manitoba)	•			
Infrastructure / Transportation	Wastewater Treatment Plant	Babylon Solid Waste Recovery Plant	•			
Infrastructure / Transportation	Wastewater Treatment Plant	Rockland County Sewer District Treatment Plant, United States (New York)	•			
Infrastructure / Transportation	Wastewater Treatment Plant	Bergen Point Wastewater Treatment Plant Outfall, United States (New York)	•			

<p style="text-align: center;">KRIS R. NIELSEN <i>Representative Engagement Experience</i></p>						
<p>DR: Dispute Resolution</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Other	Lief Erikson Tunnel, United States (Minnesota)	•			
Industrial / Process	Chemical / Petrochemical	PETROVIETNAM Phu My Fertilizer Project, Vietnam	•			
Industrial / Process	Chemical / Petrochemical	PET Production Plants, Holland (Rotterdam); Spain (San Roque); Argentina (Buenos Aires)	•			
Industrial / Process	Chemical / Petrochemical	Vitamin C Manufacturing Plant, United States (New Jersey)		•		
Industrial / Process	Chemical / Petrochemical	Cevolution Carbon Fiber Plant, United States (Oklahoma)	•			
Industrial / Process	Industrial Plants	ISAB Energy S.r.l. Integrated Gasification Combined Cycle Power Plant, Italy (Sicily)	•			
Industrial / Process	Industrial Plants	Sperry Micro-Chip Manufacturing & Research Facility, United States (Minnesota)	•			
Industrial / Process	Industrial Plants	GM Cadillac Assembly Plant, United States (New Jersey)		•		
Industrial / Process	Industrial Plants	Caterpillar Assembly Plant, United States (Illinois)		•		
Industrial / Process	Pharmaceutical	Vitamin B Manufacturing Plant, United States (New Jersey)				
Industrial / Process	Pharmaceutical	Bulk Pharmaceutical Plant, Singapore	•			
Industrial / Process	Pharmaceutical	Merck Bulk Pharmaceutical Plant, United States (New Jersey)	•			
Industrial / Process	Oil / Gas	Minerva Gas Project		•		

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<p>DR: Dispute Resolution</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Industrial / Process	Oil / Gas	Combisa Cantarell EPC 22 Contract Claim Effort-Phase I, United States (Texas)	•			
Industrial / Process	Oil / Gas	Lama NGL Project, Venezuela (Maracaibo)	•			
Industrial / Process	Oil / Gas	Oman LNG Project, Oman	•			
Industrial / Process	Oil / Gas	Altona Refinery Expansion, Australia (Melbourne)	•			
Industrial / Process	Oil / Gas	INCO 92 Project, Gas Recompression Plants, Venezuela				
Industrial / Process	Pipelines	GASYRG Pipeline (Willbros), Bolivia	•			
Industrial / Process	Pipelines	Bombax Pipeline Project, Caribbean (Trinidad & Tobago)		•		
Industrial / Process	Pipelines	HBJ Gas Pipeline, India	•			
Industrial / Process	Iron / Steel Manufacturing	NKK Steel Continuous Galvanizing Project, United States (Pennsylvania)	•			
Industrial / Process	Iron / Steel Manufacturing	Pharmaceutical Production Plant, Singapore		•		
Industrial / Process	Iron / Steel Manufacturing	Steel XX ROC Project, United States (Pennsylvania)	•			
Industrial / Process	Iron / Steel Manufacturing	Murrin Murrin Nickel-Cobalt Refinery, Western Australia	•			
Industrial / Process	Chemical	Urea & Phosphate Fertilizer Facility, United States (Ohio)		•		
Buildings	Educational Facilities	Rutgers University Records Center, United States (New York)	•			
Buildings	Educational Facilities	School District, College Stations, United States (Texas)	•			

<i>KRIS R. NIELSEN</i> <i>Representative Engagement Experience</i>						
DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Educational Facilities	Princeton University, United States (New Jersey)		•		
Buildings	Educational Facilities	Plainsboro Middle School, United States (New Jersey)		•		
Buildings	Resorts / Casinos / Hotels	Ritz Hotel & Casino, United States (New Jersey)		•		
Buildings	Resorts / Casinos / Hotels	Phoenician Hotel and Resort, (United States) Arizona	•			
Buildings	Resorts / Casinos / Hotels	Westin Hotel El Paso, United States (Texas)	•			
Buildings	Resorts / Casinos / Hotels	Seasons On Mount Snow Resort, United States (Vermont)	•			
Buildings	Resorts / Casinos / Hotels	Intercontinental Hotel, United States (Texas)	•			
Buildings	Resorts / Casinos / Hotels	Hyatt Regency Hotel, United States (Missouri)	•			
Buildings	Resorts / Casinos / Hotels	Maxwell's Plum Restaurant, United States (New York)		•		
Buildings	Apartments / Condominiums / Housing	645 First Avenue, United States (New Jersey)	•			
Buildings	Centers / Arenas	State of Washington Col Gym, United States (Washington)		•		
Buildings	Centers / Arenas	City of Ketchikan Civic Center, United States (Alaska)	•			
Buildings	Centers / Arenas	San Diego Convention Center, United States (Washington)	•			
Buildings	Centers / Arenas	Washington State Convention Center, United States (Washington)	•			
Buildings	Centers / Arenas	United States Army Youth Activity Center, United States (Alaska)	•			

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<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Centers /Arenas	Worcester Civic Center (Centrum), United States (Massachusetts)	•			
Buildings	Stadiums	Yankee Stadium Third Tier and Related Expansion, United States (New York)	•			
Buildings	Stadiums	Fresno Multipurpose Stadium (Grizzlies Stadium), United States (California)	•			
Buildings	Stadiums	Kingdome Stadium, United States (Washington)	•		•	
Buildings	Stadiums	Asphalt Green Sports Center, United States (New York)		•		
Buildings	Medical / Hospitals	Alameda County Medical Center / Highland General Hospital, United States (California)	•			
Buildings	Medical / Hospitals	University of Medicine and Dentistry, United States (New Jersey)	•			
Buildings	Medical / Hospitals	Veterans Administration Hospital, United States (New Hampshire)	•			
Buildings	Medical / Hospitals	Alameda-Mortenson Analysis, United States (California)	•			
Buildings	Medical / Hospitals	City of Ketchikan Hospital, United States (Alaska)	•			
Buildings	Medical / Hospitals	Colombo General Hospital, Sri Lanka (Colombo)	•			
Buildings	Medical / Hospitals	University Medical Center, United States (Louisiana)	•			
Buildings	Offices	One Summit Square Office Building, United States (Indiana)	•			

<i>KRIS R. NIELSEN</i> <i>Representative Engagement Experience</i>						
DR:	Dispute Resolution	RM:	Risk Management	MC:	Management Consulting	
Other:	Project Management, Engineering Design, Construction Supervision					
Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Offices	Xerox World Headquarters, United States (New York)				•
Buildings	Offices	McConnell Securities Headquarters, United States (New York)				•
Buildings	Offices	Foreign Building Operations Overseas Handbook, United States (Washington)				•
Buildings	Offices	Seattle City Projects, United States (Washington)			•	
Buildings	Offices	277 Park Avenue, United States (New York)	•			
Buildings	Offices	United States Navy Mess Hall Galley, United States (Washington)			•	
Buildings	Offices	United States GSA Federal Office Building Renovations, United States (Washington)			•	
Buildings	Offices	Whatcom City Courthouse Addition Phase II, United States (Washington)			•	
Buildings	Offices	Globe Plaza Office Building, United States (Washington)		•		
Buildings	Offices	Andover Parkway Office Building, United States (Washington)		•		
Buildings	Offices	IBM Office Complex, United States (New York)	•			
Buildings	Offices	Trident Training Facility, United States (Washington)			•	
Buildings	Offices	American Standard Office Building, United States (Oklahoma)	•			

<i>KRIS R. NIELSEN</i> <i>Representative Engagement Experience</i>						
DR:	Dispute Resolution	RM:	Risk Management	MC:	Management Consulting	
Other:	Project Management, Engineering Design, Construction Supervision					
Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Offices	Pitney Bowes Building, United States (Connecticut)	•			
Buildings	Offices	Consolidated Edison Operation Center, United States (New York)		•		
Buildings	Offices	General Services Administration, United States (New York)				•
Buildings	Offices	Post Office and Federal Building, Waycross, United States (Georgia)	•			
Buildings	Offices	National Bank of Commerce, United States (Nebraska)	•			
Buildings	Offices	Engineering & Administration Complex, United States (New York)		•		
Buildings	Offices	Seagram Office / Research Complex, United States (New York)				•
Buildings	Offices	Olefins Terminal Storage Complex	•			
Buildings	Distribution / Storage / Warehouse	TRW Record Storage Complex, United States (New Jersey)		•		
Buildings	Distribution / Storage / Warehouse	New Jersey State Food Distribution Center, United States (New Jersey)	•			
Buildings	Distribution / Storage / Warehouse	New Jersey Record Storage Center, United States (New Jersey)	•			
Buildings	Laboratory	Ta-35 Los Alamos National Laboratory, United States (New Mexico)	•			

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<p>DR: Dispute Resolution</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Laboratory	Mounds Laboratory U.S. Department of Energy, United States (Ohio)	•			
Buildings	Other	Hull Winery, United States (New York)			•	
Buildings	Other	INEC-TSA Building Claim, United States (Idaho)	•			
Buildings	Other	FedEx Hangar and Aircraft Maintenance Facility, Ted Stevens International Airport, United States (Alaska)			•	
Buildings	Other	Mirror Fusion Test Facility, United States (California)		•		
Buildings	Other	Great Adventure, United States (New Jersey)	•		•	•
Buildings	Other	New York Maritime Museum, United States (New York)		•		•
Environmental	Other	Foster Wheeler Asbestos Litigation, United States (New Jersey)	•			
Environmental	Other	United States Navy Hazardous Flammable Warehouse, United States (Washington)	•			
Environmental	Other	Transuranic Storage Area Retrieval Enclosure, United States (Idaho)	•			
Other	Seminar / Training	Risk Management and Dispute Awareness Workshop, United States (Texas)			•	
Other	Seminar / Training	University of Wisconsin-Madison Seminar, United States (Wisconsin)			•	

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<p>DR: Dispute Resolution</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Other	Seminar / Training	Identifying, Minimizing and Quantifying Project Risk, United Kingdom (London)			•	
Other	Seminar / Training	Sinna University Masters Course, Italy			•	
Other	Seminar / Training	Project Risk Management Seminar: Panama Canal			•	
Other	Seminar / Training	Partnering Seminar, United States (Kentucky)			•	
Other	Seminar / Training	Office of Foreign Buildings Operations Handbook, United States (Washington)		•		
Other	Seminar / Training	Claims Management Support; AKA: Fluor Daniel Corporate Claims Management, United States (California)			•	
Other	Other	Professional Service Agreement Projects for Taisei Corporation		•		
Other	Other	Japan Bank for International Cooperation, Japan			•	
Other	Other	Shell Construction Law Workshop, United Kingdom (London)			•	
Other	Other	Japan Ministry of Land, Infrastructure and Transport, Analysis of U.S. Public Construction Contracting Practice			•	
Other	Other	Foster Wheeler Risk Management Outsourcing		•		

EXHIBIT 2

Nuclear Power Plants	Client	Service
Cooper Station (IA)	Utility	MC, RM
Salem 1 & 2 (NJ)	Utility	MC, RM
Hope Creek (NJ)	Utility	MC, RM
Connecticut Yankee (CT)	Utility	MC, RM
Peach Bottom 1 & 2 (PA)	Utility	DR
Clinton (IL) Clinton (separate assignment)	Government Utility Contractor	MC DR MC
Columbia (Washington Nuclear 2) (WA)	Utility	MC, RM
Washington Nuclear 1 & 4 (WA)	Utility	DR
Satsop 3 & 5 (WA)	Utility	DR
Marble Hill (IN)	Utility	DR
Kawaunee (WI)	NSSS Vendor	MC, RM
Shoreham (NY)	Government Engineer/Constructor Utility	MC DR RM
Indian Point 2 and 3 (NY)	Utility	MC, RM
Millstone 2 (CT)	Design/Constructor	RM
Millstone 1, 2 and 3 (CT)	Government Utility	MC MC, RM
Nine Mile 2 (NY)	Engineer/Constructor	DR
Trojan (OR)	Utility	MC
Palo Verde 1, 2, & 3 (AZ)	NSSS Vendor Government Auditor	DR MC
Bellefonte (TN)	Engineer/Constructor Utility NSSS Vendor	RM
Calvert Cliffs 1 & 2 (MD)	Utility	MC
Turkey Point 3 & 4 (FL)	Utility	RM
Comanche Peak 1 & 2 (TX)	Government Utility	MC DR
South Texas Project 1 & 2 (TX)	Utility	MC, RM, DR
Waterford 3 (LA)	Government	MC
Seabrook 1 & 2 (NH)	Government	MC
Vogtle 1 & 2 (GA)	Utility	MC
Perry 1 & 2 (OH)	Utility Contractor	MC DR
Diablo Canyon 1 & 2 (CA)	Government	MC
Wolf Creek (KN)	Constructor	DR
Pilgrim (MA)	Utility	MC
Maine Yankee (ME)	Utility	RM
Vermont Yankee (VT)	Government	MC
Prairie Island 2 (MN)	Constructor	DR
Belene 1 (Bulgaria)	Government	RM
UK Nuclear Decommissioning Agency (UK)	Government	RM

EXHIBIT 3

The following table reflects representative non-nuclear power plant engagements in which I have dealt with various generic topics for: O = Owner/Operator; E-C = Engineer-Constructor; S-V = Subcontractor-Vendor; or F = Financial Institution. Those projects that had Design-Build/EPC contracting methodology and contracts are indicated as "Turnkey." Those that are mega projects (\$1 billion or larger) are indicated by an asterisk.

A. POWER PROJECTS

1. Power – Coal and Petroleum Fueled Plants

Project	Client	Turnkey	Mgt.	Sched.	Labor	Technical	Quality	Testing/ Comm.	Cost
Red Hills, MS, USA	O	•	•	•	•	•	•	•	•
McAdoo, PA, USA	E-C	•	•	•	•	•	•	•	•
Jiangxi, China	S-V		•	•	•				•
Paiton 7 & 8, Indonesia	E-C	•	•	•	•	•	•	•	•
Spurlock 1, KY, USA	O			•	•				
Scherer, GA, USA	O		•	•				•	•
5-CEI Plants, OH, USA	O		•	•		•			•
Jeffery, KN, USA	O		•						•
Rabigh, Saudi Arabia	E-C	•	•	•	•	•	•	•	•
PP9, Saudi Arabia	E-C	•	•	•		•	•		•

2. Power - Gas Fired and Cogeneration Plants

Project	Client	Turnkey	Mgt.	Sched	Labor	Technical	Quality	Testing/ Comm.	Cost
Dearborn, MI, USA	E-C	•	•	•	•	•	•	•	•
Merilectrica, Columbia	O	•	•	•	•	•	•	•	•
Elsta, Holland	O	•	•	•	•	•	•	•	•
ISAB, Italy*	E-C	•	•	•	•	•	•	•	•
Osborne, Australia	O			•		•		•	
Conoco SRW, TX, USA	O	•	•	•	•	•	•	•	•
Luannan, China	O			•				•	
La Paloma, CA, USA	S-V		•	•	•		•	•	•
Ave Fenix, Argentina	E-C	•	•	•	•	•	•	•	•
Nikiski, AK, USA	O	•	•	•	•	•	•	•	•
Princeton, NJ, USA	O	•	•					•	•
Crossroads, NJ, USA	F					•		•	•
Lakewood, NJ, USA	E-C		•	•	•	•	•	•	•
Consumnes, CA, USA	O	•	•	•	•	•	•	•	•
Covert, MI, USA	S-V	•	•	•		•	•	•	•

2. Resource and Process – Oil & Gas

Project	Client	Turnkey	Mgt.	Sched.	Labor	Technical	Quality	Testing/ Comm.	Cost
Altona, Australia*	S-V	●	●	●	●	●	●	●	●
INCO-92, Venezuela*	O	●	●	●	●	●	●	●	●
Lama, Venezuela*	E-C	●	●	●	●	●	●	●	●
Ahmadi, Kuwait	S-V		●	●	●		●	●	●
Mineral Oil, Egypt	E-C	●	●	●	●	●	●	●	●
Luberef, Saudi Arabia*	E-C	●	●	●	●	●	●	●	●
Perez, Venezuela*	E-C	●	●	●	●	●	●		●
Tupras, Turkey*	E-C	●	●	●	●	●	●	●	●
Pemex Demin, Mexico	S-V		●	●	●	●	●	●	●
Akal, Mexico*	E-C	●	●	●	●	●	●	●	●
Sakhalin 1, Russia*	E-C	●	●	●	●				●

3. Resource and Process – Mining and Metals

Project	Client	Turnkey	Mgt.	Sched.	Labor	Technical	Quality	Testing/ Comm.	Cost
Copper Facil., UT, USA	E-C	●	●	●	●	●	●		●
NKK, MI, USA	E-C	●	●	●	●		●		●
IPSCO, IA, USA	S-V			●	●	●	●		●
IPSCO Blaine, AL, USA	O, E- C		●	●	●	●	●	●	●
Republic, OH, USA	S-V		●	●	●	●	●		●
Algoma, OT, Canada*	S-V	●	●	●	●		●		●
Murin Murin, WA, Aus*.	E-C	●	●	●	●	●	●	●	●

4. Resource and Process – Pharmaceutical

Project	Client	Turnkey	Mgt.	Sched.	Labor	Technical	Quality	Testing/ Comm.	Cost
Bulk Pharma, Singapore	E-C	●	●	●	●	●	●	●	●
Production Pharma, Singapore	E-C	●	●			●		●	●

EXHIBIT 4

DR. KRIS R. NIELSEN PH.D., JD, PMP, MRICS, M.JSCE

Testimony List

Date	Project	Forum	Appearance	Status
2008	Vogle Nuclear Power Plant	Georgia Public Service Commission	Testimony	Pending
2008	Menasha Generating and Steam Power Plant, Wisconsin	State Court, Wisconsin	Report/Deposition	Settled
2006	BHPB Minerva Project, Australia	State Court, Victoria, Australia	Report for Mediation	Settled
2005	Covert Combined Cycle Power Plant, Michigan	AAA Arbitration, Washington, D.C.	Deposition	Settled
2005	Wolf Hollow Combined Cycle Plant Texas	ICDR (International Center for Dispute Resolution) Arbitration	Testimony	Decision
2005	Dearborn Combined Cycle Plant, Detroit, Michigan	AAA Arbitration, Detroit, Michigan	Deposition, Filed Direct Testimony	Decision
2004	Lama II Offshore Gas Liquids Plant, Venezuela	ICC Arbitration, Miami, Florida	Filed/Oral Testimony	Decision
2004	Alameda Hospital, Oakland, California	State Court, Hayward, California	Deposition	Decision
2003	Rabigh Power Plant, Saudi Arabia	AAA Arbitration, New York	Written/Oral Testimony	Decision
2003	Steam Cracker, Orange, Texas	State Court, Mediation Harris County, Texas	Filed Testimony	Settled
2003	Fiber Optic Telecom Installation, Wil Tel v. T3, IL, IN, OH, WV, VA, GA, TN	US Federal Court, Virginia and AAA Arbitration	Filed Testimony, Deposition	Settled
2003	PET Production Plants - Argentina, Holland, Spain	ICC Arbitration, New York	Filed Testimony	Settled
2002	SRW Cogen Power Plant, Texas	AAA Arbitration, Texas; Mediation, Texas	Presentation	Settled
2002	Combe Landfill, New Jersey	State Court, New Jersey	Deposition	Settled
2002	Fiber Optic Telecom Installation, Wil Tel v. Northern Line Layers, Massachusetts	US Federal Court, Boston, Massachusetts	Filed Testimony	Settled
2002	Fiber Optic Telecom Installation, Wil Tel v. Weissker Construction, California	US Federal Court, Oklahoma	Filed Testimony, Deposition	Settled
2001	ISAB Gasification Combined Cycle, Italy	UNCITRAL Arbitration, Geneva, Switzerland	Testimony	Interim Decision-Settled

Date	Project	Forum	Appearance	Status
2001	Rabigh Power Plant, Saudi Arabia	AAA International Arbitration, New York City, New York	Testimony	Settled
2001	Cooper Nuclear Station, Nebraska	State Court, Nebraska	Deposition, Testimony	Decision
2001	State Highway 380, Texas	Texas State Office of Administrative Hearings	Deposition, Testimony	Decision
2001	ATT/Motorola Broad Band Upgrade, Illinois, Michigan, Missouri	Mediation, Colorado	Presentation	Settled
2001	Elsta Cogeneration Power Plant, Ternuzen, The Netherlands	ICC Arbitration, Houston, Texas	Testimony, Deposition	Decision
2000	Paiton 7 & 8, Indonesia Coal Fired Boilers - Power Plants	London International Arbitration Centre, London, England	Testimony	Settled
2000	Pharmaceutical Plant, Singapore	Singapore International Arbitration Centre, Arbitration, New Jersey	Testimony	Decision
1999	Idaho National Laboratory TSA-Retrieval Project, Caddell Construction (LMITCO)	Mediation, Salt Lake City, Utah	Filed Testimony, Presentation	Settled
1999	Millstone Nuclear Plant 3, Connecticut	AAA Arbitration	Filed Testimony, Deposition	Settled
1999	Combined Cycle Power Plant, Sacramento, CA	AAA Arbitration, California	Testimony	Decision
1999	Septa Rail Car Renovation, UPS v. ABB Daimler Benz Transportation Co.	Federal Court, PA	Deposition	Settled
1999	Merilectrica Gas Powered Turbine Power Plant, Columbia	AAA International Arbitration, Houston, Texas	Testimony	Decision
1998	Baytown Bridge, Houston, Texas	State Court, Texas	Deposition	Settled
1998	Cooper Nuclear Plant, Lincoln, Nebraska	State Court, Lincoln, Nebraska	Testimony	Decision
1998	Casecan Multi-Purpose Project, Philippines	ICC Arbitration, New York City, New York & Singapore	Testimony	Settled

Date	Project	Forum	Appearance	Status
1998	US Route 290, Texas	Texas State Department of Administrative Hearings, Austin, Texas	Deposition	Settled
1998	High-rise Office Building	State Court, New York	Deposition	Decision
1998	Ave Fenix Power Plant	AAA Arbitration, Houston, Texas	Deposition, Testimony	Decision
1998	Altona Refinery, Melbourne, Australia	ICC Arbitration - Singapore / Vancouver, B.C.	Testimony	Decision
1998	Connecticut Yankee Nuclear Power Plant,	Federal Energy Regulatory Commission, Washington, D.C.	Testimony, Deposition	Decision
1997	Salem Nuclear Plant	AAA Arbitration, Federal Court, Philadelphia, Pennsylvania	Deposition	Settled
1997	Cooper Nuclear Plant, Nebraska	Federal Court, Iowa	Deposition	Settled
1997	South Texas Project	AAA Arbitration, New York City, New York	Testimony	Decision
1997	IPSCO Steel Mill, Iowa	AAA Arbitration, Des Moines, Iowa	Testimony	Decision
1996	INCO Recompression Platforms	AAA International Arbitration, New York City, New York	Testimony	Settled
1995	Texas Utilities, Inc., Stockholders Derivative Suite	US Federal Court, Texas	Deposition	Settled
1995	645 First Avenue New York City, New York	AAA Arbitration, New York City, New York	Testimony	Decision
1994	South Texas Nuclear Plant, Texas	Public Utility Commission of Texas	Testimony	Settled
1994	Portland General Electric Rate Case RE: Trojan Nuclear Power Plant	Oregon Public Utility Commission	Testimony	Decision
1993	Rockland County Sewer District Treatment Plant, Hutton Claim	State Court, New York	Deposition	Settled
1993	Shoreham Nuclear Power Plant, New York	US Federal Court, New York	Deposition	Settled

Date	Project	Forum	Appearance	Status
1993	National Energy Production Corporation Combined Cycle Power Plant	State Court, California	Deposition, Testimony	Decision
1992	State Highway 380, Texas	Texas Department of Transportation Administrative Hearing, Texas	Deposition, Testimony	Decision
1992	I-94 Highway, Minnesota	State Court, Minnesota	Deposition	Settled
1992	Phoenician Resort, Arizona	US Federal Court, Arizona	Deposition	Settled
1992	Palo Verde Nuclear Plant, Arizona	State Court, Colorado	Deposition, Testimony	Decision
1991	Washington Metropolitan Area Transit Authority	US Federal Court, Washington, D.C.	Deposition, Testimony	Decision
1990	South Texas Project Unit 2	Public Utility Commission of Texas	Deposition, Testimony	Settled
1990	Comanche Peak Nuclear Power Plant, Texas	Public Utility Commission of Texas	Testimony	Decision
1989	Washington DOT Tacoma Highway, Washington	State Court, Washington	Deposition, Testimony	Decision
1989	Pilgrim Nuclear Power Plant, Massachusetts	Massachusetts Public Utility Commission	Testimony	Settled
1989	South Texas Nuclear Plant, Texas	Public Utility Commission of Texas	Testimony	Settled
1988	Waterford 3 Nuclear Power Plant, Louisiana	City of New Orleans Administrative Hearing	Deposition, Testimony	Decision
1988	Equitable Life Insurance Headquarters	AAA Arbitration, New York City, New York	Testimony	Decision
1987	Vogtle Nuclear Power Plant	Georgia Public Utility Commission	Testimony	Decision
1987	Perry Nuclear Power Plant, Ohio	Public Utility Commission, Ohio	Deposition, Testimony	Decision
1987	Fossil Power Plant Scherer, Georgia	Georgia Public Utility Commission	Testimony	Settled
1987	Washington Metropolitan Area Transit Authority	US Bankruptcy Court, Maryland	Testimony	Decision

Date	Project	Forum	Appearance	Status
1987	Pleasant Prairie Generating Station, Wisconsin	US Federal Court, Wisconsin	Deposition	Settled
1986	Vessel-Underseas Drilling, Inc., Texas	AAA Arbitration, Dallas, Texas	Arbitration	Settled
1986	Millstone Point III, Nuclear Power Plant, Connecticut	Department of Public Utilities Control	Testimony	Settled
1986	Millstone Point III, Nuclear Power Plant, Connecticut	Vermont Public Service Board	Testimony	Decision
1986	New Jersey State Records Center, New Jersey	State Court, New Jersey	Deposition	Settled
1986	Clinton Nuclear Power Station, Illinois	Illinois Commerce Commission	Testimony	Decision
1985	Seabrook Station No. 2	Massachusetts Public Utility Commission	Testimony	Decision
1985	Seabrook Station No. 1, Seabrook, New Hampshire	New Hampshire Public Service Commission	Testimony	Decision
1985	Washington Public Power Supply System Nuclear Plant	US Federal Court, Washington	Deposition	Settled
1985	Kansas Power & Light Jeffrey Energy Center, Kansas	US Federal Court, Washington	Deposition	Settled
1982	Worcester Civic Center, Massachusetts	AAA Arbitration, Boston, Massachusetts	Oral and Affidavit Testimony	Decision
1982	Breed Generating Plant, Indiana	State Court, Indiana	Deposition, Testimony	Decision
1980	VA Hospital, New Hampshire	Virginia Board of Contract Appeals Washington, D.C.	Deposition	Settled
1980	U.S.C.G. Facilities Governor's Island, New York	DOT Board of Contract Appeals Washington, D.C.	Testimony	Decision
1980	Spurlock Generating Station, Kentucky	US Federal Court, Ohio	Deposition	Settled
1980	GM Cadillac Assembly Plant, New Jersey	State Court, New Jersey	Deposition	Settled
1980	Clark Equipment Manufacturing Plant, Kentucky	US Federal Court, Kentucky	Written Affidavit	Settled
1979	Ohio State University, Field House, Ohio	US Federal Court, Michigan	Deposition	Settled
1979	Air Mail Facility, Michigan	AAA Arbitration, Detroit, Michigan	Testimony	Decision

Date	Project	Forum	Appearance	Status
1978	National Bank of Commerce, Nebraska	US Federal Court, Nebraska	Deposition	Settled
1977	Union Camp Polyament Resin Plant, Ohio	US Federal Court, Ohio	Deposition	Settled
1976	Kingdome Stadium, Washington	US Federal Court, Washington	Deposition, Testimony	Decision
1975	Rahway Valley Sewage, New Jersey	AAA Arbitration, New Jersey	Testimony	Decision
1975	Pan Am Maintenance Facility, New York	AAA Arbitration, New York City, New York	Testimony	Decision
1975	Great Adventure, New Jersey	State Court, New Jersey	Testimony	Decision

EXHIBIT 5



Areas of Expertise

- Arbitrator / Mediator / DRBs
- Corporate Governance
- International Contracting and Management
- Trend Evaluation / Analytics
- Management Consulting
- Industry Best Practices
- Contracts
- Risk Management
- Risk Assessment and Audits
- Project Control Systems
- Change Management
- Prudence Analysis / Audits
- Operations Management
- Engineering and construction Management
- Project / Program Management
- Standards of Care
- Engineering Standards of Care
- Project Management Audits
- Scheduling and Delay Analyses
- Claims Analysis / negotiations
- Disruption and Productivity Analyses
- Cumulative Impact
- Fraud / Abuse / Waste
- Claims Prevention

Background

As Chief Executive Officer of Pegasus Global Holdings, Inc., Dr. Galloway oversees all aspects of the firm's Risk Management, Management Consulting and Strategic Consulting business services. Dr. Galloway has served as an Engagement Director and primary team member on wide ranging, complex engagements involving the entire project delivery process- cradle to grave – in the following industries: power; oil and gas / petrochemical; transportation; infrastructure; and buildings. She has worked on behalf of private and public sector clients globally. She has also served as Project Manager and Scheduling Engineer for major projects (design, construction and fast track) using computer automated systems.

On Management Consulting engagements, Dr. Galloway's engagement experience includes analyses of Board of Directors roles and responsibilities, management structures and performance, evaluation of operations, management processes, contract development and form, project controls, contract administration, claims avoidance, schedule delay, value engineering, Lessons Learned and others. She has performed Management Consulting services for major U.S. and non-U.S. companies and public agencies including Japan and Australia throughout the construction, process, power and transportation sectors. She also lectures and presents seminars on project controls, management, Board of Director roles and responsibility and leadership to private firms, corporations and professional society organizations.

Dr. Galloway's Risk Management experience includes project planning and ongoing project execution, risk assessment and analysis, trend evaluations and risk reduction plans for public and private projects in the transportation, infrastructure, power, process, oil and gas and building sectors. She has written and lectured extensively on the subject of risk management and has served as an in-house instructor on risk management for both Owners and Contractors. She has served as an advisor to multiple Owner and Contractor clients and served as a member of various Risk Management assessment and review panels. In addition, Dr. Galloway has assisted and been actively involved in developing and setting up Risk Management corporate-wide programs for multinational companies around the world.

Dr. Galloway has extensive international experience having traveled to nearly 100 countries and having worked on numerous domestic and international engagements.

Mega-projects, by industry definition, are very large investment projects that attract a high level of public attention or political interest because of substantial direct and indirect impacts on the community, environment and budgets. They are generally defined as major infrastructure projects that cost more than \$1 billion.

Dr. Galloway has significant global experience with megaprojects costing several times this minimum definition. She has been a member of and led teams on engagements such as Crossrail Project, London, United Kingdom at £10 billion; Sakhalin Pipeline Project, Moscow, Russia at \$20 billion; Consortium Contractor, Marine Facility, Europe at \$6 billion; Xiaolangdi Dam, China at \$3.5 billion; Melbourne Citylink Project, Victoria, Australia at \$2 billion; Siemens PEMEX-Cadereyta project at \$1.6 billion; Rockport Works Steel Mill Facility, Rockport, Indiana, United States at \$1.1 billion; Refinery Upgrade and Pipeline Project, North America at over \$1 billion; and International LNG Terminal, North America at \$1 billion; HBJ Pipeline Project, India at \$1 billion; Murrin Murrin Nickel-cobalt Project, Western Australia at \$1 billion; Tsing Ma Bridge, Hong Kong at \$1 billion; and multiple nuclear power plant projects.

Dr. Galloway has also served as a facilitator for partnering workshops and Instructor in several forums such as seminars and course instructor for private and public entities; a past guest Professor at the University of Wisconsin, Madison, University of Bologna, Italy and Harbin University of Technology in Harbin, China; and is currently a visiting Professor at Kochi University of Technology in Kochi, Japan.

Dr. Galloway is an internationally recognized leader in the civil engineering and construction arena. In November of 2003, Dr. Galloway was inducted as the first woman President of the American Society of Civil Engineers (ASCE), and in 2006 was appointed by President Bush to the National Science Board. 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 had 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.

Prior to joining Pegasus, Dr. Galloway was the Chief Executive Officer and principle of The Nielsen-Wurster group Inc., an international management consulting firm specializing in management consulting, risk management and dispute resolution. Her Dispute Resolution engagement experience includes 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), 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.

Dr. Galloway has served as both a consulting and testifying expert. She has presented expert witness testimony in numerous formal court proceedings, domestic (AAA) and International arbitration forums (International Chamber of Commerce (ICC) arbitrations, UNCITRAL, SAIC, London), and public utility rate hearings. Dr. Galloway also serves as an arbitrator with the American Arbitration Association on both commercial and construction litigation cases and is a member of its Construction Arbitrators Master Panel.

Before joining Nielsen-Wurster, Dr. Galloway was employed by CH2M Hill. Her responsibilities at CH2M Hill included preparation of project management training courses, project controls including estimating and critical path scheduling and tunnel inspection, being the first woman tunnel inspector in Wisconsin. She was assigned as the Master Program Scheduler for the \$1.6 billion Milwaukee Water Pollution Abatement Program (MWPAP). Her responsibilities included coordination of all project schedules, involvement with cost engineering functions, preparation of all 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

- Professional Engineer in the following US locations:
 - Arizona #16978
 - Colorado #28566
 - Florida #44498
 - Georgia #031939
 - Kansas #19495
 - Kentucky #17690
 - New Hampshire #12184
 - New Jersey #GE-29321
 - New York #060684-1
 - Ohio #72520
 - Pennsylvania #PE-046146-R
 - Washington #28262
 - Wisconsin #21786-006
 - Wyoming #PE-4974
- Professional Engineer in the following Global locations:
 - Australia, FIEAust CPEng #1194740
 - Canada, Province of Manitoba #15061
- Certified Examiner, National Council of Examiners for Engineering and Surveying (NCEES) #12046
- Certified Project Management Professional #0012-84
- Certified Forensic Claims Consultant (CFCC)
- Member of the ICDR Panel of Arbitrators
- Member of the AAA Panel of Arbitrators
- Professional Member of the Royal Institution of Chartered Surveyors, Faculties of Project Management and Risk Management (MRICS)
- Registered in the International Registry of Professional Engineers in the discipline of Civil Engineering, Construction Management by the United States Council for International Engineering Practice (USCIEP) #131
- Private Pilot

Board of Direction Membership

For Profit Companies

- Pegasus Global Holdings, Inc., 2000 - Present
- Unionville Vineyards (Partner), 1986 - 2008
- The Nielsen-Wurster Group, Inc., 1984 - 2008
- Nielsen-Wurster Asia-Pacific Pty. Ltd., 2001 - 2008
- Unionville Aviation, 1987 - 2005
- Nielsen-Wurster ESB 1986 - 1989

Non-Profit Companies

- Governor's Eastern Washington Business Advisory Council, 2007 - Present
- National Science Board, 2006 – Present
 - Vice Chair, 2008 - Present
- Construction Industry Institute Advisory Board, 2006 - Present
- Order of the Engineer, National Board of Governors, 2004 - 2008
- Engineers for a Sustainable World, Member of Advisory Board, 2003 - Present
- Purdue University Dean's Advisory Board, Engineering Visiting Committee, 2004 - 2007
- Project Management Institute, College of Scheduling, 2003 - 2006
- National Science Foundation Engineering Directorate Advisory Committee, 2004 - 2006

- National Science Foundation International Directorate Advisory Committee, 2006
- Pan American Academy of Engineering, 2006 - Present
- American Society of Civil Engineers, 1992 - 1995, 2002 - 2005
- American Society of Civil Engineers Foundation, 2002 - 2005
- Construction Institute, 2004 - 2005
- Civil Engineering Research Foundation (CERF), Member of Corporate Advisory Board, 2001 - 2005
- Civil Engineering Research Foundation (CERF), 2002 - 2004
- Purdue University Engineering Alumni Board, 1992 - 2001
- Hoover Medal Award Board, 1996 - 1999
- Project Management Institute, Publications Advisory Board, 1991 - 1993

Awards

- 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 59, 2005
- Key Women in Energy-Global Awards, Energy Leaders Council, 2005
- National Academy of Construction, 2005
- "Who's Who of American Women," Edition 24, 2004 - 2005 (listed since 1983)
- "Who's Who in the World," Edition 22, 2004
- "Who's Who in Science and Engineering," Edition 8, 2004
- YWCA Tribute to Women Honoree, 2004
- Society of Women Engineers' Upward Mobility Award, 2003
- Kentucky Governor Award-Kentucky Colonel, 2002
- "Who's Who in Science and Engineering," 2002
- Lafayette High School Hall of Fame, Inducted 2001
- National Academy of Engineering: Celebration of Women, 2000
- White House Commission: 2000 Design Award, 1999
- 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
- 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

Education

- Ph.D., Infrastructure Systems (Civil) Engineering, Kochi University of Technology, Kochi, Japan
- M.B.A., New York Institute of Technology, New York, Magna cum Laude
- B.S., Civil Engineering (double major in Structures and Construction Management), Purdue University, West Lafayette, Indiana

Courses

- Arbitrator Ethics and Disclosure
- Chairing a Panel, American Arbitration Association
- Award Writing, American Arbitration Association, Atlanta, Georgia
- International Training for Dispute Resolution, International Symposium in Advanced Case Management Issues, American Arbitration Association, New York, New York
- Arbitrator II Training (Advanced Case Management Techniques), American Arbitration Association, Washington, D.C.
- Construction Industry Arbitrator Workshop, American Arbitration Association, Philadelphia, Pennsylvania
- The Dispute Review Board Administration and Practice Workshop, The Dispute Review Board Foundation, Boston, Massachusetts
- Caltrans Dispute Review Board Administration and Practice Workshop

Languages

Spanish - conversational / good understanding of written word

Industry Research

- National Research Council (NRC) Committee for Advancing the Productivity and Competitiveness of the U.S. Construction Industry Workshop, 2008 – Present
- Construction Industry Institute Research Team RT 260-Reimbursable Contract –Co-Chair, 2008 – Present
- Kochi University of Technology, Doctorial Dissertation, Engineering Education Reform, 2005

Technical Papers and Presentations

Dr. Galloway has authored and presented numerous technical papers and articles on engineering management, contract administration, project controls management; scheduling, risk management and other topics (*see attached Technical Papers and Presentations*).

Memberships

- American Society of Engineering Education (ASEE)
- American Association for Engineering Societies (AAES)
 - Chair, International Activities Commission, 1999 - 2000
- Academy of Experts, United Kingdom
- American Arbitration Association, Panel of Arbitrators (Philadelphia, New York and International)
- American Consulting Engineers Council (ACEC)
- American Nuclear Society (ANS)
- American Society of Civil Engineers (Fellow) (ASCE)
 - Past President, 2004 - 2005
 - National President, 2003 - 2004
 - National President-Elect, 2002 - 2003
 - International Director of the Board, August 1992 - 1995

Board Activities

- Society Awards Committee, 2004 - Present

DR. PATRICIA D. GALLOWAY

- Chair, Past Presidents Council, 2004 - 2005
- Chair, Executive Compensation Committee, 2004 - 2005
- Executive Committee Liaison to the Construction Institutes Board of Directors, 2003 - 2005
- Chair, Membership Committee, 2001 - 2002
- Member, Communications Committee, 2000 - 2002
- Member, Committee on Strategic Initiatives, 2000 - 2001
- Chair, Task Committee on Women in Civil Engineering, 1998 - 2000
- Member, Engineers Joint Contract Documents Committee, 1999 - 2000
- Member, ASCE Hoover Medal Board of Award, 1996 - 2000
- Member, Finance Committee, 1997 - 1999
- Chair, International Activities Committee, 1994 - 1997 (Member 1992 - 1999)
- Member, COSOPO Committee and Workforce Subcommittee, 1995 - 1997
- Member of the Membership Committee, 1994 - 1996
- Member, Long Term Strategic Planning Committee, 1994 - 1995
- Chair, Audit Committee, 1994 (Member 1993 - 1994)
- Member, Visioning Task Force Committee, 1993 - 1994
- Chair, New York Convention, 1992
- Member, Teller's Committee, 1991
- Vice Chair, Orlando Convention Committee, 1990

Professional Activities Committee (PAC)

- Co-chair, Engineer 2025 Summit, "Summit on the Future of Civil Engineering," June 2006
- Member, Committee on Conventions and Conferences, 1988 - 1991
- Chair, Sessions Committee on Professional Activities, 1988 - 1990
- Member, Engineering Management Committee, 1986 - 1990

Technical Activities Committee (TAC)

- Member, Professional Construction Management Committee, 1978 - 1989
- Member, Committee on Underground Tunneling, 1983 - 1986
- Subcommittee Chair, Professional Construction Management Committee, 1978 - 1985
- Session Moderator, ASCE National Spring Convention, May 1983 (Philadelphia)
- Session Moderator, ASCE National Spring Convention, May 1981 (New York)
- Co-chair, Specialty Conference on "Reduced Liability through Better Inspection and Specifications," San Diego, February 1981
- Member, National Inspection Committee, 1979 - 1981
- Member, National Specifications Committee, 1979 - 1981

Local Section Activities

- District 1 Council, Zone I, New Jersey Section Representative, 1995 - 2001
- New Jersey Section Strategic Planning Subcommittee Chair, 1996 - 1999
- Speaker at New Jersey Central Branch Meeting, 1995
- Toastmaster, New Jersey Section Annual Banquet, 1994 - 1995
- Wisconsin Section, Student ASCE Club Advisor to the Milwaukee School of Engineering, October 1978 - July 1981
- ASCE Construction Institute
- Association for the Advancement of Cost Engineering International (Fellow) (AACEI)
 - Chair, National Committee-Women in Project Controls, 2004 - 2005
 - Member, National Planning and Scheduling Committee
- Civil Engineering Research Foundation (CERF)
 - Member, Corporate Advisory Board, 2001 - 2005
- Chi Epsilon (National Civil Engineering Honor Society)

DR. PATRICIA D. GALLOWAY

- Construction Management Association of America
- Dispute Review Board Foundation
- Institution of Civil Engineers, United Kingdom (Fellow) (ICE)
- Engineers Australia (Fellow)
- Extraordinary Women Engineers Project
 - Chair, National Steering Committee, 2003 - 2006
 - Member of Advisory Board, 2007 - Present
- Inter-Pacific Bar Association (IPBA)
- Japan Society of Civil Engineers (JSCE)
- National Academy of Construction
- National Association of Corporate Directors
- National Council of Examiners for Engineering and Surveying (NCEES)
- National Science Board
 - Presidential Appointment, 2006 - 2012
- National Society of Professional Engineers (NSPE)
- Order of the Engineer
 - Board of Director, 2004 – 2008
- Pan American Academy of Engineers
 - Board of Directors, 2006 - Present
- Project Management Institute, College of Scheduling (PMI)
 - Speaker and Instructor Bureau, 1990 - Present
 - Chair, 3rd International College of Scheduling Conference, Orlando, Florida, April 2006
 - Chair, Board of Directors, College of Scheduling, 2003 - 2006
 - Chair, 2nd International College of Scheduling Conference, Scottsdale, Arizona, May 2005
 - Chair, International College of Scheduling Conference, Montreal, Canada, April 2004
 - Member, Publications Advisory Board, 1991 - 1993
- Purdue University
 - Dean Advisory Council, 2004 - 2007
 - SWE Student Advisor Program
 - Engineering Alumni Board of Directors, 1994 - 2001
- Royal Institution of Chartered Surveyors (RICS)
- Society for Social Management Systems
 - Chair, 2006 - Present
- Society of Petroleum Engineers
- Society of Women Engineers
 - New York Section President, 1982 - 1983
 - National Committee Chair for Headquarters Site Study, 1982 - 1983
 - National Committee Chair for Teller's Committee, 1981 - 1982
 - Wisconsin State President, 1980 - 1981
 - Wisconsin State Secretary, 1979 - 1980
- Tau Beta Pi (Honorary Member)
- Toastmasters International
 - Competent Toastmaster Award, July 1981
 - Speechcraft Organizer, 1979
- UPADI
 - General Chair, UPADI Annual Convention, 2006
- Women in Engineering Programs & Advocates Network (WEPAN)
 - Mentor for Women College Engineering Students
- World Federation of Engineering Organizations (WFEO)

DR. PATRICIA D. GALLOWAY

- ComTech Committee Vice President, 2004 - 2007
- US Representative to WFEO, 2006
- Member of WFEO President’s Advisory Board, 2006
- Co-Chair, World Summit on Women in Science, Engineering and Technology, November 2006

Reference	Authored	Presented	<i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i>
1.		•	“New Trends in Engineering Management Education” ASEE Conference, Pittsburgh PA, June 23, 2008
2.	•	•	“The Role of the 21 st Century Engineer in the Midst of Global Engineering Crisis” International Symposium on Futures in Civil & Construction Engineering, Seoul Korea, June 17, 2008
3.	•	•	“The 21 st - Century Engineer: A Proposal for Engineering Education Reform”, Cal Poly Pomona College of Engineering, Pomona CA, May 30, 2008
4.	•	•	“Being A Leader In The 21 st Century” ASCE Younger Member Evening Lecture, San Diego CA, May, 27, 2008
5.	•	•	“The 21 st Century Engineer,” Seminars to the Civil Department, Civil Department Advisory Committee and to the Engineering Department, University of British Columbia (UBC) Vancouver, British Columbia, Canada, May 1, 2008
6.	•	•	"Viewing Risks and Liability in Light of Sustainability, The Environment and Critical Infrastructure," IBTTA Facilities Management conference, Orlando, Florida, April 29, 2008
7.		•	“Ethics and Professionalism-their Importance to Engineers in the 21 st Century,” KSPE 2008 Annual Convention, Louisville, Kentucky, April 24, 2008
8.	•	•	“The Framework of Sustainability for Engineering Design Considerations” Society for Social Management Systems 2008 Kochi, Japan. March 6, 2008
9.	•	•	“Mega Projects – A Primer for Finance (or How Can Finance Help Improve Results)” Nexen Finance Family Forum Scottsdale, AZ – Co-presentation with Jack Dignum February 19, 2008
10.	•	•	“Engineer, Contractor and Owner Risk in Constructed Projects,” Wisconsin Transportation Builders Association WISDOT Contractor Engineer Conference, Madison, Wisconsin, January 31, 2007
11.	•		Galloway, Patricia D., <i>The 21st Century Engineer: A Proposal for Engineering Education Reform</i> , Reston: American Society of Civil Engineers, 2007
12.	•		“Ethics, Standards of Care and Your Engineering Profession,” <i>Kentucky Engineer, Official Publication of the Kentucky Society of Professional Engineers</i> , Volume 44, Fall 2007

Reference	Authored	Presented	<i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i>
13.		•	“Construction Delay-How Opposing Experts Can Come to Different Conclusions From the Same Set of Facts: Honest Mistake, System Failure or Deceptive Practice,” <i>Construction Claim Advisor</i> - Audio Conference, November 12, 2007
14.		•	“The 21 st Engineer,” <i>ASCE, The G. Brooks Earnest Awards Dinner</i> , Cleveland, Ohio, October 9, 2007
15.		•	“Role Responsibility and Risk Considerations for the Engineer Regarding Sustainability,” <i>Kentucky ACPA Conference</i> , Louisville, Kentucky, October 5, 2007
16.	•	•	“How Leaders Should be Viewing Risk Today,” <i>AES Global Engineering & Construction Conference</i> , San Francisco, California, September 18, 2007
17.	•	•	“How Leaders Should be Viewing Risk Today,” <i>CII Annual Conference</i> , Orlando, Florida, August 1, 2007
18.		•	Panel Member, “Intellectual Honesty in Proving Delay,” <i>Project Management Institute College of Scheduling Conference</i> , Vancouver Canada, April 17, 2007
19.		•	“Footprints for Success: Being a Female Leader in Engineering,” <i>National Symposium for the Advancement of Women in Science (NSAWS)</i> , Harvard University, April 13, 2007
20.	•	•	“Role, Responsibility and Risk Considerations of the Engineer Regarding Sustainability,” <i>10th Annual INFTRA-ARHCA-CEA 2007 Transportation Conference</i> , Alberta, Canada, March 19 - 20, 2007
21.	•	•	“Engineer’s Role in Public Policy,” <i>International Symposium on Social Management Systems</i> , Three Gorges Dam, China, March 11, 2007
22.	•	•	“Engineering Education Reform,” <i>International Symposium on Social Management Systems</i> , Three Gorges Dam, China, March 9, 2007
23.	•	•	“Risks and Liabilities in Specifying HDPE Pipe,” <i>Mountain States Concrete Pipe Association 5th Annual Concrete Pipe Seminar</i> , Illinois, February 28, 2007
24.	•	•	“Risks and Liabilities in Specifying HDPE Pipe,” <i>Mountain States Concrete Pipe Association 5th Annual Concrete Pipe Seminar</i> , Indiana, February 27, 2006
25.		•	2007 Western Regional Younger Member Council Banquet and Awards Ceremony, <i>The Seattle ASCE Younger Member Forum</i> , Seattle, Washington, February 24, 2007
26.		•	“Engineering Leadership in the 21 st Century,” <i>Second Annual Luncheon at George Mason University</i> , Fairfax, Virginia, January 30, 2007
27.		•	“Common Disputes on Light Rail Transit Projects and How to Resolve Them,” <i>Construction Superconference</i> , San Francisco, California, December 7 - 8, 2006
28.		•	Panel Member, “Key to Company Success in Today’s Global Market,” <i>Shaping the Future: Global talent Leadership in Engineering</i> , Princeton, New Jersey, November 2, 2006

Reference	Authored	Presented	PATRICIA D. GALLOWAY <i>Technical Papers and Presentations</i>
29.	•	•	“Risks and Liabilities in Specifying HDPE Pipe,” <i>Mountain States Concrete Pipe Association 5th Annual Concrete Pipe Seminar</i> , Salt Lake City, Utah, October 26, 2006
30.	•	•	“Risks and Liabilities in Specifying HDPE Pipe,” <i>Mountain States Concrete Pipe Association 5th Annual Concrete Pipe Seminar</i> , Las Vegas, Nevada, October 25, 2006
31.	•	•	“Risks and Liabilities in Specifying HDPE Pipe,” <i>American Concrete Pipe Association Fall Short Course</i> , Charlotte North Carolina, October 16, 2006
32.	•	•	“Risks and Liabilities in Specifying HDPE Pipe,” <i>American Concrete Pipe Association Fall Short Course</i> , San Antonio, Texas, October 13, 2006
33.		•	Panel Member, “Engineering Education Reform-Solutions for Professional Survival,” <i>Workplace Dynamic Panel with Bob Peckar</i> , September 28, 2006
34.	•		“Risk Based Processes that Assure Anti-Corruption Processes and Promote Transparency and Governance in Resource Extraction Industries,” co-authored with Kris Nielsen, <i>International Conference on Infrastructure Development and the Environment</i> , Abuja, Nigeria, September 10 - 15, 2006
35.		•	Panel Member, “Engineering Education Reform-Solutions for Professional Survival,” <i>American Association of Engineering Societies</i> , Chicago, Illinois, June 19 - 20, 2006
36.	•	•	“Cumulative Impact,” <i>Current Trends In Construction Law, International Project Management and Dispute Resolution: The South Central American Project</i> , São Paulo, Brazil, June 5 - 6, 2006
37.		•	“Creating an Effective Media / Public Affairs Campaign,” <i>First National Summit on the Advancement of Girls in Math and Science</i> , Washington, D.C., May 15, 2006
38.		•	“The Engineer’s Role and Responsibility in Specifying HDPE Pipe,” <i>American Concrete Pipe Association Short Course</i> , Nashville, Tennessee, May 5, 2006
39.		•	“Ethics and Professionalism-Their Importance in the Oil and Gas Industry,” <i>Offshore Technology Conference</i> , Houston, Texas, May 1, 2006
40.	•		“Managing Risks on Defense Projects Using CPM Scheduling,” co-authored with Ed Blow, <i>Scheduling The Next Generation: Third PMI College of Scheduling Conference</i> , Orlando, Florida, April 23 - 26, 2006
41.		•	“Leadership, Stewardship and Control,” <i>9th Australian International Performance Management Symposium</i> , Canberra, Australia, March 1, 2006
42.		•	Profile of Patricia Galloway. Hatch, Sybil, “Changing Our World: True Stories of Women Engineers,” <i>American Society of Civil Engineers</i> , 2006
43.	•		“What Girls Want From Their Profession,” <i>Geo-Strata</i> , Volume 6, Issue 1, pp. 19 - 21, January / February 2006

Reference	Authored	Presented	<p style="text-align: center;"><i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i></p>
			44.
45.		•	“What it Takes to be a Leader,” <i>Evening with Industry; California Polytechnic State University</i> , San Luis Obispo, California, January 27, 2006
46.	•		“CPM Scheduling - How Industry Views Its Use,” <i>Cost Engineering: The AACE International Journal of Cost Estimation, Cost / Schedule Control, and Project Management</i> , January 2006
47.		•	“The Engineer’s Role and Responsibility in Specifying HDPE Pipe,” <i>American Concrete Pipe Association Short Course</i> , Las Vegas, Nevada, November 9, 2005
48.		•	“Building a Better Role Model,” <i>Continental Airline’s In-Flight Magazine</i> , November 2005 Issue
49.		•	Panelist, “Ground Breaking Women in Construction,” Los Angeles, California, September 21, 2005
50.	•		“The Engineer’s Role in Public Policy,” <i>Institution of Civil Engineers Sustainable Development Forum</i> , New York, New York, September 9, 2005
51.		•	“Engineering Educational Reform,” Panelist, <i>Curriculum Reform Leader’s Conference</i> , Purdue University, West Lafayette, Indiana, August 30, 2005
52.	•	•	“CPM Scheduling and How the Industry Views Its Use,” <i>Association for the Advancement of Cost Engineering International’s 49th Annual Meeting</i> , New Orleans, Louisiana, June 26 - 29, 2005
53.		•	Speaker, “CPM Scheduling - How Industry Views its Use,” <i>Second Annual PMI College of Scheduling Conference</i> , Scottsdale, Arizona, May 22 - 24, 2005
54.		•	“Bad Idea. You’ll Flunk Out.” <i>Time Magazine</i> , Science Section, First Person: Pat Galloway, Authored by Dierdre Van Dyk, March 7, 2005 Issue
55.		•	“Leadership,” <i>Visiting Professor, Special Lecture Series, Kochi University of Technology</i> , Kochi, Japan, November 22, 2004
56.	•	•	“Risk Management-Now More Than Ever,” Published Proceeding, <i>World Engineers’ Congress, Session C2. Sustainable Development of Mega-cities on Model of Transportation Structure, Model of Public Transportation First and so on</i> , Shanghai, China, November 2 - 5, 2004
57.		•	“Professionalism,” <i>Visiting Professor, Harbin University of Technology</i> , Harbin, China, November 1, 2004
58.		•	“America’s Infrastructure,” Live Media Radio and Television appearances in over 25 cities across the United States, October 2004
59.		•	“Leadership and Professionalism,” Opening Keynote Speaker, <i>Rebuilding Together Annual Convention</i> , Seattle, Washington, October 2004

Reference	Authored	Presented	<p><i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i></p>
			60.
61.	•	•	“The Mission of the Civil Engineer in the Movement of Globalization,” Vechellio Special Lecture Series, <i>Virginia Tech</i> , Blacksburg, Virginia, October 2004
62.		•	“Engineer for a Sustainable World,” Annual Convention Keynote Speaker, <i>Stanford University</i> , California, September 2004
63.		•	“What it Takes to Be a Leader,” <i>National Women in Construction Leadership Forum</i> , San Francisco, California, September 2004
64.	•		“Lest We Forget-The Engineering Heroes,” <i>American Society of Civil Engineers, ASCE News</i> , September 2004
65.	•		“What Do Dmitrov, Russia, and a Civil Engineer’s Dream Have in Common?,” <i>American Society of Civil Engineers, ASCE News</i> , August 2004
66.	•		“Engineers Laugh at Lawyers and Legal Issues, but Should They?,” <i>American Society of Civil Engineers, ASCE News</i> , July 2004
67.		•	“Leadership and Professionalism,” <i>Boeing Corporation</i> , Seattle, Washington, July 2004
68.	•		“Governance Restructuring: Leading ASCE into the Future,” <i>American Society of Civil Engineers, ASCE News</i> , June 2004
69.	•		“Problems in Underground Construction: Lessons Learned from Failures and Methods Developed for Success,” co-authored with M. Petrov, Proceedings, Underground Space for Sustainable Urban Development, <i>ITA-AITES 2004 World Tunnel Congress</i> , Singapore, May 2004
70.	•		“Emily, Amelia, et. al: Who Are These Women And Why Should You Care?,” <i>American Society of Civil Engineers, ASCE News</i> , May 2004
71.		•	“The Love for Amelia Earhart and the Undying Quest for her Discovery,” <i>Zonta Awards Luncheon</i> , Albany, New York, May 2004
72.		•	“Extraordinary Stories of Women in Engineering,” <i>National Academy of Engineering</i> , May 3, 2004
73.		•	Panelist, “How to Become a Leader,” Women in Engineering Leadership Institute (WELI) Leadership Summit, <i>University of Connecticut</i> , Windsor, Connecticut, May 2004
74.		•	Panelist, “Rising to Lead,” Women’s Leaders Tour, <i>Advancement of Technology for Women (ATW)</i> , Albany, New York, Austin, Texas; San Jose, California, April - May 2004
75.		•	Presenter, “Innovation-Engineering A Better Engineer for Today’s Workforce,” <i>Construction Innovation Forum</i> , NOVA Awards Dinner, Dearborn, Michigan, April 2004

Reference	Authored	Presented	<p style="text-align: center;"><i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i></p>
			76.
77.		•	Keynote Speaker, “Does Scheduling Make Any Sense in Today’s World?” <i>On the Road to Better Scheduling-PMICOS Conference</i> , Montreal, Canada, April 25 - 28, 2004
78.		•	“CPM Current Trends in Education: A Comparative Study Between Europe, Asia and North America,” <i>On the Road to Better Scheduling-PMICOS Conference</i> , Montreal, Canada, April 25 - 28, 2004
79.		•	“PMI Scheduling Practice Standard Panel,” <i>On the Road to Better Scheduling-PMICOS Conference</i> , Montreal, Canada, April 25 - 28, 2004
80.		•	“Engineering Marvels-Seven Modern Engineering Wonders of the World,” Co-host to <i>ABC / Discovery Channel Television Series</i> , April, 2004
81.	•		“Is Our Perspective Truly Global?” <i>American Society of Civil Engineers, ASCE News</i> , April 2004
82.	•		“ASCE’s Institutes: Inclusive or Divisive,” <i>American Society of Civil Engineers, ASCE News</i> , March 2004
83.	•		“Bachelor’s Plus, The Rationale for ‘Raising the Bar’ in Engineering Education,” <i>Licensure Exchange</i> , Publication of National Council of Examiners for Engineering and Surveying, Clemson, South Carolina, March 2004
84.	•		“Professionalism-Have We Forgotten?,” <i>American Society of Civil Engineers, ASCE News</i> , February 2004
85.	•		“Public Policy: Friend or Foe in Advancing the Civil Engineering Profession,” <i>American Society of Civil Engineers, ASCE News</i> , January 2004
86.		•	Keynote Speaker, “The Engineers Role in Public Policy, Globalization and Ethics and Professionalism,” <i>ASCE Annual Leadership Conference</i> , New Orleans, Louisiana; New York, New York; Portland, Oregon; Chicago, Illinois, January - March 2004
87.	•		“Our Enthusiasm Can Be Persuasive,” <i>American Society of Civil Engineers, ASCE News</i> , December 2003
88.		•	Keynote Speaker, “Ethics and Professionalism,” <i>Tau Beta Pi Annual Awards and Induction Dinner at the University of Florida</i> , December 2003
89.		•	Moderator, “The Impacts to Public Contracting in a Post 9 / 11 Environment,” Luncheon Panel, <i>Construction Super Conference</i> , San Francisco, California, December 2003
90.	•		“Faculty Licensure-Will it Better the Profession?” <i>American Society of Civil Engineers, ASCE News</i> , November 2003
91.		•	“Roles and Responsibilities of a Board Director,” <i>ASCE Board Orientation</i> , Nashville, Tennessee, November 2003

Reference	Authored	Presented	<p style="text-align: center;"><i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i></p>
			92.
93.		•	“Leaders and Leadership,” Visiting Professor, Special Lecture Series, <i>Kochi University of Technology</i> , Kochi, Japan, November 20, 2003
94.	•	•	“CPM Scheduling-Its Importance in Monitoring and Demonstrating Construction Progress,” published Proceedings, <i>Japan Society of Civil Engineers, JSCE First International Symposium on Construction and Project Management-Human Resources Development under Globalization</i> , Tokyo, Japan, October 16 - 17, 2003
95.	•	•	“Mission of the Civil Engineer in the Movement of Globalization,” published Proceedings, <i>Japan Society of Civil Engineers, JSCE First International Symposium on Construction and Project Management-Human Resources Development under Globalization</i> , Tokyo, Japan, October 16 - 17, 2003
96.	•		“Mission of the Civil Engineer in the Movement of Globalization,” <i>ASCE Journal of Leadership and Management in Engineering</i> , Journal Issue 3, Volume 3, pp. 122 - 127, July 2003
97.		•	Keynote Speaker, “Ethics and Professionalism,” <i>Society of American Military Engineers Annual Conference</i> , Seattle, Washington, May 2003
98.	•	•	“Mission of the Civil Engineer in the Movement of Globalization,” Visiting Professor, <i>Kochi University of Technology</i> , Japan, November 2003; Michigan Tech University, Houghton, Michigan, January 16, 2003
99.	•	•	“Basic Project Execution Risk Management,” co-authored with J. Dignum, Proceedings, <i>North American Tunneling 2002 Conference</i> , Seattle, Washington, May 18 - 22, 2002
100.		•	Panelist, “Using Risk Management Techniques to Improve the Return on Investment,” <i>The Global Construction Superconference</i> , London, United Kingdom, November 5 - 6, 2001
101.		•	Presenter, “Risk Assessment & Management,” <i>Foster Wheeler Law Department Conference</i> , Warren, New Jersey, October 23 - 24, 2001
102.	•	•	“The Ubiquitous Requirement of Performing to High International Standards,” co-authored with K. Nielsen, published Proceedings, <i>The Second Civil Engineering Conference in the Asian Region</i> , Tokyo, Japan, April 16 - 18, 2001
103.		•	Panelist, “Intellectual Honesty in Proving Delay,” <i>Federal Board of Contract Appeals</i> , Hilton Alexandria Mark Center, Alexandria, Virginia, April 3, 2001
104.	•		“Innovative Benefits In a Small Consulting Firm,” <i>ASCE Journal of Leadership and Management in Engineering</i> , Winter 2001, Volume 1, Number 1, pp. 45 - 47
105.		•	Moderator, “High Heels are Replacing Hard Hats in the Boardroom,” <i>Construction Superconference</i> , The Fairmont Hotel, San Francisco, California, December 8, 2000

DR. PATRICIA D. GALLOWAY

Reference	Authored	Presented	<i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i>
106.		•	Moderator, “Conception to Birth of a Project,” <i>Infrastructure 2000</i> , San Francisco, California, June 7, 2000
107.	•		“Leadership: Women’s Role in Engineering,” <i>A Civil Engineered World, a publication of ASCE’s International Affairs Department</i> , Volume 13, Issue 1, March 2000
108.		•	Keynote Speaker, “Breaking Through the Glass Ceiling,” <i>HDR Women’s Forum 2000</i> , Embassy Suites, Kansas City, Missouri, March 31, 2000
109.	•		“Adjust Work Arrangements to Entice, Retain Professionals,” <i>Engineering News Record</i> , Viewpoint Column, January 3 - 10, 2000
110.		•	The Industry Forum for Contractors, Owners and Their Attorneys, “The Nielsen-Wurster Group Examines the Risks That Must be Recognized and Managed by Owners and Contractors in a Lump Sum, EPC Project,” prepared by William K. Kerivan, presented by Patricia D. Galloway and Marianne C. Ramey, <i>The 14th Annual Construction Industry Networking Nirvana, The Millennium Construction Superconference</i> , The Fairmont Hotel, San Francisco, California, December 9 - 10, 1999
111.		•	“Innovative Benefits in a Small Consulting Firm,” <i>1999 ASCE Civil Engineering Conference and Exposition</i> , Charlotte Convention Center, Charlotte, North Carolina, October 17 - 20, 1999
112.	•	•	“Managing the Unknowns in Restarting Projects,” <i>Inter-Pacific Bar Association Ninth Annual Meeting and Conference</i> , Shangri-La Hotel, Bangkok, Thailand, April 30 - May 4, 1999
113.		•	Panel Moderator, “Dealing with Risks on Nuclear Waste Sites,” <i>The Environmental Superconference</i> , Washington, D.C., April 28 - 29, 1999
114.		•	“Utilities Serving Our Needs: US Experience in Serving Its Communities,” <i>National Engineering Forum-Energy, Water and Telecommunications</i> , Cooma, NSW, Australia, April 21, 1999
115.		•	Panel Moderator, “Minimizing Risk in Design / Build Projects,” <i>Construction Superconference</i> , San Francisco, California, December 10 - 11, 1998
116.		•	Panel Moderator, “Management of Construction Risk on Infrastructure Projects in Latin America,” <i>The Latin American Market, The Fourth Annual Conference</i> , Turnberry Isle Resort & Club, Aventura, Florida, November 17 - 19, 1998
117.	•	•	“Analyzing Schedule Delay,” <i>Minimizing Risks in Construction Projects and Resolving Construction Disputes</i> , Hong Kong, September 28 - 29, 1998
118.	•	•	“Project Controls and Their Significance on International Projects,” <i>AusAID</i> , Canberra, Australia, August 21, 1998
119.	•	•	“Delivering a Successful Project,” <i>Worldwide Infrastructure Partnerships</i> , New York, New York, June 24, 1998
120.		•	In-House Training Seminar, “Project Risk Management,” <i>Panama Canal Commission</i> , Panama, March 9 - 12, 1998

Reference	Authored	Presented	<p style="text-align: center;"><i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i></p>
			121.
122.		•	Panel Moderator, “The Multi-Billion Dollar Issue Facing the Nuclear Power Industry: Decommissioning Versus Life Extension,” <i>The Future of the US and International Environmental Industry</i> , Washington, D.C., November 10 - 12, 1997
123.	•	•	“Delay: Use of CPM Schedules for Concurrency, Allocation, Proof, and Window Analysis,” Proceedings, <i>Hurry Up and Slow Down: Dealing with Delays in Construction</i> , American Bar Association Forum on the Construction Industry Conference, New York, New York, January 23, 1997
124.	•	•	“The Contractor’s Right to Finish Early,” Proceedings, <i>Hurry Up and Slow Down: Dealing with Delays in Construction</i> , American Bar Association Forum on the Construction Industry Conference, New York, New York, January 23, 1997
125.	•	•	“Harmonizing Japanese and US Practices for Effective Project Management,” <i>Taisei Corporation M.I.T. Conference</i> , Tokyo, Japan, November 1, 1996
126.	•	•	“Employing Effective Project Management to Achieve Project Success,” <i>Taisei Corporation P.M. Conference</i> , Tokyo, Japan, October 31, 1996
127.	•	•	“Delay: Use of CPM Schedules for Concurrency, Allocation, Proof, and Window Analysis,” <i>Taisei Corporation P.M. Conference</i> , Tokyo, Japan, October 31, 1996
128.		•	Co-presenter, “Panel of Experts-Specific Risks to Consider,” <i>World Conference on Construction Risk III</i> , Paris, France, April 25 - 26, 1996
129.	•	•	“Tricks of the Trade New Uses and Misuses of CPM Scheduling,” BCQS Project Managers Chartered Quantity Surveyors, The Nielsen-Wurster Group Construction Management Consultants, <i>Whitman Breed Abbott & Morgan Construction Attorneys’ Seminar on Controlling Construction Risk and Conserving Your Cash</i> , Radisson Hotel, Grand Cayman Islands, February 26, 1996
130.	•	•	“Risk Management Analysis Techniques for Projects With Significant Environmental Issues,” co-authored with K. Nielsen, Proceedings, <i>ASCE-SAS Second Regional Conference and Exhibition</i> , Beirut, November 16 - 18, 1995
131.	•	•	“Privatization and the Use of IVHS in the 1990s,” Proceedings, <i>ASCE Transportation Conference on IVHS</i> , co-authored with K. Nielsen and M. Ramey, San Diego, California, October 1995
132.	•	•	“So Mrs. Roebling-What’s Your Side of the Story?” a one-woman play, <i>1995 ASCE Annual Convention</i> , San Diego, California, October 1995
133.		•	Co-presenter, “Panel of Experts-Specific Risks to Consider,” <i>World Conference on Construction Risk II</i> , Singapore, October 5 - 6, 1995

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			134.
135.	•	•	“CPM Schedule Delay: Window Analysis, Concurrency, and Proof,” co-authored with K. Nielsen and M. Ramey, <i>Nielsen-Wurster Seminar on Emerging Risks in Construction: How to Minimize, Manage and Avoid Disputes</i> , New Orleans, Louisiana, May 10 - 12, 1995; Indian Wells, California, October 19 - 21, 1994
136.	•	•	“The Contractor’s Right to Finish Early,” <i>Nielsen-Wurster Seminar on Emerging Risks in Construction: How to Minimize, Manage and Avoid Disputes</i> , New Orleans, Louisiana, May 10 - 12, 1995; Indian Wells, California, October 19 - 21, 1994
137.	•	•	“Project Risk Management-A Necessity for Today’s Engineered Projects,” <i>ASCE-India Section</i> , Calcutta, India, January 30, 1995
138.		•	Co-presenter, “Construction Management and Administration, Construction Claims and Project Risk Management,” In-House Training Seminar, <i>Pt. Wijaya Karya</i> , Jakarta, Indonesia, January 23 - 27, 1995
139.	•	•	“The Utilization of Computer Technology in the Presence of Evidence,” co-authored with Pamela Moon, <i>La Gestion de los Asuntos Mercantiles en los Juzgados de Primera Instancia</i> , Madrid, Spain, October 26, 1994
140.	•	•	“New Risks with CPM Scheduling-Tricks of the Trade,” <i>Nielsen-Wurster Seminar on Emerging Risks in Construction: How to Minimize, Manage and Avoid Disputes</i> , New Orleans, Louisiana, May 10 - 12, 1995; Indian Wells, California, October 19 - 21, 1994
141.	•	•	“A New Game Plan for Intelligent Risk Identification / Allocation,” <i>Charting the Course to the Year 2000-Together!</i> , DART, Hyatt-Lexington, Lexington, Kentucky, October 16 - 19, 1994
142.	•	•	“Project Risk Management-A Necessity for Today’s Engineered Projects,” <i>Proceedings of the American Society of Civil Engineers Saudi Arabia Section First Regional Conference and Exhibition on Advanced Technology in Civil Engineering</i> , Manama, Bahrain, September 18 - 20, 1994
143.		•	“Civil Engineering with Stars and Stripes,” presented at a joint <i>ASCE / ICE Meeting</i> , Epsom, United Kingdom, July 5, 1994
144.		•	Co-presenter, “Project Manager nei settore delle costruzioni,” Visiting Professor, <i>University of Bologna - SINNEA</i> , Bologna, Italy, May 25 - 27, 1994
145.	•	•	“Project Risk Management-A Necessity for Today’s Engineered Projects,” <i>Tarumanagara University</i> , Jakarta, Indonesia, May 2, 1994
146.	•	•	“CPM Schedule Delay: Window Analysis, Concurrency, and Proof,” co-authored with K. Nielsen and M. Ramey, <i>World Conference on Construction Risk</i> , Paris, France, April 28 - 29, 1994

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147.		•	Co-presenter, “Project Risk Management,” <i>Panama Canal Commission</i> , Panama, April 20 - 22, 1994
148.	•		“Anticipating Problems: Project Risk Assessment and Project Risk Management,” co-authored with K. Nielsen, Chapter 6, “ <i>Collaboration Management, New Project and Partnering Techniques</i> ,” edited by H. Schaughnessy, John Wiley & Sons 1994
149.	•	•	“Disruption / Productivity Cost Claim Analyses,” co-authored with K. Nielsen, <i>Construction Disputes-Analysis and Management</i> , Winnipeg, Canada, November 1 - 5, 1993
150.	•	•	“CPM Scheduling Delay: Window Analysis, Concurrency and Proof,” co-authored with K. Nielsen and M. Ramey, <i>Construction Disputes-Analysis and Management</i> , Winnipeg, Canada, November 1 - 5, 1993
151.		•	Co-presenter, “Schedule Delay Analysis & Early Completion,” <i>Nielsen-Wurster Seminar on Managing Risk and Minimizing Disputes in Construction Contracts</i> , Hilton Head Island, South Carolina, October 6 - 8, 1993
152.		•	Co-presenter, “Project Management for Design and Construction,” <i>Panama Canal Commission</i> , Panama, June 28 - July 2, 1993
153.		•	Co-presenter, “Schedule Delay Analysis,” <i>WASHTO Annual Conference</i> , Oklahoma City, Oklahoma, June 23 - 24, 1993
154.		•	Presenter, “Early Completion Claim Analysis and Expert Delay Analysis,” <i>The Nielsen-Wurster Seminar on Construction Issues Facing the Public Transportation Industry</i> , Sacramento, California, April 28 - 30, 1993
155.	•		“Going International: Profit or Peril?” Interview with Patricia D. Galloway, Executive Vice President, The Nielsen-Wurster Group, Inc., <i>Worldwide Projects</i> , Spring 1993
156.	•	•	Co-presenter, “Utilizing an Expert Effectively in ADR,” <i>Resolving Disputes in International Construction Contracts through ADR</i> , Geneva, Switzerland November 12 - 13, 1992
157.	•	•	“International Construction Law-Opportunities and Risks in the ‘90s,” <i>The American Bar Association Forum on The Construction Industry</i> , Stouffer Mayflower Hotel, Washington, D.C., November 5 - 6, 1992
158.	•	•	Co-Presenter, “International Contract Administration Issues: Project Documentation, Dispute Proofs, Programmes and Productivity,” <i>Training Workshop on International Construction Contracts and Contractor Claims</i> , The International Development Law Institute (IDLI), Rome, Italy for the Finnish International Development Agency (FINNIDA), Helsinki, Finland, October 13 - 16, 1992
159.	•	•	“Analyzing Scheduling Delays by Use of Window Analysis,” <i>The Nielsen-Wurster Seminar on Managing and Resolving Construction Disputes</i> , Lake Tahoe, Nevada, March 1992; San Diego, California, April 1992; Key West, Florida, October 1992

Reference	Authored	Presented	<i>PATRICIA D. GALLOWAY</i> <i>Technical Papers and Presentations</i>
160.	•	•	“Contract Administration,” Masters Degree Course, SINNEA, <i>Instituto Di Studi Per La Cooperazione E La Piccola E Media Impresa</i> , Bologna, Italy, September 25, 1992
161.	•	•	“Project Risk Management-Achieving Goals,” co-authored with K. Nielsen, Proceedings, <i>11th INTERNET World Congress on Project Management</i> , Florence, Italy, June 16 - 19, 1992
162.	•	•	“Effective Construction Contract Administration,” <i>University of Wisconsin-Madison, College of Engineering</i> , Madison, Wisconsin, April 7 - 10, 1992
163.	•	•	“International Contract Administration Issues: Project Documentation, Dispute Proofs, Programmes, Productivity,” co-authored with K. Nielsen, <i>IDLI Conference</i> , Rome, Italy, December 12, 1991
164.	•	•	“Overcoming Schedule Delay-Analyzing and Resolving this Project Nemesis,” co-authored with K. Nielsen, <i>IIR National Construction Conference</i> , Sydney, Australia, August 28 - 29, 1991
165.		•	Co-presenter, “Inefficiency Seminar,” <i>Florida Department of Transportation</i> , Deland, Florida, August 1991
166.	•	•	“International Construction Dispute Proofs,” co-authored with K. Nielsen, <i>Nordnet '91 Transactions: The Practice and Science of Project Management</i> , Trondheim, Norway, June 3 - 5, 1991
167.		•	Co-presenter, “Advanced CPM Scheduling,” <i>Pennsylvania Department of Transportation</i> , West Palm Beach, Florida, May 1991
168.	•	•	“Pricing and Proving Contractor Claims for Changes in Scope and Unforeseen Conditions,” Proceedings, <i>Construction Litigation Superconference</i> , Andrews Conferences, Inc., April 11 - 12, 1991
169.	•		“Computerized Document Control-The Expert Witness's View,” co-authored with Pamela Moon, <i>The International Construction Law Review Journal</i> , Volume 8, Part 2, April 1991
170.		•	Co-presenter, “Contract Administration,” <i>West Virginia Division of Energy</i> , Charleston, West Virginia, March 1991
171.	•	•	“Pricing and Proving Contractor Claims for Changes in Scope and Unforeseen Conditions,” Proceedings, <i>Construction Litigation Superconference</i> , Andrews Conferences, Inc., December 6 - 7, 1990
172.	•	•	“Contract Administration,” Proceedings, <i>Arbitration and Mediation Construction Claims Seminar, American Arbitration Association</i> , Charleston, West Virginia, November 1, 1990
173.	•	•	“Evaluating the Contractor’s Right to Finish Early,” co-authored with K. Nielsen, <i>Project Management Institute Book of Proceedings</i> , Calgary, Alberta, Canada, October 16, 1990
174.	•		“Concurrent Schedule Delay in International Contracts,” co-authored with K. Nielsen, <i>The International Construction Law Review</i> , Volume 7, Part 4, pp. 386 - 401, October 1990

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175.	•	•	“Schedule Delay Concurrency Issue Analysis & Proof,” co-authored with K. Nielsen, Proceedings, <i>International Cost Congress</i> , Paris, France, April 1990
176.		•	Co-presenter, “CPM Scheduling,” <i>Kentucky Department of Transportation</i> , Lexington, Kentucky, December 1989
177.		•	“CPM Scheduling Seminar,” <i>Reale, Fosse & Perry, P.C.</i> , Pittsburgh, Pennsylvania, November 1989
178.		•	“Motivating the Engineer,” <i>Project Management Institute, Delaware Chapter Meeting</i> , Wilmington, Delaware, October 1989
179.		•	Co-presenter, “Construction Dispute Seminar,” <i>Florida Department of Transportation</i> , Tallahassee, Florida, August 1989
180.	•	•	“Pricing, Proving and Calculating Construction Claims,” Proceedings, <i>Construction Litigation Superconference</i> , Andrews Conferences, Inc., April 6 - 7, 1989
181.		•	“Claims Avoidance Seminar,” <i>Loney Construction Co., Inc.</i> , Keene, New Hampshire, January 1989
182.		•	“Minimization of Claims Seminar,” <i>Weyerhaeuser Paper Company</i> , Jackson, Mississippi; Birmingham, Alabama, November 1988
183.	•	•	“Analyzing Schedule Delays By Use of Window Analyses,” <i>The Nielsen-Wurster Group Construction Disputes Seminar</i> , San Antonio, Texas, April 1991; New Orleans, Louisiana, April 18 - 20, 1988
184.	•	•	“Analyzing Schedule Delays By Use of Window Analyses,” <i>The Nielsen-Wurster Group Construction Disputes Seminar</i> , San Antonio, Texas, April 1991; New Orleans, Louisiana, April 18 - 20, 1988
185.	•	•	“Defining Scheduling,” <i>The Nielsen-Wurster Group Construction Disputes Seminar</i> , New Orleans, Louisiana, April 18 - 20, 1988
186.	•	•	“Construction Delay Analysis,” <i>The Nielsen-Wurster Group Construction Disputes Seminar</i> , New Orleans, Louisiana, April 18 - 20, 1988
187.	•	•	“The 5-Year Living Schedule,” co-authored with R. Cochran, <i>American Association of Cost Engineers Annual Convention</i> , Atlanta, Georgia, June 1987
188.		•	“Construction Claims Prevention and Analysis,” Visiting Professor, <i>University of Wisconsin</i> , Madison, Wisconsin, May 1985, June 1986 and May 1987
189.	•	•	“Pricing Contractor’s Claims,” <i>American Society of Civil Engineers Course</i> , “ <i>Construction Claims</i> ,” Anchorage, Alaska, March 1986; San Francisco, California, May 1987

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190.	•	•	“Combining PURPA, Prudence and Avoided Cost Rate Design; A New Cost Engineering Environment,” co-authored with K. Nielsen, Proceedings, <i>American Association of Cost Engineers 9th Annual Mid-Winter Symposium Transactions</i> , San Francisco, California, February 1987. Reprinted, <i>Cost Engineering</i> , Volume 31, No. 1, page 16, January 1989
191.		•	“Scheduling Super Projects,” Visiting Professor, <i>University of Wisconsin</i> , Madison, Wisconsin, January 1987
192.	•		“Preparing a Project Control Specification,” co-authored with K. Nielsen, <i>Proceedings of Eleventh Annual PROJECT / 2 Utility Users Group Conference</i> , Birmingham, Alabama, November 17 - 19, 1986
193.	•		“Preparing for the Utilities’ Future-Managing the Prudence Issues,” co-authored with K. Nielsen, <i>Electric Potential</i> , Volume 2, No. 4, July - August 1986
194.	•	•	“Utilities Forced Delays-Controllable or Uncontrollable,” co-authored with K. Nielsen, Proceedings, <i>American Association of Cost Engineers Annual Convention</i> , Chicago, Illinois, June 1986
195.	•	•	“Preparing for Utilities Future-An ‘Attack Plan’ for Minimizing Disallowable Costs In Outage and Future Capital Construction,” co-authored with K. Nielsen, <i>American Association of Cost Engineers, 8th Annual Mid-Winter Symposium Transactions</i> , New Orleans, Louisiana, February 1986; <i>Project 2, 5th Annual Outage Symposium Proceedings</i> , Cambridge, Massachusetts, May 1986
196.	•		“Second-Guessing the Engineer,” co-authored with K. Nielsen, <i>Civil Engineering, American Society of Civil Engineers</i> , November 1985
197.	•		“Utility Prudence Time Impact Evaluation,” <i>American Association of Cost Engineers Annual Convention Transactions</i> , Denver, Colorado, July 1985
198.	•		“Failure Proof Your Projects,” co-authored with K. Nielsen, <i>Consulting Engineer</i> , June 1985
199.		•	Co-presenter, “Electric Utility Capital Project Prudence Issues,” <i>National Association of Regulated Utility Commissioners Annual Meeting</i> , Hartford, Connecticut, May 1985
200.	•	•	“Avoiding Lengthy and Costly Litigation by Negotiation Resolution Methods,” co-authored with K. Nielsen, Proceedings, <i>American Society of Civil Engineers Spring Convention</i> , Denver, Colorado, April 1985
201.		•	Co-presenter, “Prudence Concepts,” <i>American Association of Cost Engineers</i> , Ramapo Section, April 1985
202.	•	•	“The Prudence Management Audit: A New Challenge For the Civil Engineer,” co-authored with K. Nielsen, <i>American Society of Civil Engineers Spring Convention</i> , Denver, Colorado, April 1985

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203.	•		“Proof Development for Construction Litigation,” co-authored with K. Nielsen, <i>The American Journal for Trial Advocacy</i> , Volume 7, No. 3, Cumberland School of Law of Samford University, Birmingham, Alabama, Summer 1984; <i>Yearbook of Construction Articles</i> , Volume 4, Federal Publications, 1985
204.	•	•	“Window Analysis: An Innovative Concept to Schedule Delay Analysis,” co-authored with K. Nielsen, <i>Project Management Institute</i> , Philadelphia, Pennsylvania, October 1984
205.	•	•	“Defining Scheduling,” <i>The Nielsen-Wurster Group Construction Dispute Proofs Seminar Handbook</i> , Conference, New Orleans, Louisiana, 1988 and 1989; Seattle, Washington, 1987; Lake Buena Vista, Florida, May 18 - 20, 1983; Minneapolis, Minnesota and Denver, Colorado, April 1984; Tampa, Florida and Boston, Massachusetts, May 1984
206.	•	•	“The Use of Schedules in Claim Preparation,” <i>The Nielsen-Wurster Group Construction Dispute Proofs Seminar Handbook</i> , Conference, New Orleans, Louisiana, 1988 and 1989; Seattle, Washington, 1987; Lake Buena Vista, Florida, May 18 - 20, 1983; Minneapolis, Minnesota and Denver, Colorado, April 1984; Tampa, Florida and Boston, Massachusetts, May 1984
207.	•	•	“The Schedule, Its Use and Development,” <i>The Nielsen-Wurster Group Scheduling Seminar Handbook</i> , Conference, Atlanta, Georgia, October 1983
208.	•	•	“Schedule Delay: A Productivity Analysis,” co-authored with K. Nielsen, and J. Leverette, <i>Project Management Institute National Convention Proceedings</i> , Houston, Texas, October 1983
209.		•	Session Moderator, “Super Projects, Case Studies,” <i>ASCE Spring Convention</i> , Philadelphia, Pennsylvania, May 1983
210.	•	•	“Performance Audits,” co-authored with D. Law, Proceedings, <i>Project Management Institute Symposium</i> , Toronto, Ontario, Canada, October 1982
211.	•	•	“The 2-Engineer Family,” Proceedings, <i>National Convention, Society of Women Engineers</i> , Detroit, Michigan, June 1982
212.	•	•	“Scheduling the Super Projects,” preprint, <i>Engineering and Construction Projects, The Emerging Management Roles, ASCE Specialty Conference</i> , New Orleans, Louisiana, March 17 - 19, 1982
213.	•	•	“Schedule Control for CPM Projects,” co-authored with K. Nielsen, <i>Journal of the Construction Division, Proceedings of the Society of Civil Engineers</i> , Volume 107, No. CO2, June 1981
214.		•	Session Moderator, “Project Management Control,” <i>ASCE Spring Convention</i> , New York, New York, May 1981
215.		•	Co-chairman, Moderator, “Reducing Risks and Liability through Better Specifications and Inspection,” <i>ASCE Specialty Conference</i> , San Diego, California, Spring 1981

PATRICIA D. GALLOWAY
Representative Engagement Experience

DR: Dispute Resolution **RM:** Risk Management **MC:** Management Consulting
Other: Project Management, Engineering Design, Construction Supervision

Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Seabrook Unit 2 Nuclear Generating Station, United States (New Hampshire)			•	
Power	Nuclear	Cooper / Lincoln Electric, United States (Iowa)	•			
Power	Nuclear	Millstone Unit 3, United States (Hartford, Connecticut)			•	
Power	Nuclear	PSE&G Stockholders Derivative Suits	•			
Power	Nuclear	Cooper Nuclear Station, United States (Des Moines, Iowa)	•			
Power	Nuclear	Connecticut Yankee Nuclear Plant, United States (Connecticut)			•	
Power	Nuclear	Millstone Point Nuclear Generating Station, Units 1, 2 and 3, United States (Waterford, Connecticut)			•	
Power	Nuclear	Indian Point Nuclear Power Plant Unit 3, United States (New York)			•	
Power	Nuclear	Iowa Power Cooper, United States (Iowa)			•	
Power	Nuclear	Texas Utilities Stockholder Litigation, United States (Texas)			•	
Power	Nuclear	Salem and Hope Creek Nuclear Power Plants, United States (New Jersey)			•	
Power	Nuclear	South Texas Nuclear Plant, United States (Texas)			•	
Power	Nuclear	Trojan Nuclear Power Plant, United States (Oregon)			•	
Power	Nuclear	Shoreham Nuclear Plant, United States (Long Island, New York)			•	

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Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Nine Mile Power Plant, United States (New York)			•	
Power	Nuclear	Bellefonte Nuclear Power Plant, United States (Jackson County, Alabama)			•	
Power	Nuclear	Millstone 2 Nuclear Power Plant, Waterford, United States (Connecticut)			•	
Power	Nuclear	Cooper Nuclear Station, United States (Nebraska)			•	
Power	Nuclear	Washington Public Power Supply Nuclear Plants, United States (Washington)			•	
Power	Nuclear	Comanche Peak Steam Nuclear Electric Station, Units 1 & 2, United States (Texas)			•	
Power	Nuclear	Clinton Nuclear Generating Station, Decatur, United States (Illinois)			•	
Power	Nuclear	Pilgrim I Nuclear Power Plant, United States (Massachusetts)			•	
Power	Nuclear	Vogtle Nuclear Generating Station, United States (Waynesboro, Georgia)			•	
Power	Nuclear	Palo Verde Nuclear Generating Station, United States (Palo Verde, Arizona)			•	
Power	Nuclear	Perry Nuclear Generating Station, United States (Ohio)			•	
Power	Nuclear	Seabrook Nuclear Generating Station Unit 1, United States (New Hampshire)			•	
Power	Nuclear	Clinton Nuclear Generating Station, United States (Ohio)			•	

PATRICIA D. GALLOWAY
Representative Engagement Experience

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Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Millstone 3 Nuclear Generating Station, United States (Connecticut)			•	
Power	Nuclear	Waterford Unit 3, United States (Louisiana)			•	
Power	Nuclear	Vogtle 3 & 4, United States (Georgia)			•	
Power	Nuclear	Shoreham, United States (New York)			•	
Power	Nuclear	Hanford, United States (Washington)			•	
Power	Nuclear	Wolf Creek, United States (Kansas)			•	
Power	Nuclear	Maine Yankee, United States (Maine)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	La Paloma Combined Cycle Power Plant, United States (California)		•		
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Sacramento Municipal Utility District Cogen Plant, United States (California)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Marshall Islands Power Plant Demolition, United States Territory (Marshall Islands)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Paiton Units 1 & 2, Indonesia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Paiton Units 7 & 8, Indonesia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	JEA Northside, United States (FL)	•			

<p align="center">PATRICIA D. GALLOWAY <i>Representative Engagement Experience</i></p>						
<p>DR: Dispute Resolution Other: Project Management, Engineering Design, Construction Supervision</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
Industry	Type	Project Name	DR	RM	MC	Other
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Osbourne, Australia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Jiu Jiang Power Plant, China	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Scherer Fossil Power Plant, United States (Forsyth, Georgia)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Cleveland Electric Illuminating Company, United States (Cleveland, Ohio)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Jeffrey Energy Center, United States (Kansas)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Wolf Hollow Plant, United States (Texas)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Covert Power Plant, United States (Michigan)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Dearborn Industrial Generation Project, United States (Michigan)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Illinois Power Company, United States (Illinois)		•		
Power	Cogeneration/ Combined Cycle/Fossil Fuel	SMUD Cosumnes Power Plant and Pipeline Project, United States (California)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Fossil Power Plant, Bulgaria	•			
Power	Geothermal	Wayang Windu Geothermal Power Project, Indonesia (Java)	•			

<p align="center">PATRICIA D. GALLOWAY <i>Representative Engagement Experience</i></p>						
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<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Hydro	Casecnan Multipurpose Project II	•			
Power	Hydro	Xiaolangdi Dam, China	•			
Power	Hydro	Casecnan Multi-Purpose Project, Philippines (Northern Luzon)	•			
Power	Hydro	Cirata II, Indonesia	•			
Power	Hydro	Mill & Sulpher Creek Hydro Power Plant, United States (California)	•			
Power	Waste to Energy	Valorsul Waste-To-Energy Plant, Europe (Portugal)	•			
Power	Wind Power	Brazos Wind Farm, United States (Texas)	•			
Power	Wind Power	Caprock Wind Farm, United States (New Mexico)	•			
Infrastructure / Transportation	Roadways	Shawnee Mission Parkway, United States (Kansas)	•			
Infrastructure / Transportation	Roadways	KDOT Project, United States (Kansas)	•			
Infrastructure / Transportation	Roadways	151st Street Bridge Project, United States (Olathe, Kansas)	•			
Infrastructure / Transportation	Roadways	New Jersey Turnpike, Section 5B-3, United States (New Jersey)	•			
Infrastructure / Transportation	Roadways	City Link, Melbourne, Australia (Victoria)		•		
Infrastructure / Transportation	Roadways	Turnpike Operations Management System, United States (Florida)		•		

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Representative Engagement Experience

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Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Roadways	Texas Department Of Transportation Group 5 Matter, United States (Texas)	•			
Infrastructure / Transportation	Roadways	State Highway US 290 Travis County, United States (Texas)	•			
Infrastructure / Transportation	Roadways	Asphalt Resurfacing Project, Highway 9, United States (Allen, Nebraska)	•			
Infrastructure / Transportation	Roadways	Electronic Toll Collection System, United States (Florida)		•		
Infrastructure / Transportation	Roadways	Houston Ship Channel Cable-Stayed Bridge, United States (Baytown, Texas)	•			
Infrastructure / Transportation	Roadways	Blue Route Section 200	•			
Infrastructure / Transportation	Roadways	Kenton County Lexington-Covington Road, United States	•			
Infrastructure / Transportation	Bridges	Veteran’s Expressway, Tampa, United States (Florida)		•		
Infrastructure / Transportation	Bridges	Interstate 75, Kentucky (Lexington and Covington Road) United States (Kentucky)	•	•		
Infrastructure / Transportation	Bridges	Vancouver Millennium Sky Train Project, Canada (British Columbia)	•			
Infrastructure / Transportation	Bridges	Hillsborough Avenue Bridge, United States (Tampa, Florida)	•			
Infrastructure / Transportation	Bridges	Tsing Ma Bridge, China (Hong Kong)	•			
Infrastructure / Transportation	Bridges	Nairn Avenue Overpass Project, Canada (Manitoba)	•			
Infrastructure / Transportation	Bridges	New Smyrna Beach Bridge, United States (Florida)	•			

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Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Bridges	Hastings Bridge, Hastings, United States (Minnesota)	•			
Infrastructure / Transportation	Bridges	Post Tensioned Segmental Bridge, Bexar County, United States (Texas)	•			
Infrastructure / Transportation	Bridges	Interstate Highway Bridges, United States (Gary, Indiana)	•			
Infrastructure / Transportation	Bridges	Gloucester Inlet Bridge, United States (Massachusetts)	•			
Infrastructure / Transportation	Airports	Yosemite International Airport, United States (Fresno, California)	•			
Infrastructure / Transportation	Airports	Port of Seattle-Task 7, United States (Seattle, Washington)			•	
Infrastructure / Transportation	Airports	International Airport, Malaysia			•	
Infrastructure / Transportation	Airports	Kuala Lumpur International Airport, Malaysia (Kuala Lumpur)		•		
Infrastructure / Transportation	Airports	Indianapolis International Airport, United Airlines Maintenance Operation Center, United States (Indiana, Indianapolis)	•			
Infrastructure / Transportation	Telecommunication	AT&T Broadband, United States (Illinois, Missouri, Michigan)	•			
Infrastructure / Transportation	Telecommunication	TADRS (Tactical Air Defense Radar System), Australia (Melbourne)	•			
Infrastructure / Transportation	Rail	Pentagon City Subway Station, United States (Virginia)	•			
Infrastructure / Transportation	Rail	Rohr Transit Cars, United States (Washington, D.C.)	•			

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Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Rail	North Harlem To Brewster (Hudson Harlem Lines) Electrification Program, United States (New York)				•
Infrastructure / Transportation	Rail	London Crossrail Project, United Kingdom (London)		•		
Infrastructure / Transportation	Rail	Sound Transit, United States (Washington)	•			
Infrastructure / Transportation	Rail	Phoenix Light Rail Transit Line, United States (Arizona)		•		
Infrastructure / Transportation	Rail	Taisei-Metro Extension Project, Bulgaria (Sofia)		•		
Infrastructure / Transportation	Rail	Regional Fast Rail Project (RFRP), Australia (Victoria)		•		
Infrastructure / Transportation	Rail	Southern New Jersey Light Rail Transit System, United States (New Jersey)	•			
Infrastructure / Transportation	Rail	Singapore Mass Rail Transit, Singapore		•		
Infrastructure / Transportation	Rail	Toronto Transit Commission Subway Line Expansion, Canada (Toronto, Ontario)		•		
Infrastructure / Transportation	Rail	Shaw Subway Station, United States (Washington, D.C.)	•			
Infrastructure / Transportation	Rail	Stamford Railroad Station Stamford, United States (Connecticut)	•			
Infrastructure / Transportation	Seaport	Central Terminal Expansion Claim Review, United States (Washington)	•			
Infrastructure / Transportation	Seaport	Port of Seattle United States (Washington)			•	
Infrastructure / Transportation	Seaport	Port of Seattle, United States (Washington)	•			

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Industry	Type	Project Name	DR	RM	MC	Other
Infrastructure / Transportation	Seaport	Lahad Datu Port Expansion, Malaysia	•			
Infrastructure / Transportation	Seaport	Panama Canal Transfer Station, Panama Canal Zone	•			
Infrastructure / Transportation	Seaport	Riofil / Manila South Harbor Pier 5 Extension, Philippines	•			
Infrastructure / Transportation	Water Plant	Pinellas County Water System Pipeline, United States (Florida)	•			
Infrastructure / Transportation	Water Plant	Mount Hope Water Main Project, Panama	•			
Infrastructure / Transportation	Other	Upper Rouge Tunnel, United States (Detroit, Michigan)		•		
Infrastructure / Transportation	Other	City of Venice Floodgate Bid Review, Italy		•		
Infrastructure / Transportation	Other	Mill to Bull Creek Tunnel, United States (California)	•			
Infrastructure / Transportation	Other	Nunez Employment Discrimination Suit, United States (Texas)	•			
Infrastructure / Transportation	Other	Seattle Public Utilities (SPU) and SeaTran, United States (Washington)			•	
Infrastructure / Transportation	Other	Seattle Public Utilities (SPU) and SeaTran, United States (Washington)			•	
Infrastructure / Transportation	Other	Lief Erikson Tunnel, United States (Minnesota)	•			
Infrastructure / Transportation	Other	F/V Arctic Storm Ship Conversion, United States (Washington)	•			
Infrastructure / Transportation	Other	Deep Sea Drilling Ship, United States (Texas)	•			

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Industry	Type	Project Name	DR	RM	MC	Other
Industrial / Process	Chemical / Petrochemical	Palmetto Lime Facility, United States (Columbia, South Carolina)	•			
Industrial / Process	Chemical / Petrochemical	PET Production Plants, Argentina, Holland, Spain	•			
Industrial / Process	Chemical / Petrochemical	Zinc Recovery Plant, United States (California)	•			
Industrial / Process	Chemical / Petrochemical	FMC Baltimore Sulfentrazone Plant, United States (Maryland)	•			
Industrial / Process	Chemical / Petrochemical	Seraya Island Petrochemical Project, Singapore (Seraya Island)	•			
Industrial / Process	Oil / Gas	PML Project (Shinwha Claim) Singapore	•			
Industrial / Process	Oil / Gas	Minerva Project		•		
Industrial / Process	Oil / Gas	Combisa's Cantarell EPC 22 Contract Claim Effort, United States (Texas)	•			
Industrial / Process	Oil / Gas	GASYRG (Willbros)	•			
Industrial / Process	Oil / Gas	Foster Wheeler SINCOR Coker Project	•			
Industrial / Process	Oil / Gas	Luberef Refinery Project, Saudi Arabia	•			
Industrial / Process	Oil / Gas	PEMEX Demineralization Plant, Mexico (Tula, Hidalgo)	•			
Industrial / Process	Oil / Gas	Perez Companc-Norcen-Corod Oritupano-Leona Oil Fields, Eastern Venezuela	•			
Industrial / Process	Oil / Gas	Altona Refinery Expansion, Australia (Melbourne)	•			
Industrial / Process	Oil / Gas	INCO 92 Project, Gas Recompression Plants, Venezuela (Lake Maracaibo)	•			

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<p>DR: Dispute Resolution Other: Project Management, Engineering Design, Construction Supervision</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
Industry	Type	Project Name	DR	RM	MC	Other
Industrial / Process	Oil / Gas	Ahmadi Oil Distribution Facility, Kuwait	•			
Industrial / Process	Waste Water	Passaic Valley Sewerage Commissioners Thickening Centrifuge Facility, United States (New Jersey)		•		
Industrial / Process	Pulp & Paper Mill	Chemical Recovery System At Pulp & Paper Mill, United States (Columbus, Mississippi)	•			
Industrial / Process	Microchip	Sperry Micro-Chip Manufacturing & Research Facility, United States (Minnesota)	•			
Industrial / Process	Pipelines	Sakhalin Pipeline Project, Russia (Moscow)	•			
Industrial / Process	Pipelines	Bolivia Pipeline, South America (Bolivia)	•			
Industrial / Process	Pipelines	Bombax Pipeline Project, Caribbean (Trinidad, Tobago)		•		
Industrial / Process	Pipelines	HBJ Gas Pipeline, India	•			
Industrial / Process	Wastewater / Environmental	Milwaukee Water Pollution Abatement Program, United States (Wisconsin)				•
Industrial / Process	Wastewater / Environmental	South Bay Wastewater Treatment Plant, California, United States (San Diego)	•			
Industrial / Process	Wastewater / Environmental	Babylon Solid Waste Recovery Plant	•			
Industrial / Process	Wastewater / Environmental	Hamilton Wastewater Treatment Plant, United States (New York)	•			
Industrial / Process	Wastewater / Environmental	Rockland County Sewer District Treatment Plant, United States (New York)	•			

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DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Industrial / Process	Wastewater / Environmental	Secondary Facilities At Newark Bay Pumping Station, United States (New Jersey)		•		
Industrial / Process	Wastewater / Environmental	Bowery Bay Wastewater Treatment Plant, United States (New York)	•			
Industrial / Process	Wastewater / Environmental	St. Joseph Wastewater Treatment Plant, United States (Missouri)	•			
Industrial / Process	Wastewater / Environmental	Bergen Point Wastewater Treatment Plant, United States (New York)	•			
Industrial / Process	Wastewater / Environmental	Coney Island Water Pollution Control Project, United States (New York)				•
Industrial / Process	Wastewater / Environmental	Water Treatment Plant, United States (Georgia)	•			
Industrial / Process	Wastewater / Environmental	Weyerhaeuser Fish Hatchery, United States (Medford, Oregon)		•		
Industrial / Process	Wastewater / Environmental	Asbestos White Paper Development-Evert & Weathesby	•			
Industrial / Process	Wastewater / Environmental	Foster Wheeler Asbestos Litigation, United States (New Jersey)	•			
Industrial / Process	Wastewater / Environmental	Wastewater Treatment Plant, Canada (Manitoba)	•			
Industrial / Process	Iron / Steel Manufacturing	POSVEN Hot Briquette Iron Plant, Venezuela (Puerto Ordaz)	•			
Industrial / Process	Iron / Steel Manufacturing	Kvaerner-IPSCO Steel Plant		•		
Industrial / Process	Iron / Steel Manufacturing	Delta Brands Subcontract PPPL and ARP Expediting Services			•	

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Industry	Type	Project Name	DR	RM	MC	Other
Industrial / Process	Iron / Steel Manufacturing	IPSCO Mini-Mill, United States (Iowa)	•			
Industrial / Process	Iron / Steel Manufacturing	NKK Steel Continuous Galvanizing Project, United States (Michigan)	•			
Industrial / Process	Iron / Steel Manufacturing	Republic Steel Mill Project, United States (Ohio)	•			
Industrial / Process	Iron / Steel Manufacturing	Union Park CSO Pump Station and Detention Facility, United States (Massachusetts)	•			
Industrial / Process	Pharmaceutical	Pharmaceutical Production Plant, Singapore		•		
Industrial / Process	Pharmaceutical	Bulk Pharmaceutical Plant, Singapore	•			
Industrial / Process	Pharmaceutical	Squibb Animal Test Facility, United States (New Jersey)	•			
Industrial / Process	Mining	Nickel-Cobalt Refinery, Western Australia	•			
Buildings	Educational Facilities	Delgado Community College, United States (New Orleans)	•			
Buildings	Educational Facilities	Rutgers University Records Center, United States (New Brunswick, New Jersey)	•			
Buildings	Educational Facilities	Washoe County School District, United States (Reno, Nevada)	•			
Buildings	Educational Facilities	Plainsboro Middle School, United States (New Jersey)				•
Buildings	Educational Facilities	Hunter College, United States (New York)	•			
Buildings	Educational Facilities	York College, United States (New York)	•			
Buildings	Educational Facilities	School Project, Indiana (Indianapolis)	•			

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Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Resorts / Casinos / Hotels	Regent Las Vegas Resort, United States (Las Vegas)	•			
Buildings	Resorts / Casinos / Hotels	Hotel / Condominium Complex, Indonesia (Jakarta)	•			
Buildings	Resorts / Casinos / Hotels	Phoenician Hotel and Resort, Arizona (Scottsdale)	•			
Buildings	Resorts / Casinos / Hotels	Westin Hotel, United States (Texas)	•			
Buildings	Resorts / Casinos / Hotels	Safety Harbor Spa, United States (Florida)				•
Buildings	Resorts / Casinos / Hotels	Intercontinental Hotel, United States (Texas)	•			
Buildings	Resorts / Casinos / Hotels	Hyatt Regency Hotel, United States (Missouri)	•			
Buildings	Apartments / Condominiums / Housing	99100 Park Towers at Hughes Center, United States (Las Vegas)	•			
Buildings	Apartments / Condominiums / Housing	Ortley Beach Commons, United States (New Jersey)	•			
Buildings	Apartments / Condominiums / Housing	Louisville Housing Authority Project, United States (Kentucky)				
Buildings	Centers / Arenas	University of Washington Basketball Arena, United States (Washington)	•			
Buildings	Centers / Arenas	Jacksonville Pre-Trial Detention Center, United States (Florida)	•			
Buildings	Centers / Arenas	San Diego Convention Center, United States (San Diego, California)	•			
Buildings	Centers / Arenas	Washington State Convention Center, United States (Washington)	•			

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Representative Engagement Experience

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Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Centers / Arenas	Worcester Civic Center (Centrum), United States (Massachusetts)	•			
Buildings	Centers / Arenas	Riverside Civic Center, United States (New York)	•			
Buildings	Stadiums	Fresno Multipurpose Stadium, (Grizzlies Stadium) United States (California)	•			
Buildings	Stadiums	Arizona State University, Sun Devil Stadium Expansion, United States (Arizona)	•			
Buildings	Medical / Hospitals	Alameda-Mortenson Analysis, United States (California)	•			
Buildings	Medical / Hospitals	Alameda County Medical Center / Highland General Hospital, United States (California)	•			
Buildings	Medical / Hospitals	Colombo General Hospital, Sri Lanka (Colombo)	•			
Buildings	Medical / Hospitals	Stoney Brook Hospital, United States (New York)	•			
Buildings	Medical / Hospitals	Madigan VA Hospital, United States (Washington)	•			
Buildings	Medical / Hospitals	Kodiak Health Care Facility, United States (Alaska)	•			
Buildings	Medical / Hospitals	University Medical Center, United States (Louisiana)	•			
Buildings	Medical / Hospitals	TA-35 Los Alamos National Laboratory, United States (New Mexico)	•			
Buildings	Offices	Unit Atrium One Building, United States (Ohio)	•			
Buildings	Offices	One Summit Square Office Building, United States (Indiana)	•			

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Industry	Type	Project Name	DR	RM	MC	Other
Buildings	Offices	Equitable Tower Office Building, United States (New York)	•			
Buildings	Offices	Loney Construction Brattleboro Projects, United States (Vermont)				•
Buildings	Offices	IBM Office Complex, United States (New York)	•			
Buildings	Offices	Gold Building Parking Garage, United States (Connecticut)	•			
Buildings	Offices	American Standard Office Building, United States (Oklahoma)	•			
Buildings	Distribution / Storage / Warehouse	Olefins Terminal Storage Complex	•			
Buildings	Distribution / Storage / Warehouse	TRW Record Storage Complex, United States (New Jersey)		•		
Buildings	Distribution / Storage / Warehouse	New Jersey State Food Distribution Center, United States (New Jersey)	•			
Buildings	Distribution / Storage / Warehouse	Trenton Record Storage Center, United States (New Jersey)		•		
Buildings	Other	Parking Garage, United States (Ohio)	•			
Environmental	Other	New Jersey Sludge Drying / Fertilizer Facility, United States (New Jersey)	•			
Environmental	Other	Blydenburgh Landfill, United States (New York)	•			
Environmental	Other	Transuranic Storage Area Retrieval Enclosure, United States (Idaho)	•			
Environmental	Other	Warren County Landfill, United States (New Jersey)	•			

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Industry	Type	Project Name	DR	RM	MC	Other
Other	Seminar / Training	Princeton University Summit, United States (New Jersey)			•	
Other	Seminar / Training	Japan Bank for International Cooperation			•	
Other	Seminar / Training	University of Wisconsin-Madison Seminar, United States (Wisconsin)			•	
Other	Seminar / Training	AKA: Fluor Daniel Corporate Claims Management, United States (California)			•	
Other	Seminar / Training	West Virginia DOT Training Seminar, United States (West Virginia)			•	
Other	Seminar / Training	Claims Avoidance & Management Training, United States (Arizona)			•	
Other	Seminar / Training	Identifying, Minimizing & Quantifying Risk, England (London)			•	
Other	Seminar / Training	Claims Seminar, Texas Department of Transportation, United States (Texas)			•	
Other	Seminar / Training	Project Risk Management Seminar: Panama Canal			•	
Other	Seminar / Training	Partnering Seminar, United States (Kentucky)			•	
Other	Seminar / Training	Claims Seminar On Construction Issues, Canada (Manitoba)			•	
Other	Seminar / Training	Florida Department Of Transportation, United States (Florida)			•	
Other	Seminar / Training	Seminar: Division Of Energy, United States (West Virginia)			•	

<i>PATRICIA D. GALLOWAY</i> <i>Representative Engagement Experience</i>						
DR: Dispute Resolution	RM: Risk Management	MC: Management Consulting				
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Other	Seminar / Training	CPM Scheduling Course, United States (Pennsylvania)			•	
Other	Seminar / Training	Claims Minimization Seminar, United States (New Hampshire)			•	
Other	Other	American Concrete Pipe Association (ACPA) Independent Research, United States (Tennessee)			•	
Other	Other	Nippon Steel On-Site Auditing Services			•	
Other	Other	Japan Ministry of Land, Infrastructure and Transport, Analysis of US Public Construction Contracting Practice, Japan			•	
Other	Other	Foster Wheeler Risk Management Outsourcing		•		
Other	Other	Royal Grading Golf Course and Country Club	•			



JOHN L. OWEN P.ENG.

Specialist Consultant

Areas of Expertise

- Corporate Governance
- International Contracting and Management
- Management Consulting
- Contracts
- Risk Management
- Prudence Analysis / Audit
- Engineering and Construction Management
- Project /Program Management
- Scheduling and Delay Analysis
- Damages Calculation
- Claims Prevention
- Claim Analysis / Negotiation

Background

Mr. Owen is a Pegasus Global Holdings, Inc. Specialist Consultant. He has led a variety of management and forensic engineering analyses involving issues of engineering management, project and operations management, operations facility performance, Dispute Resolution, Management Consulting and Risk Management assignments throughout the power, oil and gas, process, building and other industries.

Management Consulting engagements have included audits and assessments of executive and operational management process, performance, prudence and related project specific and corporate issues. Assignments have addressed planning, design, engineering, and contract evaluation, engineering cost and efficiency evaluations and operations analysis on a variety of projects.

Mr. Owen played a major role on numerous projects evaluating design management of major capital projects and the analysis of construction disputes. Mr. Owen has been responsible for the successful analysis of numerous construction dispute resolution engagements, including forensic analysis on the performance failure of two electric generating stations; schedule delay and productivity analysis on utility, process, and commercial projects; and the evaluation of engineering performance on multibillion-dollar construction projects. He has presented extensive written and oral testimony in a variety of jurisdictions.

Prior to joining Pegasus as a Specialist Consultant, Mr. Owen was a Vice President and Director of The Nielsen-Wurster Group Inc., an international management consulting firm which specialized in management consulting, risk management and dispute resolution. While with Nielsen-Wurster, Mr. Owen had a full time position as its Chief Operations Officer and served as the president of one of its subsidiary companies which specialized in forensic engineering. He also has extensive experience in the design and management of electric utility generation stations and transmission systems, was the Manager of the Thermal Division at Acres Consulting Services, Ltd. (Toronto, Ontario and Buffalo and New York).

Prior to his employment with Acres, Mr. Owen was as an Engineer with Atomic Power Constructors Limited (Sutton, Surrey, England), where he supervised the engineering design of the electric control systems for a nuclear power station and power system studies with the Central Electricity Board, UK. Claims analysis have included: evaluation of A/E performance; evaluation of project management performance; evaluation on the design adequacy, engineering performance and contract administration; evaluation of equipment performance, life expectancy of an independent power project; schedule delay and acceleration analysis; damages calculations; disruption and productivity analysis; and evaluation of energy sales agreements.

Mr. Owen has extensive experience in the power industry relating to design and control systems. Examples of this include the design of electrical protection and control schemes for hydroelectric power stations; substations and large industrial installations, power system studies and planning, design of oil-filled cable

▪ **John L. Owen**

systems and development of computer programs for design calculations and design of large AC motors to 14,000hp

Registrations

- Association of Professional Engineers, Ontario

Education and Courses

Education

- H.N.C., Electrical Engineering, Salford Technical College, Salford, England
- Part III Electrical Engineering, Institution of Electrical Engineers, United Kingdom

Languages

- Spanish - conversational, reading and writing

Technical Papers and Presentations

Mr. Owen has authored and presented technical papers on risk management and engineering on power plants (*see attached Technical Papers and Presentations*).

▪ John L. Owen

Reference	Authored	Presented	<p style="text-align: center;"><i>JOHN L. OWEN</i> <i>Technical Papers and Presentations</i></p>
1.	•		“Risk Management for Independent Power Projects (IPP),” <i>Power Gen. ‘93</i> , Dallas, Texas, November 17 - 19, 1993
2.	•		“Project Risk Management in the Development of Small Industrial and Commercial Scale Cogeneration Facilities,” <i>Northwest Cogeneration Conference</i> , Bellevue, Washington, June 1991
3.	•		“Engineering Services Contracts-Their Administration and Management, Proceedings,” <i>Project Management Institute Symposium</i> , Denver, Colorado, October 1985
4.	•		“Standby Power Systems for Nuclear Facilities,” <i>Canadian Nuclear Association, 17th Annual International Conference</i> , Montreal, Canada, 1977
5.	•		“Fossil and Nuclear Power Plant Auxiliary Systems Reliability,” <i>Canadian Electrical Association, Spring Meeting</i> , Vancouver, British Columbia, March 1975

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<i>JOHN L. OWEN</i> <i>Representative Engagement Experience</i>						
DR:	Dispute Resolution	RM:	Risk Management	MC:	Management Consulting	
Other:	Project Management, Engineering Design, Construction Supervision					
Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Dungeness 600MW Nuclear power Generating station (UK)				•
Power	Nuclear	Wolsung 600MWe Nuclear Power Generating Station, South Korea				•
Power	Nuclear	Rio Tisara Nuclear Power Plan (Argentina)				•
Power	Nuclear	Cook Nuclear plant United States (Michigan)				•
Power	Nuclear	Clinton, United States, (IL)			•	
Power	Nuclear	Trojan, United States, (OR)			•	
Power	Nuclear	Seabrook 1&2, United States, (NH)			•	
Power	Nuclear	Bellefonte, United States (TN)			•	
Power	Nuclear	INEEL Spent Nuclear Fuel Storage Project, United States (Idaho)		•		
Power	Nuclear	Peach Bottom1 & 2, United States (PA)				•
Power	Nuclear	Calvert Cliffs 1 & 2, United States, (MD)				•
Power	Nuclear	Douglas Pont Nuclear Plant, United States				•
Power	Nuclear	Shoreham Nuclear Plant, United States (New York)			•	
Power	Nuclear	South Texas Project Nuclear Plant, United States (Texas)			•	
Power	Nuclear	Comanche Peak Nuclear Plant, United States			•	
Power	Nuclear	Millstone 3 Nuclear Plant, United States			•	

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<i>JOHN L. OWEN</i> <i>Representative Engagement Experience</i>						
DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Pilgrim Nuclear Plant, United States			•	
Power	Nuclear	Clinton Nuclear Plant, United States			•	
Power	Nuclear	Vogtle Nuclear Plant, United States			•	
Power	Nuclear	Washington Public Power Nuclear Plant, United States (Washington)	•			
Power	Nuclear	Vogtle Nuclear Generating Station, United States (Georgia)			•	
Power	Nuclear	Satop 3&5, United States (Washington)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Sacramento Municipal Utility District Cogeneration Plant, United States		•		
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Reid Gardener 4, United States (Washington)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Brighton Beach Power Plant, Canada	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Rabigh Project Combined Cycle Power Plant, Saudi Arabia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	PP9 Power Plant, Saudi Arabia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Campbell's Cogeneration Facility, United States (California)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Paiton 7 & 8, Indonesia	•			

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<p style="text-align: center;">JOHN L. OWEN <i>Representative Engagement Experience</i></p>							
<p>DR: Dispute Resolution</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>			
<p>Other: Project Management, Engineering Design, Construction Supervision</p>							
Industry	Type	Project Name	DR	RM	MC	Other	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	JEA Northside, United States (FL)	•				
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Dearborn, United States (MI)	•				
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Scherer, United States (GA)	•				
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Santa Rita Power Plant, Batangas, Philippines	•				
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Bay Shore Power Plant Project, United States (Ohio)		•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Cogeneration Plant, Lakewood, United States (New Jersey)	•				
Power	Cogeneration/ Combined Cycle/Fossil Fuel	CUC Power Plant (Curacao)	•				
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Jacksonville, United States (Florida)	•				
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Nikkisky, United States (Alaska)	•				
Power	Hydro	Xialangi Dam, China			•		
Power	Waste-to-Energy	Olmstead County Waste-to- Energy Plant, United States (Minnesota)	•				
Power	Waste-to-Energy	Feather River Plant, United States (California)	•				
Power	Waste-to-Energy	Imperial Valley, United States (California)	•				

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<p style="text-align: center;">JOHN L. OWEN <i>Representative Engagement Experience</i></p>						
<p>DR: Dispute Resolution</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Other	200 kW Transmission Line, Peru				•
Infrastructure / Transportation	Rail	Railtrack, United Kingdom			•	
Infrastructure / Transportation	Rapid Transit	Merseytravel Authority, United Kingdom			•	
Infrastructure / Transportation	Rapid Transit	Ministry of Transportation, Canada (British Columbia)			•	
Infrastructure / Transportation	Rail	London Crossrail Project, United Kingdom (London)		•		
Infrastructure / Transportation	Rail	Toronto Transit Commission Subway Line Expansion, Canada (Ontario)				
Infrastructure / Transportation	Roadways	Ministry of Transportation, Canada (Ontario)			•	
Industrial / Process	Pipeline and Refinery	Cadereyata Refinery and Oil Pipeline Project, Mexico	•			
Industrial / Process	Oil / Gas	Combisa Cantarell EPC 22 Contract Claim Effort – Phase I, United States (Texas)	•			
Industrial / Process	Oil / Gas	PEMEX Demineralization Plant, Mexico (Tula, Hidalgo)	•			
Industrial / Process	Gas pipeline	Alliance Pipeline (United States & Canada)	•			
Industrial / Process	Pipeline	Bolivia Pipeline, South America (Bolivia)	•			
Industrial / Process	Treatment Plants	West Point Secondary Treatment Facility, United States (Washington)	•			

▪ John L. Owen

<p style="text-align: center;"><i>JOHN L. OWEN</i> <i>Representative Engagement Experience</i></p>						
<p>DR: Dispute Resolution</p>		<p>RM: Risk Management</p>		<p>MC: Management Consulting</p>		
<p>Other: Project Management, Engineering Design, Construction Supervision</p>						
Industry	Type	Project Name	DR	RM	MC	Other
Industrial/ Process	Treatment Plants	West End Waste Water Treatment Plant, Canada	•			
Industrial/ Process	Iron / Steel Manufacturing	NKK Steel Continuous Galvanizing Project, United States (Pennsylvania)	•			
Buildings	Centers / Arenas	Washington State Convention Center, United States (Washington)	•			
Buildings	Other	FedEx Hanger and Aircraft Maintenance facility, Ted Stevens International Airport, United States (Alaska)			•	



GERALD W. TUCKER CPA (Inactive)

Specialist Consultant

Areas of Expertise

- Execution Management
- Forensic Cost Accounting
- Accounting and Finance
- Management Consulting
- Power Sales Agreement
- Prudence Analysis/Audit
- Damage Calculation
- Fraud/Abuse/Waste
- Claims Analysis/Negotiation

Background

Mr. Tucker is a Pegasus Global Holdings, Inc. Specialist Consultant and provides assistance in accounting and financial matters for regulated utilities, management audit services for utility systems and cost damage quantification services in support of litigation involving construction projects and other disputes. Projects have included numerous significant public facilities including roadway and bridge projects, nuclear power plants, fossil power plants and chemical refinery projects both in the United States and internationally. He has served as an arbitrator on disputes regarding utility accounting issues. Mr. Tucker has provided testimony in construction litigation projects and regulatory proceedings in several states and before the Federal Energy Regulatory Commission.

Mr. Tucker has performed reviews of financial management and accounting practices as part of Pegasus' comprehensive management audits for various state and government agencies including:

- Management audits for the British Columbia Ministry of Transportation
- Cost and Management Audit for the Asheville North Carolina Water Authority
- Cost of service and cost allocation analyses for numerous electric and gas utilities located in the southern United States
- Bond default and cost analysis associated with the Washington Public Power Supply System

On Management Consulting engagements, he has provided extensive hands-on analysis for clients on the application and process of ratemaking in the regulated environment, reporting on financial information, cost allocation to all levels of regulatory authority, and public and private company cost accounting, and auditing issues. Mr. Tucker uniquely provides Pegasus' clients with management expertise in all phases of the regulated utility industry, including reporting to the SEC, federal and state regulatory bodies. Mr. Tucker's experience includes development and application Cost of Service calculations and Cost Allocation for operating utilities in support of rate applications. In addition to these activities in support of rate applications, Mr. Tucker has negotiated both power sales agreements and the per year revenue of physical facilities.

Mr. Tucker has extensive hands-on analysis in the areas of construction cost auditing, forensic cost accounting, damages quantification analyses, cost allocation reviews and accounting financial management process reviews. Representative forensic accounting and dispute cost analyses and allocations include:

- Cost analysis for the Dormitory Authority of the State of New York
- Damages and forensic accounting for Dresser-Rand Corporation
- Cost and forensic accounting assessment for Washington Metropolitan Transit Authority
- Forensic accounting and damages evaluation for Florida Department of Transportation
- Damages evaluation for Fluor Corporation
- Damages evaluation for Stone and Webster

■ Gerald W. Tucker

Mr. Tucker has participated as a team member in numerous projects for Pegasus and has served as a witness for several of the projects. Additional experience includes:

- Mr. Tucker provided expert testimony an arbitration on a large combined cycle power plant in the United States. The project included Project Management Analysis, Schedule Delay Analysis, Productivity Analysis and Damage Calculations.
- Mr. Tucker was responsible for development of cost data for a contractor on a large chemical plant project in Indonesia on which the owner had suspended work. The parties were able to reach settlement on the major issues.
- Mr. Tucker evaluated the cost overruns and damages associated with a combined cycle power plant for an international design-build contractor. The cost analysis included assessment of damages associated with delays, disruption related manpower and extra costs associated with added and increased work scope.
- Mr. Tucker assisted with the analysis of cost overruns on a road and bridge project in Canada. The analysis and findings resulted in the settlement of all claims through effective negotiation.
- Mr. Tucker provided deposition testimony in a dispute between the owner of a large nuclear plant and a major contractor. In that project, he also co-authored a significant report that was the basis for the testimony. Following the deposition testimony, the parties settled the dispute prior to going to trial.
- Mr. Tucker assisted a major Japanese contractor on a joint venture project in the Philippines. The analysis used formed the basis of a claim for damages that was heard by an arbitration panel in London. The parties reached a settlement before the arbitration panel issued a final ruling.
- Mr. Tucker worked with the Office of the Attorney General of the State of Texas in the review of documentation and transcripts of depositions and hearings regarding a road project to determine the amount of damages quantified in the trial record. As part of that assignment Mr. Tucker was deposed prior to the settlement of the case.
- Mr. Tucker provided damage quantification to a part owner of a nuclear plant in the United States. The quantification was necessary due to an extended outage of the two unit plant that lasted for several months.

Prior to becoming a Specialist Consultant with Pegasus, Mr. Tucker held the position of Vice President and Chief Financial Officer of The Nielsen-Wurster Group, Inc, a firm which specialized in management consulting, risk management and dispute resolution. Prior to joining Nielsen-Wurster, Mr. Tucker's experience included:

Controller, Central Power and Light Company (a \$1 billion annual revenue electric utility with \$3.5 billion in assets). In the position of Controller, Mr. Tucker was responsible for all accounting functions including tax, property, general and financial, budgets and payroll. The duties included reporting to the Securities and Exchange Commission and Federal Energy Regulatory Commission (FERC), as well as primary responsibility for all rate filings in the retail and wholesale jurisdictions. The Department consisted of approximately 80 professional and clerical employees.

▪ **Gerald W. Tucker**

Registrations

- Certified Public Accountant (Inactive)

Education and Courses

- B.A., Accounting, University of Arkansas, Fayetteville, Arkansas

Memberships

- American Institute of Certified Public Accountants
- Texas Society of Certified Public Accountants

▪ Gerald W. Tucker

GERALD W. TUCKER <i>Representative Engagement Experience</i>						
DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Nuclear	Salem and Hope Creek Nuclear Power Plants, United States (New Jersey)			•	
Power	Nuclear	Cooper Nuclear Station, United States (Iowa, Nebraska)			•	
Power	Nuclear	South Texas Nuclear Plant, United States (Texas)			•	
Power	Nuclear	Shoreham Nuclear Plant, United States (New York)			•	
Power	Nuclear	Salem Nuclear Plant, United States, (Pennsylvania)			•	
Power	Nuclear	Washington Public Power Nuclear Plant, United States (Washington)	•			
Power	Nuclear	Vogtle 3 & 4, United States (GA)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Reid Gardener 4 United States, (Washington)			•	
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Merilectrica Power Plant, Colombia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Rabigh Project Combined Cycle Power Plant, Saudi Arabia	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Dearborn Power Plant, United States (Michigan)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Paiton Units 7 & 8, Indonesia (Jakarta)	•			
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Engineering Design Group, United States, (Oklahoma)	•			

▪ Gerald W. Tucker

GERALD W. TUCKER <i>Representative Engagement Experience</i>						
DR: Dispute Resolution		RM: Risk Management		MC: Management Consulting		
Other: Project Management, Engineering Design, Construction Supervision						
Industry	Type	Project Name	DR	RM	MC	Other
Power	Cogeneration/ Combined Cycle/Fossil Fuel	Sacramento Municipal Utility District (Cosumnes Power Plant), United States, (California)			•	
Power	Hydro-Electric	Casecnan Multi-Purpose Project, Philippines	•			
Infrastructure / Transportation	Roadways	Texas Department of Transportation, United States (Texas)	•			
Infrastructure / Transportation	Roadways	State Highway U.S. 290 Travis County, United States (Texas)	•			
Infrastructure / Transportation	Roadways	Mississippi Department of Transportation, United States (Mississippi)	•			
Infrastructure / Transportation	Roadways	Vancouver Island Highway, Canada (Vancouver)		•		
Infrastructure / Transportation	Rail	Shaw Metro Station, United States (Washington)	•			
Industrial / Process	Oil / Gas	Oman LNG Project, Oman	•			
Industrial / Process	Process Facility	Campbell Soup Facility, United States, (California)			•	
Buildings	Educational Facilities	Dormitory Authority of New York, United States (New York)	•			

EXHIBIT 6

Common Prudence Engagements

Project	K. Nielsen	P. Galloway	G. Tucker	J. Owen
Millstone Nuclear Plant 3, Connecticut	X	X		X
Cooper Nuclear Plant, Lincoln, Nebraska	X	X	X	
Connecticut Yankee Nuclear Power Plant,	X	X		
Salem Nuclear Power Plant, Pennsylvania	X	X	X	
South Texas Power Nuclear Plant, Texas	X	X	X	X
South Texas Power, Outage Audit, Texas	X	X		X
Shoreham Nuclear Power Plant, New York	X	X	X	
Palo Verde Nuclear Plant, Arizona	X	X		
Seabrook Nuclear Plant, New Hampshire	X	X		
Comanche Peak Nuclear Power Plant, Texas	X	X		X
Pilgrim Nuclear Power Plant, Massachusetts	X	X		X
Waterford 3 Nuclear Power Plant, Louisiana	X	X		
Vogtle Nuclear Power Plants 1 & 2	X	X		X
Vogtle Nuclear Power Plants 3 & 4	X	X	X	X
Perry Nuclear Power Plant, Ohio	X	X		
Fossil Power Plant Scherer, Georgia	X			X
Clinton Nuclear Power Station, Illinois	X	X		X
Indian Point Nuclear Plant Unit, New York	X	X		
Nine Mile Power Plant, New York	X	X		
Trojan Nuclear Power Plant, Oregon	X	X		X

EXHIBIT 7

Appendix of Documents Referenced in Pegasus Report

- 01 - CEP Risk Assessment Report 3-27-07 (EY Audit)
- 02 - Iatan Audit Report – Final (7-19-07) (EY Audit)
- 03 - KCPL Phase I Cost Tracking and Accounting Risk Assessment 4-12-07 – Final
- 04 - CEP OC Presentation 2007-05-23 Level 1 Schedules
- 05 - CEP Oversight Committee 10-26-06
- 06 - CEP OC Presentation 2007-01-17 BMcD Contract Presentation
- 07 - Iatan Projects Cost Estimate and Schedule 07-17-06
- 08 - Iatan 2 Project Definition Report
- 09 - KCPL Operations Review 11-01-05
- 10 - KCPL Operations Review 02-01-06
- 11 - KCPL Operations Review 05-02-06
- 12 - KCPL Operations Review 07-25-06
- 13 - KCPL Operations Review 10-31-06
- 14 - KCPL Business Plan 2007-2011 12-05-06
- 15 - Schiff Hardin Report (5-15-06)
- 16 - Iatan Construction Project BMcD Vendor Audit Report-FINAL
- 17 - BM Vendor Audit Follow-up 4-08
- 18 - 3rd Quarter 2007 Cost Audit 10-07
- 19 - Construction Audit 7-07
- 20 - Kiewit Audit 9-08
- 21 – Iatan Construction Project Organization Audit Report – FINAL
- 22 – B-McD survey of coal plants 10-02-06

**ADDITIONAL REBUTTAL TESTIMONY OF
DR. KRIS R. NIELSEN**

**ON BEHALF OF KANSAS CITY POWER & LIGHT (KCP&L) IN THE MATTER OF
THE APPLICATION OF KCP&L TO MODIFY ITS TARIFFS TO CONTINUE THE
IMPLEMENTATION OF ITS REGULATORY PLAN**

DOCKET NO. 09-KCPE-246-RTS

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A.** My name is Dr. Kris R. Nielsen. My business address is 1750 Emerick Road, Cle Elum,
3 Washington 98922.

4 **Q. HAVE YOU PREVIOUSLY SUBMITTED PREFILED TESTIMONY IN THIS**
5 **PROCEEDING?**

6 **A.** Yes, I prefiled Rebuttal Testimony¹ on behalf of Kansas City Power & Light Company
7 (“KCP&L”) on February 23, 2009. In my previous testimony, I provided the Pegasus-
8 Global perspective of the overall assessment of KCP&L’s management process in
9 planning, executing, and controlling functional activities during the construction of Iatan
10 project, identified management strengths and positive actions that may have had an
11 impact on costs and/or schedule, and provided an overall determination of the
12 effectiveness of the construction management practices on the Iatan Unit 1 air quality
13 control system (“AQCS”) project (“Iatan 1 Project”).

¹ My testimony that was filed February 23, 2009 was incorrectly titled Direct Testimony. I will correct this error at the time of hearing when the testimony will be officially presented for admission into the record.

1 **Q. DR. NIELSEN, WHAT IS THE PURPOSE OF YOUR PRESENT TESTIMONY?**

2 **A.** I have been asked by KCP&L to evaluate the additional direct testimony filed on behalf
3 of the Kansas Corporation Commission (“Commission”) staff by their consultant, Walter
4 P. Drabinski and to identify any areas of disagreement.

5 **Q. COULD YOU IDENTIFY THE MAJOR AREAS OF THIS TESTIMONY?**

6 **A.** Yes. I will address Mr. Drabinski’s use of the term “avoidable costs” in his Additional
7 Direct Testimony, and his use of the R/O or Claims Log to evaluate prudence.

8

9 **I. “AVOIDABLE COSTS”**

10 **Q. DR. NIELSEN, HAVE YOU REVIEWED MR. DRABINSKI’S TESTIMONY**
11 **RECOMMENDING DISALLOWANCES CONTAINED IN HIS MAY 29, 2009**
12 **SUPPLEMENTAL TESTIMONY?**

13 **A.** Yes I have. Mr. Drabinski makes a number of corrections to the disallowances
14 recommended in his original testimony.

15 **Q. DO YOU AGREE WITH HIS CORRECTIONS?**

16 **A.** No. As with his Direct Testimony in this case, Mr. Drabinski’s Additional Direct
17 Testimony is based upon an incorrect application of the prudence standard that governs
18 the Iatan 1 Project. Mr. Drabinski has corrected portions of his Direct Testimony based
19 upon an audit of actual costs expended by KCP&L on the Iatan 1 Project. However, in
20 my Rebuttal Testimony, I noted that Mr. Drabinski, in his Direct Testimony, did not
21 identify any specific decision made by KCP&L’s management which he determined to be
22 unreasonable and/or imprudent, nor did Mr. Drabinski establish a nexus between any
23 management decision by KCP&L to any subsequent recommended disallowance.

1 Mr. Drabinski's Additional Direct Testimony further failed to cite to any imprudent
2 decisions, let alone allege an adverse outcome of such decisions.

3 **Q. WHAT IS THE APPROPRIATE PRUDENCY STANDARD?**

4 **A.** The accepted standard, stated generally, is set forth in my Rebuttal Testimony on page 17:

5 *Decisions are prudent if made in a reasonable manner in light of conditions and*
6 *circumstances which were known or reasonably should have been known when*
7 *the decision was made.*

8 **Q. HAS MR. DRABINSKI PROPOSED A SIMILAR STANDARD?**

9 **A.** Yes, he has. Mr. Drabinski's prudency test is set forth on page 18 of the Vantage Final
10 Report, attached to his Direct Testimony as WPD-1, and it states:

11 *As one example of applying this standard, Vantage asks whether a knowledgeable*
12 *person in the industry would have made the same or similar decision at that time*
13 *in history with the information and resources available at the time.*

14 While I agree with this formulation, I disagree with the manner in which Mr. Drabinski
15 has applied it in his analysis in this case. My Rebuttal Testimony addresses in detail the
16 shortcomings in Mr. Drabinski's analysis, so I will simply reaffirm those comments at
17 this time, rather than repeat them.

18 **Q. IS THERE ANYTHING NEW IN MR. DRABINSKI'S ADDITIONAL DIRECT**
19 **TESTIMONY REGARDING HIS PRUDENCY EVALUATION THAT YOU**
20 **BELIEVE NEEDS TO BE ADDRESSED FURTHER BY YOU IN THIS**
21 **REBUTTAL?**

22 **A.** Yes, it concerns his use of the term "avoidable costs" as a standard for supporting his
23 recommended disallowance.

1 **Q. ARE YOU FAMILIAR WITH THE TERM AVOIDABLE COSTS?**

2 **A.** Not in the context of evaluating the prudence of management decisions related to a public
3 utility construction project. As I indicated in my original testimony, I have participated
4 as an expert witness in 17 separate regulatory proceedings involving management
5 prudence. The term “Prudence” has become a commonly accepted term in regulatory
6 proceedings with a common definition. That definition is the one I described earlier – the
7 “zone of reasonableness” of management decisions based upon facts known at the time.

8 **Q. HOW IS MR. DRABINSKI EMPLOYING THE TERM “AVOIDABLE COSTS”**
9 **IN HIS ADDITIONAL DIRECT TESTIMONY?**

10 **A.** It is not clear to me exactly how Mr. Drabinski applies this term because he has not
11 related the term to his definition of “prudence” as set forth above, nor has he related the
12 term to the primary Kansas Statute addressing prudence (KSA 66-128g). KSA 66-128g
13 provides the Commission with a non-exclusive list of factors the Commission may
14 consider in making its overall determination of prudence. Overlaying these factors is the
15 concept set forth by Mr. Drabinski that to find imprudence, the Commission must ask
16 *“whether a knowledgeable person in the industry would have made the same or similar*
17 *decision at that time in history with the information and resources available at the time.”*
18 Mr. Drabinski did not incorporate this inquiry into his discussion of “avoidable costs”.

19 **Q. DR. NIELSEN, DO YOU BELIEVE THAT MR. DRABINSKI’S USE OF THE**
20 **TERM “AVOIDABLE COSTS” ASSISTS THE COMMISSION IN ITS**
21 **EVALUATION OF KCP&L’S PERORMANCE ON THE IATAN UNIT 1**
22 **CONSTRUCTION PROJECT?**

1 **A.** No, I do not. It is an ambiguous term without any commonly accepted meaning in the
2 context of the review of construction management. It provides no guidance to the
3 Commission or the parties in this proceeding. The term prudence, on the other hand, has
4 a commonly accepted meaning, has distinct elements which can be evaluated and applied
5 to a defined fact situation, and provides guidance both to the parties in a regulatory
6 proceeding and to the regulators who must evaluate management’s performance. It is
7 unclear from Mr. Drabinski’s Additional Direct testimony whether Mr. Drabinski
8 intended to use the term “avoidable costs” as a substitute for imprudence. Nevertheless,
9 Mr. Drabinski’s testimony does not provide the Commission the necessary context or
10 authority for using this term as a “standard” for its review.

11

12 **II. USE OF THE R/O OR CLAIMS LOG TO EVALUATE PRUDENCE**

13 **Q. MR. NIELSEN, WHAT IS YOUR POSITION REGARDING MR. DRABINSKI’S**
14 **USE OF THE R/O LOG OR CLAIMS LOG TO EVALUATE PRUDENCE?**

15 **A.** I continue to disagree with Mr. Drabinski’s use of a claim or identification of an issue
16 through the Risk & Opportunity Analysis Sheet (“R/O”) log as the starting point in his
17 analysis. Starting with a claim is not a prudence review, it is a claims review and it relies
18 entirely on hindsight.

19 **Q. PLEASE EXPLAIN.**

20 **A.** Earlier I identified the commonly accepted test of prudence as being an examination of
21 management decisions to determine whether they fall within the zone of reasonableness.
22 The starting point is, therefore, the management decisions in question, not the end result
23 of a process that may or may not have been triggered by imprudent decisions. The major
24 problem with Mr. Drabinski’s approach is that claims of all sorts commonly occur on any

1 construction project, regardless of its complexity and management decisions. Claims are
2 not, *per se*, a product of imprudent management decisions.

3 **Q. IS THERE ANY PARTICULAR ASPECT OF MR. DRABINSKI'S TESTIMONY**
4 **WHERE THE USE OF A CLAIM AS A STARTING POINT IS PARTICULARLY**
5 **TROUBLESOME?**

6 **A.** Yes, in Mr. Drabinski's analysis of the ALSTOM Settlement, he ignores the previously
7 filed direct testimony of a number of witnesses describing the complexity of this omnibus
8 settlement agreement and the many factors that went into its negotiation and execution.
9 He then takes the final settlement amount and arbitrarily assigns a percentage
10 disallowance without first establishing that KCP&L's Senior Management made any
11 imprudent decision. Because there was no finding of a specific imprudent decision in
12 this regard, Mr. Drabinski also could not establish a nexus between any alleged
13 imprudent decision by KCP&L to the percentage disallowance that he recommends.

14 **Q. ARE YOU AWARE THAT MR. DRABINSKI HAS RECALCULATED HIS**
15 **RECOMMENDED DISALLOWANCE RELATED TO THE ALSTOM**
16 **SETTLEMENT AGREEMENT?**

17 **A.** Yes.

18 **Q. DO YOU AGREE WITH HOW MR. DRABINSKI RECALCULATED THIS**
19 **RECOMMENDED DISALLOWANCE?**

20 **A.** No. As an initial matter, Mr. Drabinski did not modify the basis for his recommendation
21 for disallowance in his Additional Direct Testimony, he only changed the calculation of
22 the amount of the proposed disallowance. My previous testimony discusses why
23 Mr. Drabinski has previously failed to establish a proper basis for disallowance. In his
24 Additional Direct Testimony, Mr. Drabinski merely attempts to apply the same faulty
25 basis for justifying a recommended disallowance of a different portion of the ALSTOM

1 Settlement. The mere fact that Mr. Drabinski attempted to further breakdown his
2 calculation of this recommended disallowance does not cure the fact that he fails to
3 establish the necessary factual and legal basis for this proposed disallowance.

4 **Q. DOES THIS CONCLUDE YOUR ADDITIONAL REBUTTAL TESTIMONY?**

5 **A.** Yes, it does.

