

***Professor Catherine J. K. Sandoval***  
*Associate Professor, Santa Clara University School of Law*  
*Curriculum Vitae*

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**EDUCATION:**

**STANFORD LAW SCHOOL, Palo Alto, California, J.D., 1990.**

Member, *Stanford Law Review*. Co-President, Stanford Latino Law Students Association. Co-organized and co-taught educational leadership seminar for Spanish-speaking farm-worker parents in conjunction with California Rural Legal Aid. Extern, Office of California Attorney General John Van de Kamp, Fall 1989.

**Member, California Bar**, Admitted 1991. Passed bar exam on first sitting, fall 1990.

**OXFORD UNIVERSITY, Oxford, England, 1984-1987, Master of Letters, Politics, degree earned, 1990, awarded at degree ceremony, 1993. Honors:** Rhodes Scholar elected from California. First Latina to win a Rhodes Scholarship. **Thesis:** U.S. and Western European Policy toward Central America in the 1980's. Earned Oxford letter as a member and secretary of the Oxford Women's basketball team.

**YALE UNIVERSITY, New Haven, Connecticut, B.A., magna cum laude, 1984. Major:** Latin American Studies. **Honors:** Yale Scholar of the House, one of 5 Yale Seniors selected for honors independent study program. **Thesis:** Affirmative Action in the Ivy and Sister Colleges. Co-Chair, Mexican American Students' Association, MEChA at Yale; Co-Chair, Minority Admissions Advisory Committee; Contributing writer, *Yale Daily News*.

**PROFESSIONAL EXPERIENCE:**

**SANTA CLARA UNIVERSITY SCHOOL OF LAW (SCU Law), Santa Clara, California, Associate Professor (with Tenure), 2010 to present, Assistant Professor, Fall 2004- 2010.**

**Adjunct Professor, Spring 2011 to Fall 2016, while serving as a Commissioner of the California Public Utilities Commission (CPUC).** Teach courses and conduct research on Energy, Telecommunications, Contract, and Antitrust Law. Director, SCU Law Summer Law Program at Oxford University, fall 2017-present. Tutor and Lecturer, SCU Law Oxford University Summer Program, Energy and Environmental Law, Comparative Antitrust Law. Co-Director, SCU Law High-Tech Law Institute, May 2018 to present. Vice-President, Broadband Institute of California, 2004-2010, Co-Director, 2017 to present. SCU Human Rights Law Program Director, San Jose, Costa Rica, 2008 and 2010. Research grants from the Ford Foundation, Minority Media and Telecommunications Association, Santa Clara University. University service includes: Chair, Student Affairs Committee; Member, Student Conduct Panel; Member, Law School Technology Committee. Advisor, SCU Law High Tech Law Advisory Committee, Computer and High-Tech Law Journal, La Raza Law Students Association. Supervised over 350 student research papers. Co-Founder, SCU Fellowships Office that mentors students applying for competitive fellowships including three Rhodes Scholars elected from SCU in nine years. **Honors:** 2010 Public Interest and Social Justice Achievement Award.

**PRESIDENT AND CEO, CATHERINE SANDOVAL ADVISORY, MARCH 2017-PRESENT.** Provide analysis and advise on utility regulatory processes and issues through short-term advisory and expert services

**CALIFORNIA PUBLIC UTILITIES COMMISSION, COMMISSIONER, San Francisco, California, January 2011-January 2017:** Appointed by Governor Edmund G. Brown, Jr., and unanimously confirmed by the California State Senate to a six-year term on the five-member CPUC to oversee Investor-Owned Utility (IOU) service for more than 11.5 million California electric customers, 10.7 million natural gas customers, 82.7 million telecommunications customers, 18 percent of California's water users, and millions of rail transit and Transportation Network Carrier riders, for which Californians spend more than \$50 billion annually. First Latinx appointed as a CPUC Commissioner. **Management and Strategic Leadership:** Collaborated with CPUC President and Commissioners to oversee 1,000 CPUC staff members, and a \$1.5 billion annual budget.

*Commissioner, California Public Utilities Commission, 2011- January 2017, continued*

Collaborated with Commissioners to adopt ethics policies and strategic priorities. Adopted risk-based decision-making process to align programs with safety, reliability, inclusion, and sustainability priorities. **CPUC Commissioner Litigation Committee**, Founded and served on Commissioner Litigation Committee to coordinate with the CPUC Office of General Counsel on CPUC Legal Matters. **CPUC Modernization Committee**, Lead Commissioner, convened public meetings to discuss and analyze CPUC rules and procedures. **Legislative Leadership**: Analyzed legislation on various utility service and public safety issues, provided legislative briefings, legal, and policy recommendations. **National and State Leadership**: Appointed by the Federal Communications Commission to the Federal-State Joint Conference on Advanced Telecommunications Services, 2013-2017, State Chair 2014-2015, State Policy Chair, 2013-2014. National Association of Regulatory Utility Commissioners (NARUC) Telecommunications Committee, Co-Vice-Chair, 2014-2016. NARUC Presidential Task Force on Federalism and Telecommunications, 2012-2013. Co-Chair, California State Water-Energy Team of the Climate Action Team. Member, California State Broadband Council, 2015-2016. **Lectures**: Lectured on infrastructure, environmental, cybersecurity, antitrust, and safety issues at Harvard, Yale, Stanford, California Institute of Technology, Berkeley, UCLA, USC, Loyola Chicago, Santa Clara University, and at more than 200 conferences and community meetings. **CPUC Small Business Commissioner**, Worked with CPUC Commissioners and staff to promote opportunities for small and diverse businesses in regulated utility industries. Participated in CPUC Diversity *En Banc* hearings. Spoke at and attended CPUC Small Business Summits. Led efforts to address small business issues such as delays in small business customer connections in PG&E territory. **Assigned Commissioner, CPUC Low-Income Oversight Board**, presided at quarterly meetings of the CPUC Low-Income Oversight Board appointed by California's Governor to convene forums for discussion of water, energy, telecommunications, and other utility issues affecting low-income ratepayers and California communities. **Technology Leadership**: Initiated Apps for Energy, Apps for Agriculture, and Apps for Water Hackathons with state and local governments, the private sector, non-profits, and UCLA. Judge, DOE 2014 Energy Data Challenge. **Communications Leadership**: Led as Assigned Commissioner, CPUC proceeding that unanimously approved Frontier's 2015 acquisition of Verizon, California's landline and Internet facilities and franchise. As Assigned Commissioner, led CPUC proceeding analyzing the proposed merger of AT&T and T-Mobile, 2011. Led efforts to secure the largest Connect America Fund II grants awarded in 2015 by the FCC to any state to expand broadband Internet service in California's rural areas. Assigned Commissioner, California Lifeline Program, co-authored with the Assigned ALJ the unanimously adopted 2014 decision to provide mobile or landline phone, broadband, and text service to low-income Californians. Reduced California LifeLine enrollment time from three months to less than three minutes through an electronic eligibility verification process. Assigned Commissioner, California's High Cost A Fund. Coordinated with the Assigned ALJ to develop the Decision unanimously adopted in December 2014 to authorize \$39.5 million in annual support for rural telecommunications and broadband service. As Assigned Commissioner, authored in coordination with the Assigned ALJ the CPUC's December 2016 Decision to stem call completion failures, dial tone and 9-1-1 outages. Led CPUC collaboration with NARUC to stem rural call completion and 9-1-1 failures. **CPUC Water Commissioner**, Led the CPUC's response to California's 2012-2016 drought. Assigned Commissioner, first-in-the-nation Water/Energy Nexus Proceeding; Authored in conjunction with the Assigned Administrative Law Judges (ALJ) four unanimously adopted decisions to reduce the embedded water in energy, and the embedded energy in water. Authored in conjunction with the Assigned ALJ two unanimously adopted decisions in the Balanced Rates Order Instituting Rulemaking to facilitate water district consolidation, provide more transparency about water rates, improve water service and quality, and promote water conservation. Authored 2012 CPUC Decision authorizing the San Clemente dam's removal from the Carmel River to address earthquake, water, and environmental risks. Led CPUC proceeding that authorized recycled water purchase agreement to bring 3,500 acre-feet of new drinking water annually to Monterey

County. Led CPUC proceeding analyzing California American Water's application and Environmental Impact Review (EIR) to construct and operate a Desalination Plant in Monterey County with the CPUC as the state EIR lead. Assigned Commissioner for several Water IOU general rate cases.

**Energy Leadership:** Assigned Commissioner, California Alternative Rates for Energy and Energy Savings Assistance program proceeding. Authored unanimously adopted Alternate Proposed Decision to authorize \$6.8 billion to enable 4.5 million low-income Californians to save energy and water and reduce GHGs through 2020. Led proceeding that unanimously approved the Southern California Valley South Transmission line construction permit after CPUC-led EIR and need review. As Assigned Commissioner, authored in conjunction with Assigned ALJ unanimously adopted 2016 Decision concerning *ex parte* violations in the San Onofre Nuclear Generating Station (SONGs) proceeding. Demand Response Leadership Award, 2013, for work with diverse communities to reduce energy usage following SONGs' outage. Co-lead, CPUC resolutions leveraging American Recovery and Reinvestment Act accelerated tax depreciation incentives to generate more than \$8 billion in investments in 2011-2012. Voted to impose penalties and require pipeline safety investments following the 2010 San Bruno Natural Gas explosion. Participant, CPUC Safety *En Banc* workshops. **Tribal Consultation:** Coordinated with the American Indian Chamber of Commerce of California to convene three Native American Infrastructure Summits. Led CPUC-Yurok Tribe consultation to support electric and telephone service construction, providing first telephone and electric service beginning in 2013 to areas of the Yurok Tribe's Northern California reservation. Commissioned study of broadband access in tribal and high wildfire danger areas.

**U.C. Berkeley School of Law (formerly Boalt Hall), Berkeley, California, Adjunct Professor, Spring 2013.** Taught Telecommunications, Broadcast, and Internet Law. Supervised student research. Guest lecturer, Telecommunications Law, Spring 2012. Guest lecturer, Thai Telecom Regulators course, 2012.

**STATE OF CALIFORNIA, BUSINESS, TRANSPORTATION AND HOUSING AGENCY (BTH), Sacramento, California, 2001-2003. Undersecretary and Senior Policy Advisor for Housing and Economic Development, November 2003-April 2004. Staff Director and Acting Undersecretary, April 2001-November 2003. Acting BTH Secretary, served when Agency Secretary was out of state. BTH Legislative Director, May 2003 to October 2003.** Appointed by Governor Davis to work with Agency Secretary Maria Contreras-Sweet to plan, organize, and direct BTH oversight of 14 California state departments employing 47,000 people with a \$12.4 billion budget. Recommended state and federal legislative, policy, administrative, and budget proposals concerning business, transportation, housing, infrastructure, and energy issues. **Energy and Infrastructure:** Advised the Secretary on energy initiatives including development of energy demand response programs and her service on the California Independent System Operator Board of Governors in 2001 during California's energy crisis. Provided policy and editorial analysis for the *Invest for California Infrastructure Report* on Energy, Water, Telecommunications, Transportation, and Housing. Oversaw public safety initiatives to protect infrastructure after September 11, 2001. Collaborated with California departments to initiate freeway sign use for Amber Alerts, improve goods movement and traffic safety. **Housing:** Member, California Housing Finance Agency Board of Directors. Expanded housing financial education. Authored sustainable community development principles.

**Entravision Communications Corporation, Vice-President and General Counsel, Z-Spanish Media Corporation, Sacramento, California, April 1999-April 2001 (merged with Entravision in 2001).** Oversaw Z-Spanish Media's legal and regulatory affairs and transactions including Z-Spanish's merger with Entravision in August 2000 valued at over \$700 million. Z-Spanish owned 33 radio stations, 4 satellite-based programming networks that served 45 affiliates, 10,000 billboards, and 5 internet sites.

**FEDERAL COMMUNICATIONS COMMISSION, (FCC), Washington D.C., Jan. 1994-April 1999.** *Director, Office of Communications Business Opportunities (OCBO)*, August 1995-April 1999. *Deputy Director, OCBO, August 1994-July 1995.* Chief policy advisor to FCC Chairman Reed Hundt and Bill Kennard and FCC Commissioners regarding initiatives to increase communications services to underserved communities, and expand opportunities for small, minority, and women-owned businesses.

Managed office of up to 10 professionals and 3 interns. FCC Legislative liaison to Congressional Small Business Committee, Black, and Hispanic Caucuses. Organized three national FCC communications conferences each attended by more than 300 people. Tripled the FCC's community and small business mailing and outreach list. Keynote speaker or panelist at more than 100 conferences. Designed and commissioned research studies to identify and remove small minority, and women-owned business market entry barriers. Studies led to FCC order prohibiting discrimination in broadcast transactions and advertising sales contracts. *See, Prometheus Radio Broadcasting v. FCC*, 652 F.3d 451 (2011) (upholding discrimination prohibitions); *accord*, FCC 2016 Media Ownership Decision.

**Special Assistant to the Director, FCC Office of International Communications (OIC), January 1994-August 1994.** Policy advisor to the FCC Chairman, Commissioners, and Office Chief Scott Harris on international telecommunications business, legal, and economic development issues. Vice-Chair, United States delegation, International Telecommunications Union (ITU), 1994 World Telecommunications Development Conference, Argentina. Worked with the FCC, U.S. Department of Commerce, U.S. Department of State, and the private sector to develop international telecommunications accords with Mexico, Chile, Argentina, and the ITU. Awards: FCC Chairman's Special Achievement Award, 1997; National Association of Black Telecommunications Professionals, Patrice Johnson Award for Excellence in Public Service, 1998; Performance Award, 1996; Special Act and Group Act Awards, 1995; Letter of Recognition, FCC Chairman, 1994.

**LAW OFFICES OF MUNGER, TOLLES & OLSON, Los Angeles, California, Associate, Oct. 1991-Jan. 1994.** Prepared pleadings, conducted research, took and defended depositions, represented clients at mediation and court hearings for contract, securities law, and employment litigation. Incorporated the Villa Malaga Housing Corporation and served as its Board President to construct supportive housing for low-income adults with disabilities in East Los Angeles.

**JUDGE DOROTHY W. NELSON, UNITED STATES COURT OF APPEALS FOR THE 9TH CIRCUIT, Pasadena, California, Law Clerk, 1990-1991.** Conducted legal research, analyzed pleadings, drafted bench memoranda, opinions, and oral argument questions for Judge Nelson.

#### **PROFESSIONAL QUALIFICATIONS AND ACTIVITIES:**

**Member, California Bar**, admitted 1991, Bar number: 153839. Passed bar exam in fall 1990 after first sitting in July 1990. Admitted to practice as Catherine J. Kisse-Sandoval. **Bar Admissions:** U.S. Court of Appeals for the D.C. Circuit, Admitted, August 2018; U.S. Court of Appeals for the Ninth Circuit Court, Admitted, July 22, 1991; Central District of California, Admitted, Dec. 23, 1991.

**Member, California Judicial Selection Advisory Committee**, 2012-2018. Appointed by Governor Brown to evaluate judicial applications and recommend judicial appointments. **Current Professional Organization Memberships:** American Bar Assn.; Energy Bar Assn.; Federal Communications Bar Assn.; Santa Clara County Bar Assn.; Conference of California Public Utility Counsel; La Raza Lawyers Assn. of Santa Clara County; Association of American Law Schools,

Section on Communication, Media & Information Law Section, Treasurer, 2019. Friends of Hispanics Organized for Political Equality Network; National Assn. of Latino Elected and Appointed Officials. **Past Professional Organization Memberships** include: National Assn. of Black Owned Broadcasters; Sacramento Hispanic Chamber of Commerce; Council on Foreign Relations; Montebello-Ashiya Sister City Assn.

### **PEER REVIEWER FOR ACADEMIC PUBLICATIONS**

Stanford Law Review, 2019                      Energies, Journal, 2019  
Yale Law Review, 2018                        Atmosphere, Journal, 2019

### **ACADEMIC COURSES TAUGHT**

**Santa Clara University School of Law: Contracts**, Fall-Spring academic years, 2004-2005, 2005-2006, 2006-2007, 2007-2008, 2008-2009, 2009-2010, 2010-2011, 2014-2015, 2015-2016, 2016-2017, 2017-2018, 2018-2019 (two Contracts courses, full-time and part-time student classes), 2019-2020.

**Energy Law**, Fall 2017, Fall 2019.

**Communications Law; Mass Media Regulation in the Era of Internet Convergence**, Spring 2005, Fall 2005, 2006, 2007, Spring 2009, 2010, 2018, scheduled for Spring 2020.

**Antitrust Law**, Spring 2006, 2007, 2008, Fall 2008, 2009, 2010, 2012, 2013. Summer 2020 Comparative Antitrust Law course at SCU Law Oxford Summer Program. Teach antitrust modules in Energy Law and Communications Law courses.

**Director, Santa Clara University Oxford University Summer Law Program**, Oxford, England, Fall 2017-Summer 2020. Direct SCU Law program at Oxford University, organizing tutors, lectures, and program. Supervised a two-credit paper written by each student after my comments on the draft and student revision. Taught tutorial, Energy and the Environment, summer 2019 and 2020. Comparative Antitrust Law tutorial, Summer 2020. Lecture, July 2019, The Native American Reservation Electricity Gap. Lecture, July 2018, Net Neutrality Powers Energy and Forestalls Climate Change. Organized Energy, Environment, and Ethics conference at Oxford University, July 2020.

**Director, Santa Clara University Human Rights Law Summer Program, Costa Rica**, 2008 and 2010. Taught class in 2008 analyzing *Boumediene v. Bush* habeas corpus case. Taught classes in 2010 on Freedom of Expression, and the Inter-American System of Human Rights Law.

**Seoul National University Intellectual Property LLM Summer Program, Santa Clara University**, Summer 2010, Summer 2011, Summer 2012. Taught a week-long class for Seoul National University LLM students on the intersection of Antitrust Law and Intellectual Property.

**LLM 2-day mini-courses**: Corporations and Antitrust Law, Summer 2007 and 2008.

**Osher Lifelong Learning**. Summer 2007. Taught two-day course on Communications Law analyzing FCC proposals to change media ownership rules to permit more market consolidation.

**U.C. Berkeley School of Law, Adjunct Professor**, Telecom. Broadcast, and Internet Law, Spring 2013.

ACADEMIC PUBLICATIONS:

ALLEN S. HAMMOND IV, CATHERINE J.K. SANDOVAL, AND LEONARD BAYNES, COMMUNICATIONS LAW IN THE PUBLIC INTEREST (Wolters Kluwer, forthcoming, 2020).

Catherine J.K. Sandoval, *Net Neutrality Repeal Rips Holes in the Public Safety Net*, PITTSBURGH LAW REVIEW (forthcoming, 2019).

Catherine J.K. Sandoval, *Cybersecurity Paradigm Shift: The Risks of Net Neutrality Repeal to Energy Reliability, Public Safety, and Climate Change Solutions*, 10 SAN DIEGO J. CLIMATE & ENERGY LAW 91 (2019).

Catherine J.K. Sandoval, Patrick Lanthier, *Connect the "Whole Community" to Address Regulatory-Driven Vulnerability to Infrastructure Management Decisions, Disaster, and the Digital Divide*, TECHNOLOGY VS GOVERNMENT: THE IRRESISTIBLE FORCE MEETS THE IMMOVABLE OBJECT (Emerald Studies in Media and Communications, Publisher. Edited by Lloyd Levine) (forthcoming, 2019).

Catherine J.K. Sandoval, *Contested Places, Utility Pole Spaces; A Competition and Safety Framework for Analyzing Utility Pole Association Rules and Roles Principles to Address Utility Pole Association Concerted Action that Undermines Electric and Telecom Competition and Safety*, CATHOLIC UNIVERSITY LAW REVIEW, (forthcoming, 2020).

Catherine J.K. Sandoval, *Energy Access is Energy Justice, The Yurok Tribe's Trailblazing Work to Close the Native American Reservation Electricity Gap*, in ENERGY JUSTICE, US AND INTERNATIONAL PERSPECTIVES (Edward Elgar, Pub. Raya Salter; Carmen G. Gonzalez, and; Elizabeth Ann Kronk Warner, Eds., Nov. 2018).

Catherine J.K. Sandoval, *Net Neutrality Powers Energy and Forestalls Climate Change*, 9 SAN DIEGO JOURNAL OF CLIMATE & ENERGY LAW 1 (2018).

Catherine J.K. Sandoval, *Pharmaceutical Reverse Payment Settlements*, 26 SANTA CLARA COMPUTER AND HIGH TECH LAW JOURNAL 141 (2009-2010).

Catherine J.K. Sandoval, *Minority Commercial Radio Ownership in 2009: FCC Licensing and Consolidation Policies, Entry Windows, and the Nexus Between Ownership, Diversity, and Service in the Public Interest*, in COMMUNICATIONS RESEARCH IN ACTION: SCHOLAR-ACTIVIST COLLABORATIONS FOR A DEMOCRATIC PUBLIC SPHERE (Minna Aslama & Philip M. Napoli, eds., Fordham University Press, 2010).

Catherine J.K. Sandoval, *Disclosure, Deception and Deep-Packet Inspection; The Role of the Federal Trade Commission Act's Deceptive Conduct Prohibitions in the Net Neutrality Debate*, 78 FORDHAM LAW REVIEW 101 (October 2009).

Catherine J.K. Sandoval, *Antitrust Language Barriers: First Amendment Issues in Defining a Broadcast Market by the Program's Language and their Implications for Democracy, Competition and Communities*, 60 FEDERAL COMMUNICATIONS LAW JOURNAL 407 (2008).

Christine M. Bachen, Allen S. Hammond, IV, and Catherine J.K. Sandoval, *Serving the Public Interest: Broadcast News, Public Affairs Programming, and the Case for Minority Ownership*, in MEDIA DIVERSITY AND LOCALISM: MEANINGS AND METRICS (Philip Napoli, ed., L. Erlbaum Assoc., 2007).

Catherine J.K. Sandoval, *Antitrust Law on the Borderland of Language and Market Definition; Is there a Separate Spanish-Language Radio Market? A Case Study of the Merger of Univision and Hispanic Broadcasting Corporation*, 40 U. San Francisco Law Review 381 (Winter 2006).

**Academic Works in Progress:**

Catherine J.K. Sandoval, *The Native American Reservation Internet Gap* (work in progress, forthcoming, 2020).

Catherine J.K. Sandoval, *The Safety Gap in Federal Electricity Regulation Fuels Wildfire Risk* (work in progress, forthcoming, 2020).

Catherine J.K. Sandoval, *High-Tech Solutions to Address the Native American Reservation Electricity Gap; Solar and Electric-Powered Boat-to-Home and Artificial Intelligence* (work in progress, forthcoming, 2020).

Catherine J.K. Sandoval, *Net Neutrality Protects Democracy* (work in progress, forthcoming, 2020).

Catherine J.K. Sandoval, *Principles for Regulating Utility Infrastructure to Foster Safe, Reliable Service at Just and Reasonable Rates Consistent with California's Environmental Laws and Climate Change Mitigation Strategy* (work in progress, forthcoming, 2020).

Catherine J.K. Sandoval, *The Water-Energy Communications Nexus; Expanding Internet Deployment and the Internet of Things to Manage Water and Energy Resources* (work in progress, forthcoming, 2020).

Catherine J.K. Sandoval, *The Water-Energy Communications Nexus; Expanding Internet Deployment and the Internet of Things to Manage Water and Energy Resources* (work in progress, forthcoming, 2020).

Catherine J.K. Sandoval, *Energy Efficiency, Demand Response, and Internet of Things Climate Change Mitigation Strategies* (work in progress, forthcoming, 2020).

**Short Articles, Blogs, and Editorial Articles:**

Catherine J.K. Sandoval, SCU LAW FACULTY BLOG, <https://law.scu.edu/category/faculty/>. *PG&E should file asset transfer requests with the CPUC*, Jan. 17, 2019; *Replace uninsulated and spliced electric wires in high-wildfire danger areas, and address the causes of transformer and utility pole failures to protect our communities*, Jan. 22, 2019.

Catherine J.K. Sandoval, *Principles for Utility Regulation in the Face of Increasing Wildfire Risk*, Markkula Center for Applied Ethics, December 4, 2018, <https://www.scu.edu/ethics/all-about-ethics/principles-for-utility-regulation-in-the-face-of-increasing-wildfire-risk/>.

Catherine J.K. Sandoval, *Net Neutrality Protects Democracy, the Economy, and National Security*, SAN JOSE MERCURY NEWS, December 12, 2017.

Catherine J.K. Sandoval, *Protect the Open Internet*, DAILY JOURNAL, May 18, 2017.

Catherine Sandoval, *Minority Broadcasters; FCC Data Obscures Numbers and Status*, SOCIAL SCIENCES RESEARCH COUNCIL, DATA DRIP (Aug. 25, 2009). Founding contributor to social science research blog.

Catherine J.K. Sandoval, *Bilingualism should be cultivated, not discouraged*, SAN JOSE MERCURY NEWS, June 24, 2007. Op Ed responding to Governor Schwarzenegger's suggestion that Hispanics should "Turn off the Spanish TV set."

### **Citations in Legal Cases and Government Decisions**

**D.C. Circuit Court of Appeals, *Mozilla v. FCC***, 940 F.3d 1, 95, 97, 99-100 (2019) (citing Professor and former CPUC Commissioner Sandoval's comments as the basis for remanding the FCC's net neutrality repeal order to consider its effect on public safety. Citing Professor Sandoval's comments about the Internet's role in public safety, energy reliability and safety, natural gas leak detection, and critical infrastructure protection to find that the FCC violated the Administrative Procedures Act and the Communications Act by failing to analyze the public safety consequences of net neutrality repeal).

**FCC, *In the Matter of Restoring Internet Freedom***, 33 FCC Rcd. 311, n. 507, n. 512, n. 561, n. 943, n. 1067, n. 1068, n. 1071 (2018) (rejecting comments that net neutrality repeal undermines national security), and attaching the 2015 Open Internet Order to Commissioner Clyburn's Dissent including citations to then CPUC Commissioner Sandoval's Comments (Jan. 2018) (citing Professor Sandoval's comments supporting regulations to prohibit ISP blocking, throttling, and paid priority in light of ISP contracting practices, the absence of antitrust law remedy for non-competition harms, legal duties to protect critical infrastructure and national security, the FCC's jurisdiction over wireless service providers).

**FCC, *In re: Protecting and Promoting the Open Internet***, 30 FCC Rcd. 5601 n. 254, 291, 355, 503, 1483 (2015) (citing comments of CPUC Commissioner Catherine Sandoval "[A]ny of the minimum level of access standards the FCC proposes would be insufficient to support the needs of a diversity of Internet users including Critical Infrastructure"); (asserting paid prioritization undermines public safety and universal service, and increases barriers to adopting Internet-based applications such as Internet-enabled demand response communications electric and gas utilities use to prevent power blackouts, forestall the need to build fossil-fueled power plants, promote environmental sustainability, and manage energy resources); (asserting commercial reasonableness rule deters investment and Internet applications, such as Internet-enabled "Smart beds," which read a patient's vital signs and send aggregated data on available beds to mass casualty and disaster planners who use this information to determine which hospital has an available bed in a burn unit); (asserting difficulties in using interconnected VoIP service amidst a broadband provider dispute with a server host or content provider raise grave concerns about public safety and network reliability); ("[R]ecommend[ing] the FCC adopt rules to protect and promote the Open Internet consistent with both Section 706 of the Telecommunications Act and Title II of the Communications Act with forbearance and a light regulatory touch.")

**FCC, *Preserving the Open Internet***, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, 25 FCC Rcd. 17905, 17911, n. 112, n. 165, n. 168, n. 170, n. 191 (2010) (*2010 Open Internet Order*), *aff'd in part, vacated and remanded in part sub nom. Verizon v. FCC*, 740 F.3d 623 (D.C. Cir. 2014) (citing Professor Sandoval's study of Internet service provider Terms of Service and Acceptable Use Policies that prohibit the use of certain Internet protocols to access or upload content such as movies or games. Comments cited argue ISP contract terms and conduct merit FCC action to protect the Open Internet).

**FCC, 2014 and 2010 Media Ownership Quadrennial Review, Promoting Diversification of Ownership in the Broadcasting Services**, MB Docket No. 14-50 (bans discrimination in broadcast transactions,<sup>1</sup> adopts ownership fraud “zero tolerance” policy,<sup>2</sup> requires broadcast advertising sales contracts include non-discrimination provisions<sup>3</sup> based in part on research studies commissioned by Catherine Sandoval).

**FCC, Promoting Diversification of Ownership in the Broadcasting Services**, MB Docket 07-294, et. al., *Memorandum Opinion and Order and Fifth Further Notice of Proposed Rulemaking*, Oct. 16, 2009, 24 FCC Rcd. 13040, n. 12, n. 22, n. 37, (citing comments filed by Catherine Sandoval for the Broadband Institute of California supporting data collection from sole proprietors, and criticizing the FCC’s data collection policies and instruments hinder rational rulemaking).

#### Amicus Briefs and Government Comment Citations:

*Brief of Professors of Administrative, Communications, Energy, Antitrust, and Contract Law and Policy As Amicus Curiae In Support of Petitioner, Mozilla v. FCC*, Aug. 27, 2018, prepared by Catherine J.K. Sandoval with Allen S. Hammond, Dr. Carolyn Byerly, and Anthony Chase (leader writer for brief analyzing the FCC’s failure to discuss the effect of net neutrality’s repeal on public safety, critical infrastructure, and democracy).

*Brief of Government Petitioners, Mozilla v. FCC*, Aug. 20, 2018 WL 3993567 (C.A.D.C.), 23, 24, 25 (citing Catherine Sandoval’s Reply Comments, at 31-32) (“There is no evidence that it is possible to isolate and preferentially prioritize communications important to public health and safety, given the diversity of platforms and endpoints.”); (“As part of the effort to modernize the nation’s electrical grid, electric utilities in California and other States have invested ratepayer funds in integrated systems of smart meters, communications networks, and data management systems that enable two-way communication between utilities and customers.”); (citing Sandoval Reply Comments at 47) (“Instant communication between customers, suppliers, energy generators, contractors, regulators, and safety personnel is essential to maintaining a safe and reliable grid, and must thus remain free from blocking or delay due to throttling or deprioritization.”); (citing Sandoval Supp. Reply Comments, Ex. C at 34-35) (“California has relied on demand response services offered by utilities and third parties to directly balance load, manage congestion, and satisfy state and federal reliability standards.”); *Id.* at 25 (citing Sandoval Reply Comments at 25-27, 30-32) (“Similarly, state and local governments have modernized their public health and safety systems by moving such systems online. These systems depend on the public’s access to BIAS on nondiscriminatory terms.”); *Id.* at 29 (citing Sandoval Reply Comments at 51-52) (“Commenters, including the Government Petitioners, submitted substantial evidence of reliance on open Internet principles, including millions of dollars of investment.”).

<sup>1</sup> See 47 CFR § 73.2090; *NPRM*, 26 FCC Rcd at 17545, para. 148; *Diversity Order*, 23 FCC Rcd 5922, 5939-40, paras. 40-42 (2008) (adopting “a rule that bars discrimination on the basis of race or gender and related protected categories in broadcast transactions” and requiring certification of compliance).

<sup>2</sup> *Diversity Order*, 23 FCC Rcd at 5940-42, paras. 43-50 (barring applications based on ownership fraud).

<sup>3</sup> See *NPRM*, 26 FCC Rcd at 17545, para. 148; *Diversity Order*, 23 FCC Rcd at 5940-42, paras. 43-50; 5941-42, paras. 49-50 (requiring broadcasters renewing their licenses to certify that their advertising sales contracts contain nondiscrimination clauses that prohibit all forms of discrimination). *Prometheus II* upheld several measures adopted in the FCC *Diversity Order* including commissioning longitudinal research on minority and women ownership trends, enabling the FCC’s Office of Communications Business Opportunities to coordinate with the Small Business Administration to encourage local and regional banks to make loans through SBA’s guaranteed loan programs, holding “Access to Capital” conferences, and creating a guidebook on diversity. *Prometheus II*, 652 F.3d at 471 n.41; see also *Diversity Order*, 23 FCC Rcd at 5939-45, paras. 40-64.

*Amicus Briefs and Government Comment Citations, continued:*

*Reply Brief of Government Petitioners, Mozilla v. FCC*, Nov. 16, 2018, p. 17 (citing Professor Sandoval's Reply Comments, p. 47-51 (discussing “abundant record evidence of harms to public safety that are unaddressed—and in many cases *caused*—by market forces.”))

*Reply Brief, Internet Association, et. al., in Support of Petitioners, Mozilla v. FCC*, Nov. 15, 2018, p. 12, (citing Br. of Professors of Admin., Commc’ns, Energy, Antitrust, and Contract Law and Policy 7–8) (“Consequently, antitrust laws are ill-suited to address harms to consumers, free speech, investment, and innovation in the net neutrality context.”)

*FCC, Restoring Internet Freedom, WC Docket No. 17-108, Comments of the California Public Utilities Commission to the FCC*, n. 63 (Aug. 2017) (citing *See, 2015 Open Internet Order*, at ¶ 126, noting commenters’ concerns about paid prioritization and citing to an *ex parte* letter from then-CPUC Commissioner Catherine Sandoval, “asserting that paid prioritization undermines public safety and universal service....”). The CPUC’s citation to the FCC’s citation of my *ex parte* filing is used to support the CPUC’s argument in the Internet Freedom rulemaking that without paid prioritization and the lack of “non-discriminatory rules, providers of emergency services or public safety agencies might have to pay extra for their traffic to have priority. If states, cities, and counties were required to pay for priority access, their ability to provide comprehensive, timely information to the public in a crisis could be profoundly impaired.”

*Joint Brief for Petitioners Mozilla Corporation, et. al., Mozilla v. FCC*, Aug. 20, 2018, 2018 WL 3993564 (C.A.D.C.) 72-73 (citing *Disclosure, Deception, and Deep-Packet Inspection*, attached to Catherine Sandoval Reply Comments, WC Docket No. 17-108) (Aug. 31, 2017) (citing a finding that Comcast had blocked users' ability to share copies of the King James Bible).

*Amicus Brief of Former Commissioners and General Counsel of the Federal Communications Commission and the Minority Media and Telecommunications Council, Amici Curiae in Support of Respondents*, p. 16, *Fisher v. Texas* (5<sup>th</sup> Cir. 2012) (“The need for diversity in higher education as a means of promoting diversity in mass media is particularly pronounced because minorities are profoundly underrepresented as owners of mass media outlets) (citing Catherine Sandoval, *Minority Commercial Radio Ownership Policies, Entry Windows, and the Nexus Between Ownership, Diversity, and Service in the Public Interest* (2009) (“ethnic minorities owned only 7.24% of the 11,249 [U.S.] commercial radio stations”)).

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Catherine J.K. Sandoval, FCC, *Hispanic Heritage Month Celebration*, October 2019 (discussing issues affecting Latinos and the public interest including the remand of media ownership rules to consider the impact on minorities and women ordered by the 3<sup>rd</sup> Circuit’s Prometheus IV decision and the D.C. Circuit’s remand of the FCC’s net neutrality order to analyze its effect on public safety).

Catherine J.K. Sandoval, CPUC *En Banc*, *The Future of California’s Communications Grid, Moderator and Commenter*, May 2019 (discussing the integration of communications and information technology into the energy and water ecosystems, education, and the economy, and the need for resilience and safety).

Catherine J.K. Sandoval, CPUC Workshop, *PG&E Safety Culture Workshop*, Moderator and Commenter, April 2019 (discussing regulatory principles to foster safety and highlight the risks of regulated utilities who wrongly classify problems as not a safety issue to avoid regulation or obtain bonus incentives).

Catherine J.K. Sandoval, CPUC Workshop, *Sprint/T-Mobile Proposed Merger*, Commenter, Dec. 2018 (encouraging the CPUC to analyze the proposed merger’s impact on competition including wholesale market access for minutes crucial to Lifeline providers and non-facilities-based competitors, and the merger’s impact on price competition, service, and Lifeline).

Catherine J.K. Sandoval, Letter to Mayor Lisa Gillmor, May 6, 2019 (discussing lack of analysis of the renewable natural gas market or the Greenhouse Gas emission effects of the Resolution in file 19-329).

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Anthony E. Varona, *Toward A Broadband Public Interest Standard*, 61 *ADMIN. L. REV.* 1, 135 (2009) (discussing the effects of radio ownership rule liberalization on the radio-dependent Latino/a community).

Catherine J.K. Sandoval, *Antitrust Language Barriers: First Amendment Constraints on Defining an Antitrust Market by A Broadcast's Language, and Its Implications for Audiences, Competition, and Democracy*, 60 *Fed. Comm. L.J.* 407, 479 (2008) (citing FCC grant of temporary and long-term waivers to Spanish-and non-English-language television and cable stations to foster program diversity).

Dara Ashrafi, *Forcing the Connection: The Antitrust Concerns with Broadband Data Caps and Data Discrimination in the Wake of the New Internet Television Age*, 54 *SANTA CLARA L. REV.* 465, 496 (2014) (arguing that narrow market definitions result in distorted antitrust analyses).

LaVonda N. Reed-Huff, *Offensive Political Speech from the 1970s to 2008: A Broadcaster's Moral Choice* (2008) 8 *U. MD. L.J. RACE, RELIGION, GENDER & CLASS* 241, 290 (barriers to counter-speech include lack of control and ownership of broadcast outlets by racial minorities).

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**Bachen, C.M., Hammond, A.S., & Sandoval, C.J.K. (2007). Serving the public interest: Broadcast news, public affairs programming, and the case for minority ownership. In P.M. Napoli (Ed.), *Media diversity and localism: Meaning and metrics* (pp. 269-308). Mahwah, NJ: Erlbaum. Cited by:**

Dam Hee Kim, *Diversity Policies in the Media Marketplace: A Review of Studies of Minority Ownership, Employment, and Content*, 10 INTERNATIONAL JOURNAL OF COMMUNICATION 2201–2220, 2216 (2016).

Hector Amaya, CITIZENSHIP EXCESS: LATINO/AS, MEDIA, AND THE NATION, 124, NYU Press (May 2013).

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Christine Bachen, Allen Hammond, and Catherine Sandoval of Santa Clara Law School, Serving the public interest: Broadcast news, public affairs programming, and the case for minority ownership, as laying “an elegant foundation for the legal theories and social science evidence supporting policies promoting media ownership by minorities.”)

Lauren Gilbert, *The 26th Mile: Empathy and the Immigration Decisions of Justice Sotomayor* (2010) 13 HARV. LATINO L. REV. 1, 4–5 (citing Hispanic National Bar Association, Report of the Hispanic National Bar Association in Support of the Confirmation of the Honorable Sonia Sotomayor as Associate Justice of the Supreme Court of the United States, prepared and edited by Professors Jenny Rivera, Laura E. Gómez, Elizabeth Iglesias, Solangel Maldonado, and Catherine Sandoval (July 2009), <http://www.cuny.edu/law/clinics/JusticeInitiatives/clore/sotomayor/HispanicNationalBarAssociation.pdf>).

Susan P. Crawford, *The Radio and the Internet*, 23 BERKELEY TECH. L.J. 933, 1007 (2008) (citing Catherine J.K. Sandoval, Director, Office of Commc'ns Business Opportunities, FCC, Statement Regarding Closing of PCS Entrepreneurs' Block Auction (May 6, 1996), available at <http://www.fcc.gov/Bureaus/OCBO/ocbospch.wp> (“Congress authorized the use of installment payments to allow bidders to pay for their licenses over time, bidding credits and other provisions to lower the capital access barriers which keep many small businesses from competing.”)).

### **Selected Papers Presented and Speeches, 2011 to Present**

#### **Presentations About Diversity, the Public Interest, and Increasing the Pipeline for Opportunity:**

The Federal Communications Commission, Serving American Diversity and the Public Interest, Hispanic Heritage Month Celebration, October 2019.

College Bound Today, *College and Career Development*, August 2020.

Yale University, April 2019, *Mentorship Models*.

Third Annual Pathway to Law Summit, University of San Francisco School of Law, *Preparing Students for Law School Success*, February 2018.

Keynote Speaker, Applied Technology Center, High School Graduation Commencement, Montebello Unified School District, June 2017

Yale University, *Inaugurating the Catherine Sandoval Yale Scholars of the House Fellowship*, October 2015.

**Presentations About Communications Regulation, Deployment, Access, Diversity, and the Public Interest:**

***Presentations About FCC Regulation and Jurisprudence:***

The Federal Communications Commission, *Serving American Diversity and the Public Interest*, Hispanic Heritage Month Celebration, October 2019.

National Association of Regulatory Utility Commissioners (NARUC) Winter Conference, February 2017, Panelist, *The FCC and the New Administration, Issues and Opportunities*.

***Presentations About Net Neutrality:***

University of Pittsburgh Law Review Symposium, *The Net Without Net Neutrality, Net Neutrality Repeal Rips Holes in the Public Safety Net*, March 2019.

Oxford University, SCU Law Summer Law Program Lecture Series, *Net Neutrality Protects Democracy and Critical Infrastructure*, July 2018.

Trina Grillo Public Interest And Social Justice Retreat, *Net Neutrality Protects Democracy and Civil Justice*, March 2018.

Santa Clara University School of Law, Faculty Works in Progress, *Net Neutrality Powers Energy and Forestalls Climate Change*, February 2018.

Net Neutrality Protects Democracy, CSCI 10: Intro to Computer Science, *The Social Impact of Computing, Law, and Policies Governing Internet Regulation*, November 2017.

Santa Clara University Library, Lightning Lecture Series, *Net Neutrality Protects Democracy*, October 2017.

National Association of Regulatory Utility Commissioners (NARUC) Summer Conference, July 2017, Panelist, *Back to the Future... or the Past: The Effect of a Broadband Reclassification*.  
Catherine J.K. Sandoval, California Public Utilities Commission, *Testimony Before the Congressional Forum on Net Neutrality*, Hosted by Congresswoman Doris O. Matsui, September 2014.

Yale University, *Net Neutrality and Community Leadership*, April 2014.

***Presentations About the Digital Divide:***

CETF, *Closing Keynote Speech on Closing the Digital Divide*, December 1, 2017.

California Emerging Technology Fund, Digital Divide Roundtable, Participant, August 15, 2017.

Partnership for Progress on the Digital Divide, Presentation, *Electricity Access and the Digital Divide, Bringing Reliable Energy and Communications Technology to California's Yurok Tribe*, May 2017.

California Research and Education Network (CENIC), Keynote address, *Connecting California*, March 2015.

***Presentations About the Federal and State Lifeline Program to Provide Communications and Internet Service to Low-Income Americans:***

NARUC Summer Conference, July 2016, Panelist, Telecommunications Committee, *Lifeline State and Federal Programs and Policies to Promote Voice and Broadband Access*.

***Presentations About the Internet and Privacy:***

Conference of Western Attorney Generals, Panelist, *Internet and Privacy Regulation*, August 2017.

***Presentations About First Amendment Legal Issues:***

Southeastern Association of Law Schools Annual Meeting, Panelist, *The Boundaries of Modern Press Protection*, August 2018.

***Presentations About Media Diversity, Community Information Needs and FCC Media Ownership Issues:***

Congressional Hispanic Caucus Institute, October 2016, Media Diversity Summit Speaker

National Association of Latino Independent Producers, October 2016, *Net Neutrality and Media Diversity*.

***Presentations About Communications, Disaster Planning, and Public Safety:***

Southeastern Association of Law Schools, Panel, The Socioeconomic Reliability of Communications Infrastructure Function During Times of Disaster, *The Safety Gap in Federal Power Act Regulation*, August 2019.

**Presentations about Energy Regulation:**

***Presentations About the Energy, the Environment, Climate Change and Diverse Communities:***

University of California, Berkeley, Latinos and the Environment Summit, Panelist, Environment, Education, and Equity, April 2018.

Yale University, *Latinx and the Environment; Climate Change and Immigration Policy*, October 2017.

University of California, Berkeley, Latinos and the Environment Conference, Research, Policy Maker, and Ground Work, Featured Speaker, Presentation "Latinx and the Environment, Community Risks and Resources," September 2017.

Environmental Law Society, Santa Clara University School of Law, Spring 2017 Symposium, Facing Climate Change in California, Challenges and Opportunities in Energy Policy Regulation, and Practice. Presentation, *Reliable and Resilient Energy Access for Disadvantaged Communities*.

***Presentations About Energy Efficiency and Climate Change:***

Oxford University, Energy, Environment, and Ethics Conference, *Energy Efficiency as a Climate Change Mitigation Strategy for U.K. and U.S. Energy Markets*, July 2019.

National Regulatory Research Institute (NRRI), *Convergence: Energy Efficiency in the Water Sector and the Clean Power Plan*, December 2015.

***Presentations About Energy Reliability, Safety, and Climate Change Strategies Using Communications and Information Technology:***

NARUC Fall Conference, November 2016, NARUC Electricity Committee, *Natural Gas Safety, Reliability, and the Natural Gas/Electricity/ Communications Nexus in light of the Aliso Canyon Gas Field Leak*.

NARUC Winter Conference, February 2017, Panel organizer and panelist, *Telecommunications Resiliency and Critical Infrastructure*.

NARUC Fall Conference, November 2016, Panelist, Telecommunications Committee, *Critical Infrastructure Interconnection, the Communications/Water/Energy Nexus*.

Power Association of Northern California, October 2016, *Energy Regulation*.

Infotech Conference, *Energy and Natural Gas Regulation; Managing the Aliso Canyon Gas Leak and Energy Resources through Conservation and Communications Technologies*.

***Presentations About Energy Regulation and Innovation:***

Advanced Research Projects Agency, Energy (ARPA-E), Energy Innovation Summit, Speaker, *Energy Innovation Plenary*.

Grid Edge World Forum, June 2016, Industry Visionary, *Perspective on the Future Electricity System*.

Harvard Electricity Policy Group, February 2016, Energy Innovation Conference participant.

SCU Law, Climate Change Law Course, *California Energy Policies*, Guest lecturer, Oct. 2012.

SCU Law, Environmental Law Society, *California's Energy Goals*, Guest lecturer, August 2012.

Power Association of Northern California (PANC), *Safe, Reliable Service at Just and Reasonable Rates*, September 11, 2012.

Stanford University, Silicon Valley Leadership Summit, *Achieving California's Energy Goals*, June 2012.

Environmental Law Conference, *Greening Energy and the Environment*, October 2011.

***Presentations About Distributed Energy Resources, Regulatory Paradigms, and Climate Change Mitigation:***

Harvard Electricity Policy Group, June 2016, Harvard University, Moderator, *Value of Solar Panel*.

AWEA Regional Wind Energy Summit West 2013, *State Wind Energy Initiatives, Priorities, Challenges, and Opportunities*, January 2013.

Southern California Energy Summit, *Achieving Renewable and Reliable Energy*, January 2012.

**Presentations about the Native American Reservation Electricity and Infrastructure Gap; Regulation, Equity, Access, Governance, and Innovation Frameworks:**

The Native American Reservation Electricity Gap; High-Tech Solutions to Address Families Without Electricity in the 21<sup>st</sup> Century, Intertrust Innovator Series, August 2019

Oxford University, SCU Law Summer Law Program Lecture Series, *Energy Justice, Closing the Native American Reservation Electricity Gap*, July 2019.

Stanford University, The Precourt Energy Institute, *The Legal Roots of the Native American Reservation Electricity Gap*, March 2019.

Renaissance Conference, December 2018, *Energy Justice, Closing the Native American Reservation Electricity Gap*. Panelist on Energy and Climate Change.

Yale University, *Closing the Native American Reservation Electricity Gap*, December 2018.

Humboldt State University, California State University, *The Yurok Tribe's Trailblazing Leadership to Close the Native American Reservation Electricity Gap*, November 2018.

Santa Clara University Law School, Faculty Works in Progress, "Energy Access is Energy Justice, The Yurok Tribe's Trailblazing Work to Close the Native American Reservation Electricity Gap," November 2017.

American Indian Chamber of Commerce of California, July 2017, Co-Moderator, Native American Infrastructure Summit.

U.C. Berkeley School of Law, Trina Grillo Social Justice Retreat, March 2017, *Energy and Telecom Access on the Yurok Reservation and Karuk Tribal Lands in California*.

NARUC Winter Fall Conference, February 2016, Organizer and Speaker, *Panel on Telecommunications Access in Native American Communities*.

NARUC Winter Conference, February 2016, Panel Organizer and Speaker, *Telecommunications and Energy Access in Native American Communities*.

*American Indian Chamber of Commerce of California, November 2016, Warrior Award for Energy and Communications Leadership, Infrastructure Access for Economic Development and Equity.*

**Presentations About Utility Governance, Infrastructure, Market Design, Legal and Regulatory Gaps:**

***Presentations about Utility Infrastructure Regulation, Safety Gaps, Competition, and Public Service Barriers***

Advanced Regulatory Research Institute, *Contested Places, Utility Poles Spaces*, June 2019.

National Energy Marketers Assn., *Energy Access Service Gaps and Market Design*, April 2019.

SCU Law, Environmental Law Society, *The Safety Gap in Federal Energy and Dam Regulation*, March 2019.

National Energy Marketers Assn., *Energy Market Design*, Jan. 2019.

Comments, CPUC Utility Pole Census and Competitive Access Order Instituting Investigation, 17-06-027, May 2018.

Conducted Utility Pole Tour in conjunction with the California Public Utilities Commission to highlight pole safety, reliability, and competition issues, May 2018.

Loyola University Chicago School of Law, Institute for Consumer Antitrust Studies, 18<sup>th</sup> Annual Antitrust Law Colloquium, *Contested Places, Utility Pole Spaces; Competitive Barriers Raised by Utility Pole Association Membership Supermajority Voting Requirements*, April 2018.

West Hills Community College, October 2016, Keynote Speaker, *Powering the San Joaquin Valley's Development*.

Coachella Valley Environmental Health Leadership Summit, Keynote Address, *Infrastructure Access and Policy for a Healthier Environment*, May 2014.

***Presentations About Utility Governance Regulatory Frameworks and Models:***

Conference of California Public Utility Counsel, *CPUC Regulatory Successes and Reform*, October 2016.

NARUC, *Federalist Roots of Telecom Regulation, Federalism and Telco Committee*, June 2011.

**Presentations About Cybersecurity:**

Stanford University, Digital Civil Society, February 2020, *Cybersecurity Paradigm Shift; The Hacker Paradigm Obscures Cyber Vulnerabilities Created by Net Neutrality Repeal*.

The Leslie K. McAllister Symposium on Climate and Energy Law, 2018, University of San Diego School of Law, *Cybersecurity Paradigm Shift for Smart Grid Governance*, November 2018.

Harvard Electricity Policy Group, June 2014, Harvard University, *Energy Cybersecurity*.

**Presentations About Water Regulation and the Water-Energy-Communications Nexus and Climate Change:**

***Presentations About Water Regulation and Climate Change:***

Suscol Intertribal Council and Napa Valley College, 2018 Water Symposium, presentation, *Water, Community, and Climate Change*, May 2018.

***Presentations About the Water-Energy-Communications and Information Technology Nexus and Climate Change:***

Advanced Workshop on Regulation and Competition, Rutgers University, Western Conference, June 2017, Keynote Speaker, *The Water-Energy Nexus; Aligning Regulatory Paradigms*.

U.C. Riverside, Public Policy School, March 2017, *Broadband Internet for Energy and Water Management*.

NARUC, Western Conference, May 2016, Organizer, Moderator, and Speaker, *Panel on the Communications Water Energy Nexus*.

NARUC Fall Conference, November 2016, Water Committee, *Water Supply Markets*.

NARUC Summer Conference, July 2016, Panelist, Water Committee, *Water Resources and Drought*.

NARUC Winter Conference, February 2016, Water Committee, *Water Management through Data and Communications*.

NARUC, Western Conference, May 2016, Organizer, and Speaker, *Communications/Water/Energy Nexus*.

Australian Energy Networks, August 2016, *Regulatory Strategies to Manage Energy, Water, and Climate Change Risks*.

National Association of Water Companies, October 2016, Speaker and Moderator, *Communications/Water/Energy Nexus*.

California Water Association, September 2016, Keynote Speaker, *Regulating for the Outlier*.

Cal Tech, *Developing the Smart Energy Ecosystem*, Lecture, April 2014.

UCLA, *Smart Grid Technology and Leadership through Communications and Integration*, April 2014.

Stanford Law School, *Communications, Energy, Water, and Community*, Lecture, April 2013.

Center for Research in Regulated Industries, Keynote Address, *Energy and Water Regulation*, June 2012.

**Presentations About Sharing Economy Regulation:**

American Bar Association, Business Section, Autonomous Vehicle Regulation, Governance Paradigms and Net Neutrality Repeal Risks, Sept. 2018.

Federal Trade Commission, “Sharing” Economy Workshop: Issues Facing Platforms, Participants, and Regulators, *TNC Regulation*, June 9, 2015.

**Presentations About Antitrust Law:**

Am. Assn. of Law Schools, *Patently Wrong; Pharmaceutical Reverse Settlement Payments*, January 2011.

**Expert Citations in Media Publications Since 2017**

**Net Neutrality Articles citing Professor Sandoval:**

Michelle Waters, *Catherine Sandoval cited in D.C. Net Neutrality Ruling by D.C. Circuit, A Force for Net Neutrality*, SANTA CLARA UNIVERSITY SCHOOL OF LAW, October 3, 2019 (highlighting the D.C. Circuit’s citation of Professor Sandoval’s comments three times for decision to remand the Net Neutrality Order to the FCC for the Commission’s failure to analyze the public safety issues Professor Sandoval’s FCC comments illuminated. Discussing the public safety, critical infrastructure, and other issues raised by Professor Sandoval and Professor Hammond in their amicus brief filed in the D.C. Circuit net neutrality appeal).

Maura Dolan, *Suit to Block California’s Net Neutrality Law Could be Overshadowed by Broader Challenge in D.C. Circuit*, LOS ANGELES TIMES, Oct. 3, 2018 (citing Santa Clara University Law professor Catherine Sandoval, “the 10th Amendment of the Constitution gives states police powers to protect and promote the safety of their people. “Almost every sector of California is dependent on an open internet,” she said,”) <https://www.latimes.com/local/lanow/la-me-ln-net-neutrality-legal-20181003-story.html>.

*California Passes New Law Preserving Fair And Open Access To The Internet*, ILLUMINATE, SANTA CLARA UNIVERSITY THOUGHT LEADERS, Sept. 5, 2018 (interviewing Professors Sandoval and Hammond and quoting Professor Sandoval about the threats of net neutrality repeal to public safety and critical infrastructure, and discussing the amicus brief they filed with the D.C. Circuit challenging the FCC’s net neutrality repeal as a violation of the Communications Act, The Wireless Act, and the APA), <https://www.scu.edu/illuminate/thought-leaders/catherine-sandoval/california-passes-new-law-preserving-fair-and-open-access-to-the-internet.html>.

Ross Benes, Surprise, *Small Publishers Screwed the Most by Net Neutrality Rules*, DIGIDAY, April 13, 2017 (regarding effect of repeal of net neutrality rules and allowing ISP to favor their affiliate's content, “This system would allow ISPs to raise the cost of the rivals of their affiliates,” said Santa Clara University legal scholar Catherine Sandoval.)

Deborah Lohse, *The Perils of Repealing Net Neutrality*, SANTA CLARA UNIVERSITY MAGAZINE, Dec. 11, 2017, (interview with Professors Sandoval and Hammond about net neutrality repeal proposals) [https://www.scu.edu/news-and-events/feature-stories/stories/the-perils-of-repealing-net-neutrality-.html?utm\\_source=newsletter&utm\\_medium=email&utm\\_campaign=january-18](https://www.scu.edu/news-and-events/feature-stories/stories/the-perils-of-repealing-net-neutrality-.html?utm_source=newsletter&utm_medium=email&utm_campaign=january-18).

Daniel Abbott, *Stolen E-mail Accounts Used to Target the Net Neutrality Repeal, Study Finds*, THE PARALLAX, Dec. 14, 2017, <https://www.the-parallax.com/2017/12/14/stolen-email-net-neutrality/> (quoting Professor Sandoval regarding the FCC's failure to investigate or remedy the submission of comments that used identity theft to distort the record, a violation of the Administrative Procedures Act).

*Efforts to Block California's Net Neutrality Law Could Face a Larger Challenge*, GOVTECH.COM, THE LOS ANGELES TIMES DISTRIBUTED BY TRIBUNE CONTENT AGENCY, LLC., Oct. 4, 2018, (quoting Professor Sandoval, the Constitution's 10th Amendment respects the states' police power, and noting "Almost every sector of California is dependent on an open Internet.")

<http://www.govtech.com/policy/Efforts-to-Block-Californias-Net-Neutrality-Law-Could-Face-a-Larger-Challenge.pdf>.

### **Utility Wildfire and PG&E Bankruptcy articles citing Professor Sandoval:**

Dan Noyes, *Kincade Fire: CPUC steps up action on PG&E's planned outages*, ABC7NEWS, Oct. 29, 2019 (quoting SCU Law Professor and former CPUC Commissioner Sandoval regarding her previous calls for replacing uninsulated power lines with insulated power lines to forestall fire and other dangers from electric lines, and PG&E's poor record in being forthcoming with the FCC about safety issues), <https://abc7news.com/kincade-fire-cpuc-steps-up-action-on-pg-es-planned-outages/5657356/>.

Jaxon van Derbeken and Sean Meyers, *PG&E Says 56 Fires Could Have Been Sparked Without Mass Shutoffs This Month*, Oct. 30, 2019 (quoting SCU Law Professor and former CPUC Commissioner Sandoval stating that PG&E needs to immediately analyze and quickly learn from problems to determine if they are systematic or isolated issues, and to be a learning organization as required by the CPUC in order to protect public safety), <https://www.nbcbayarea.com/news/local/PGE-Says-56-Fires-Could-Have-Been-Sparked-Without-Mass-Shutoffs-This-Month-564143841.html>.

George Avalos, *PG&E Faces Sanctions, Demand for Refunds in the Wake of Planned Blackouts*, THE MERCURY NEWS, October 15, 2019 (quoting SCU law professor Sandoval's regarding California power shutdowns, "I would give PG&E and F for communication," and a "D-minus for planning and a D" for execution of its wildfire mitigation plan,) <https://www.mercurynews.com/2019/10/14/pge-must-pay-for-the-intentional-power-blackouts-gov-newsom/>.

Nico Savage, Casey Tolan, John Woolfolk, George Avalos, *As PG&E Recovers from Power Shutoffs, Many Ask 'Was this Necessary,'* THE MERCURY NEWS, October 14, 2019 (quoting Professor Sandoval, "PG&E's efforts should be particularly focused on areas where the region's topography creates vicious wind tunnels," to avoid "massive outages year after year, while PG&E moves at a slow pace," and arguing for the need to achieve both "reliability and safety,") <https://www.mercurynews.com/2019/10/13/pges-bay-area-power-shutoff-was-years-in-the-making-and-wont-be-the-last/>.

Rebecca Smith, *Wall St. Journal, PG&E's Long Record of Run-Ins With Regulators: A 'Cat and Mouse Game', Over more than two decades, the California utility has at times misled regulators, withheld data and hindered investigations—accumulating fines and judgments of \$2.6 billion*, Sept. 5, 2019 (quoting Santa Clara University law professor and former CPUC commissioner Catherine J.K. Sandoval, PG&E has "a trust issue and a conduct issue," and it violates rules of conduct so often it amounts to a pattern. "They are definitely the worst" among the utilities she oversaw, she said), <https://www.wsj.com/articles/a-cat-and-mouse-game-pg-es-long-record-of-run-ins-with-regulators-and-courts-11567707731?mod=searchresults&page=1&pos=8>.

Yuki Liang, *PG&E Reported Ignored Safety Risks that led to Several Deadly Wildfires in California*, USC ANNENBERG RADIO, March 19, 2019, (interviewing Professor Sandoval about the wildfire and safety risks of “run to failure” approaches to regulation) <http://www.uscannenbergmedia.com/2019/03/19/pge-reportedly-ignored-safety-risks-that-led-to-several-deadly-wildfires-in-california/>.

Ivan Penn, *How PG&E Ignored Fire Risks in Favor of Profits*, NEW YORK TIMES, March 18, 2019 (quoting Professor Sandoval, a former California regulator who has been pushing for improved maintenance of electrical poles and towers about risks that led to the Camp Fire “Some people believe that you run equipment to failure,” to save money. The Camp Fire exemplifies that strategy’s danger), <https://www.nytimes.com/interactive/2019/03/18/business/pge-california-wildfires.html>.

Dan Noyes, *Federal judge criticizes PG&E's wildfire record, demands action*, ABC7NEWS, March 6, 2019, (quoting Santa Clara Law Professor and former CPUC Commissioner Sandoval regarding Judge Alsup’s proposed ruling in the federal criminal probation of PG&E ordering compliance with federal and state laws and wildfire safety plan, including production of traceable, verifiable records), <https://abc7news.com/federal-judge-criticizes-pg-es-wildfire-record-demands-action/5173325/>.

Paige Blankenbueler, *Things Are Not Going To Get Better For A Long Time, PG&E Bankruptcy Complicates an Already Difficult Recovery for Camp Fire Survivors*, HIGH COUNTRY NEWS, Feb. 28, 2019 (reporting that SCU Law Professor Catherine Sandoval, a former California public utilities commissioner, doubts PG&E’s motivation for the bankruptcy filing. She finds its justification especially thin now that the company has been found not liable for the 2017 Tubbs Fire. “That wipes \$15 billion in potential damages off the board right there,” she said), <https://www.hcn.org/issues/51.5/wildfire-pacific-gas-and-electrics-bankruptcy-complicates-an-already-difficult-recovery-for-camp-fire-survivors>.

Ethan Elkind, *City Visions: What can be done about PG&E?*, KALW, Feb 4, 2019 (interviewing about PG&E bankruptcy and options to protect safety, reliability, environmental values, and customer choice Supervisor Hillary Ronen from San Francisco’s District 9; Severin Borenstein, Professor of Business Administration and Public Policy at the Haas School of Business and Faculty Director of the Energy Institute at Haas; Catherine Sandoval, Associate Professor of Law at Santa Clara University and former Commissioner at the California Public Utilities Commission.)

Lauren Sommer, *Here's How PG&E's Bankruptcy Might Hurt California's Ambitious Climate Goals*, NPR, January 31, 2019, <https://www.npr.org/2019/01/31/690371352/heres-how-pg-e-s-bankruptcy-might-hurt-california-s-ambitious-climate-goals> (quoting Santa Clara Law Professor and former CPUC Commissioner Sandoval regarding the jurisdictional issues between bankruptcy and utility regulation and the lack of bankruptcy jurisdiction over state environmental regulations).

CPUC Commissioner Cliff Rechtschaffen, Interview Santa Clara Law Professor Cathy Sandoval about Net Neutrality, BETWEEN TWO FLAGS, Jan. 31. 2019, <https://www.youtube.com/watch?v=eFp6bEJUZY>.

RACHEL MARTIN, *Will PG&E's Bankruptcy Hurt California's Ambitious Energy Efficiency Goals?*, NPR'S MORNING EDITION, Jan 31, 2019, <https://www.kdlg.org/post/will-pges-bankruptcy-hurt-californias-ambitious-energy-efficiency-goals> (quoting Santa Clara Law Professor and former CPUC Commissioner Sandoval regarding the jurisdictional issues between bankruptcy and utility regulation and the lack of bankruptcy jurisdiction over state environmental regulations).

Dan Noyes, *Wildfire victims hold rally, urge lawmakers to keep PG&E out of bankruptcy*, ABC7News, Tuesday, January 22, 2019, <https://abc7news.com/business/wildfire-victims-urge-lawmakers-to-keep-pg-e-out-of-bankruptcy/5101939/> (quoting Santa Clara Law Professor and former CPUC Commissioner Sandoval regarding options for PG&E to raise cash and continue to provide safe and reliable service as an alternative to bankruptcy).

J.D. Morris and Kimberly Veklerov, *PG&E's other big problem: Regulators detail gas record falsification claims*, SAN FRANCISCO CHRONICLE, Jan. 20, 2019, <https://www.sfchronicle.com/business/article/PG-E-s-other-big-problem-Regulators-detail-gas-13547293.php> (quoting Santa Clara Law Professor and former Commissioner Sandoval regarding the CPUC's December 2018 investigation alleging that PG&E falsified tens of thousands of records a year regarding its gas locate and mark program).

*PG&E Files for Bankruptcy Protection*, NPR PODCASTS, January 29, 2019 (reporting that “on Tuesday filed for Chapter 11 bankruptcy protection, a move the company insists is necessary to contend with at least \$30 billion in potential liabilities growing out of the calamitous wildfire seasons of 2017 and 2018. Guest: Catherine Sandoval, Santa Clara University Law Professor.”)

*PG&E Files for Bankruptcy*, KQED, Jan. 29, 2019, <https://www.kqed.org/news/11721886/pge-files-for-bankruptcy-protection> (Interviewing Professor Sandoval regarding implications for the public for PG&E bankruptcy).

*PG&E Files for Bankruptcy, Effects Loom Large*, KQED FORUM, Jan. 29, 2019, <https://www.kqed.org/forum/2010101869377/as-pge-bankruptcy-nears-effects-loom-large> (Interviewing Professor Sandoval regarding implications for renewable energy, costs, and reliability from PG&E bankruptcy).

Dan Noyes, *PG&E Opposes Judge's Ideas to Prevent Wildfire*, ABC NEWS, Jan. 23, 2019, <https://abc7news.com/business/pg-e-opposes-judges-ideas-to-prevent-wildfires/5103668/> (citing Commissioner Sandoval (“Former California Public Utilities Commissioner Catherine Sandoval told us, “PG&E has made it clear they're going to be very aggressive in court and not simply agree. So, what I'm really waiting to hear from is the California Public Utilities Commission and Cal Fire.”)

*Wildfire Victims Hold rally, Urge lawmakers to keep PG&E out of bankruptcy*, CAPITAL GROWTH MANAGEMENT, Jan. 23, 2019, <https://www.cgmwealthadvisors.com/2019/01/23/wildfire-victims-hold-rally-urge-lawmakers-to-keep-pge-out-of-bankruptcy/> (“Former CPUC Commissioner Catherine Sandoval tells the ABC7 News I-Team that the utility should raise cash instead of going bankrupt, starting with putting its San Francisco headquarters up for sale. Sandoval also says PG&E faces other barriers if it goes the bankruptcy route, “What about the government shut down? The federal courts are saying they run out of money this Friday and so bankruptcy cases are already being delayed.”)

J.D. Morris, *PG&E, facing staggering wildfire costs, says bankruptcy coming this month*, SF CHRONICLE, Jan. 16, 2019, <https://www.sfchronicle.com/business/article/PG-E-facing-staggering-wildfires-costs-says-13531815.php> (“Before the bankruptcy announcement, PG&E said it was considering a range of restructuring options to “implement necessary changes while meeting customer and operational needs,” citing SCU Law Professor Catherine Sandoval. “I hope they have a better plan than they’ve been communicating to the rest of us,” said Sandoval, who formerly served on the California Public Utilities Commission.)

Levi Sumagaysay and George Avalos, *PG&E Bankruptcy, What it Means, Press Reader*, BAY AREA NEWS GROUP, January 15, 2019, <https://www.pressreader.com/> (interviewing Professor Sandoval regarding PG&E bankruptcy anticipated filing).

Michelle Waters, *Catherine Sandoval Interviewed by Multiple Media Outlets Regarding PG&E's Pending Bankruptcy*, Santa Clara University School of Law, Jan. 15, 2019, <https://law.scu.edu/news/catherine-sandoval-interviewed-by-multiple-media-outlets-regarding-pges-impending-bankruptcy/>.

Levi Sumagaysay and George Avalos, *PG&E to file for bankruptcy due to wildfire lawsuits; shares tank, Utility cites 'challenges' from California wildfires*, BAY AREA NEWS GROUP, Jan. 14, 2019, <https://www.dailydemocrat.com/2019/01/14/pge-to-file-for-bankruptcy-shares-tank-3/> (“Operating a utility takes a lot of cash,” said Catherine Sandoval, associate professor of law at Santa Clara University who served on the PUC from 2011 to 2017. “The poles, all the wires, the infrastructure, those are the arteries of the electric grid. Maintaining those arteries is a vast undertaking.” She also expressed concern about a possible repeat of what happened after PG&E’s previous bankruptcy during the 2001 energy crisis, when it was unable to buy power — and how ratepayers ended up shouldering costs that continue to this day.”)

Levi Sumagaysay and George Avalos, *McGuire: Ratepayers, fire victims must be protected in PG&E fallout, Utility cites 'challenges' from California wildfires*, THE UKIAH DAILY JOURNAL, Jan. 14, 2019 (“But a former California Public Utilities Commission commissioner is concerned about how long PG&E would be able to provide that service. “Operating a utility takes a lot of cash,” said Catherine Sandoval, associate professor of law at Santa Clara University, on Monday. “The poles, all the wires, the infrastructure, those are the arteries of the electric grid. Maintaining those arteries is a vast undertaking,” said Sandoval, who served on the PUC from 2011 to 2016. “There needs to be a plan for maintaining safe and reliable operation,” Sandoval added. “This is not a case where Sears and JCPenney can close their stores and you go someplace else.” She also expressed concern about a possible repeat of what happened after PG&E’s previous bankruptcy during the 2001 energy crisis, when it was unable to buy power — and when ratepayers ended up shouldering costs that continue to this day...When it comes to PG&E paying its creditors, Sandoval said she was concerned fire victims would be at the most risk. Bankruptcy protection “kicks in a whole bunch of rules, including who gets paid.” Secured creditors get paid first, and she said that even if fire victims were to be awarded damages, they would be considered unsecured creditors who would end up at the bottom of the list.)

David Louie, *PG&E bankruptcy in 2019 may have parallels to its 2001 bankruptcy*, ABC7 NEWS, January 14, 2019, <https://abc7news.com/business/pg-e-bankruptcy-in-2019-may-have-parallels-to-its-2001-bankruptcy/5077747/> (interviewing Professor Sandoval on parallels and distinctions from 2001 PG&E bankruptcy and infrastructure risks).

Jaxon Van Derbeken, *PG&E Bankruptcy Announcement Not a Surprise*, NBC BAY AREA NEWS, Jan. 14, 2019, <https://www.nbcbayarea.com/news/local/PGE-Bankruptcy-Announcement-Not-a-Surprise-504351601.html> (“But another former public utilities commissioner, Catherine Sandoval, worries that in the meantime, the company could have trouble hiring and getting financing given two financial firms have given it a junk rating. “This is a situation where we have to maintain the airplane while in flight, right?,” Sandoval said. “We can’t get to the point where we sacrifice safety of the very system that has caused these fires, because of the credit issues.”)

Betty Yu, *PG&E Bankruptcy Would be one of the biggest Chapter 11 Filings in U.S. History*, CBS SF BAY AREA, Jan. 14, 2019, <https://sanfrancisco.cbslocal.com/video/4009796-pge-bankruptcy-would-be-one-of-the-biggest-chapter-11-filings-in-u-s-history/>.

*¿Qué significa la declaración de bancarrota de PG&E para los clientes? Aunque el Capítulo 11 le permite a la compañía continuar operando con normalidad, la Comisión de Servicios Públicos alertó que las tarifas de gas y electricidad podría aumentar para los consumidores*, UNIVISION, Jan. 14, 2019 – <https://www.univision.com/local/san-francisco-kdtv/que-significa-la-declaracion-de-bancarrotade-pg-e-paralos-clientes> (quoting Professor Sandoval regarding the importance of maintenance to public safety during the PG&E bankruptcy process).

Reuters, *Factbox: What can the state of California do about PG&E?*, NEW YORK TIMES, Jan. 9, 2019 <https://www.nytimes.com/reuters/2019/01/08/business/08reuters-california-wildfires-pg-e-us-factbox.html> (quoting Professor Sandoval re: PG&E restructuring and California electric service." State ownership would not necessarily result in better maintenance of the utility's distribution system, said Catherine Sandoval, a professor at Santa Clara Law School and former CPUC commissioner. "If you change to municipal control without changing the underlying dynamics of the maintenance and operation of the utility and its transmission network, you haven't really solved the problem," Sandoval said.)

Lisa Krieger, *Camp Fire Created a Blackhole of Communication, In Disasters our High-Tech Communities are Reduced to 1940s Responses*, SAN JOSE MERCURY NEWS, Dec. 16, 2018, <https://www.mercurynews.com/2018/12/16/camp-fire-created-a-black-hole-of-communication/> (Quoting Catherine Sandoval regarding failure of communications towers and backhaul during the Camp Fire and the relationship between communication and electric power. Cites Professor Sandoval's statement that communications failures force communities to rely on 1940s methods such as bullhorns for evacuation warnings. Cross-links and cites to Professor Sandoval's article, Principles for Utility Regulation in the Face of Increased Wildfire Risk, Santa Clara University Markkula Center, Dec. 2018).

Matthias Gafni and Thomas Peele, *Did PG&E Tower spark fire*, PRESS READER, THE MERCURY NEWS, Dec. 8, 2018, <https://www.pressreader.com/> (Discussing Professor Sandoval's article published in December 2018 on principles for utility regulation in the face of increased wildfire risk, and the importance of utility infrastructure inspection and maintenance).

Matthias Gafni and Thomas Peele, *It was originally built in 1919. What failed on PG&E tower at heart of Camp Fire probe? Sources say investigators are narrowing their focus to wear and tear on portions of the tower*, ENTERPRISE-RECORD, Dec. 7, 2018, <https://www.chicoer.com/2018/12/07/it-was-originally-built-in-1919-what-failed-on-pge-tower-at-heart-of-camp-fire-probe/> (" Catherine Sandoval, a former CPUC commissioner who teaches energy law at Santa Clara University, wrote an article Wednesday recommending 10 regulatory goals to help prevent utility-sparked wildfires, warning of safety risks in the maintenance and monitoring of equipment. Professor Sandoval stated that she worried PG&E and other companies are "running to failure.")

David Louie, *PG&E customers may end up footing Camp Fire liability claims*, ABC7 NEWS, Nov. 15, 2018 (quoting Santa Clara Law Professor and Former CPUC Commissioner Sandoval ""You still need somebody to maintain the utility infrastructure, including the transmission poles and wires and the distribution poles and wires," said former California Public Utilities Commissioner Catherine Sandoval.")

**Utility Pole Tour and Presentation to the CPUC, May 2018 articles and stories citing Professor Sandoval:**

Marianne Favro, *Aging Power Poles Under Scrutiny by State Regulators*, NBC BAY AREA NEWS, May 21, 2018, <https://www.nbcbayarea.com/news/local/Aging-Power-Poles-Under-Scrutiny-by-State-Regulators-483269691.html>.

*David Louie*, California looking into utility pole safety, database, *ABC7 NEWS*, May 21, 2018 (*discussing utility pole safety issues highlighted by utility pole tour organized by Professor Sandoval*), <https://abc7news.com/california-looking-into-utility-pole-safety-database/3504397/>.

George Avalos, May 21, 2018, *Utility Poles Alarm Experts in Wake of Wine Country Infernos*, SAN JOSE MERCURY NEWS (“The commission needs to be much more vigorous about enforcement; the PUC has a lot of tools it can use to step up enforcement,” said Santa Clara University law professor and former CPUC Commissioner Sandoval. “I also support the idea of a utility poll census.”), <https://www.mercurynews.com/2018/05/21/utility-poles-alarm-experts-wake-wine-country-infernos/>.

Ivan Penn, *Power Companies’ Mistakes Can Cost Billions. Who Should Pay? Utilities say they must be shielded from liability or the electric grid will suffer. Critics say that puts the burden on ratepayers, not investors*, NEW YORK TIMES, June 14, 2018,

<https://www.nytimes.com/2018/06/14/business/energy-environment/california-fires-utilities.html>  
(Discussing utility pole tour Professor Sandoval organized and led in May 2018. “On a recent walking tour in San Jose, the state’s third-most populous city, a former state regulator showed the issues that are raised when the wooden poles that hold power lines and communication cables are not attended to. Some cable lines dangled in front of houses. Workers had tied some wires to the poles with rope — a violation noted by the tour’s guides. Power lines ran through thickets of trees to connect to houses. Some resembled odd Christmas trees, with wires, a street lamp, a cable box and ropes, all supported by a single pole. And even with the array of things connected to the poles, some lack proper support. A wire from one pole along the route had even caused a brush fire next to a home when it fell to the ground in April. “Overloaded poles have caused wildfires,” said Catherine Sandoval, the former regulator who had organized the tour).

**Autonomous Vehicle Regulation articles citing Professor Sandoval:**

Kirstin Downey, *Is Hawaii Ready For Driverless Cars?*, HONOLULU CIVIC BEAT, March 2, 2017  
(Commenting on calls for uniform federal regulation of driverless car standards as opposed to state regulation, “Sandoval, the former California Public Utilities Commission member, said states need to decide how they want to handle these questions. She said Hawaii, with its crowded urban areas, congested highways, high rate of pedestrian deaths and unusual environmental conditions, could be a state that wants its own regulations because of the potential risks of machines driving passengers into dangerous spots. “Hawaii needs to make a decision,” she said.)

**Privacy Regulation articles citing Professor Sandoval:**

Kate Kaye, *FTC Could Regain ISP Privacy Oversight, But It Won't Be Easy*, ADVERTISING AGE, March 30, 2017, (Commenting on Congress's resolution under the Congressional Review Act to repeal the FCC rule requiring Internet Service Providers to protect customer privacy, and the suggestion that the Federal Trade

Commission should have jurisdiction over ISP privacy, "Despite the intentions of the agency chairmen to put ISP privacy in the hands of the FTC, it will be no easy task, said Catherine Sandoval, associate professor at Santa Clara University School of Law. "You can't just assume that. There's a big legal mountain between here and there," said Ms. Sandoval, who previously served as a commissioner of the California Public Utilities Commission and was the VP and general counsel of radio, digital and billboard media firm Z-Spanish Media Corporation...For now, said Ms. Sandoval, "what we're left with is a period of uncertainty where the carriers may do certain things but it's unclear. Does the FCC have jurisdiction or does the FTC have jurisdiction?" She continued, "I don't think that it is healthy for consumers, carriers, advertisers or the American economy for all of this to be in limbo."), <http://adage.com/article/privacy-and-regulation/ftc-regain-isp-privacy-oversight-easy/308487/>.

Bloomberg Law, March 30, 2017 (Interview with Professor Sandoval, Commenting on Congress's resolution under the Congressional Review Act to repeal the FCC rule requiring Internet Service Providers to protect customer privacy), <https://www.bloomberg.com/news/audio/2017-03-31/bloomberg-law-brief-house-vote-on-fcc-internet-privacy-audio>

### **Energy, Water, and Flood Risk and Regulation articles citing Professor Sandoval:**

Thy Vo, *Silicon Valley Professors Criticize New Santa Clara Energy Regulation*, SAN JOSE MERCURY NEWS, May 10, 2019 (quoting Catherine Sandoval, a law professor at Santa Clara University and former member of the California Public Utilities Commission, about the City of Santa Clara's ban on fuel cells that do not run on biofuels, "The issue with the market isn't that it's simply too expensive, it's plain unavailable," Sandoval said. "If their motive was to reduce greenhouse gases, they need to share with the public and voting members some analysis of the market and how this is calibrated to reduce greenhouse gases," she added.") <https://www.mercurynews.com/2019/05/10/silicon-valley-companies-professors-criticize-new-santa-clara-energy-regulation/>.

Jennifer Wadsworth, Josh Koehn and Dan Pulcrano, *Still No Answers*, METRO ACTIVE, March 15, 2017 (citing SCU Law Professor Sandoval short speech and more detailed letter that the water district's predictive models may have been wildly off base but that anyone with a smartphone could have been alerted to the coming disaster. Besides that, she said, public officials should know by now that when the Anderson Reservoir spills, a flood is imminent. Even as 5 feet of water seethed through doors and windows of people's homes on Feb. 21, the city held fast to the water district's projections of minor flooding. Yet data from river gauges all along Coyote Creek, which was available online for anyone to see, showed the flood stage approaching by Feb. 19—two full days before the flood. "We need to look at height, not just river flow," Sandoval said. By Feb. 20, Coyote Creek swelled to 10 feet at the Edenvale gauge. By the next day, it topped 14.4 feet—well over the flood threshold—hours before San Jose issued mandatory evacuation orders. The Madrone gauge reached 9 feet on Feb. 20 and crested at 12-plus feet a day later. The William Street gauge marked 22.42 feet early on Feb. 17—the weekend before the flood—and peaked at 33.41 feet when the waters poured over the William Street Park and into homes around Naglee, Olinder, Brookwood Terrace and three mobile home parks along Old Oakland Road. "Better analysis is a predicate for better notice," Sandoval said."), <http://www.metroactive.com/features/San-Jose-Flood-Residents-Displaced-City-Water-District.html>.

Jennifer Wadsworth, *San Jose Flood Victims Plead for Help; City Admits Many Mistakes*, SAN JOSE INSIDE, March 10, 2017 (citing SCU Law Professor Sandoval's "the water district's predictive models may have been wildly off base but that anyone with a smartphone could have been alerted to the coming disaster...public officials should know by now that when the Anderson Reservoir spills, a flood is imminent,")  
<http://www.sanjoseinside.com/2017/03/10/san-jose-flood-victims-plead-for-help-city-admits-many-mistakes/>.

**Antitrust and Merger Review articles citing Professor Sandoval:**

Thuy Vu, *Antitrust Challenges to T-Mobile-Sprint Merger, and Comparisons of U.S. and E.U. Merger and Privacy Law Standards*, KQED, July 17, 2019,  
<http://mms.tveyes.com/MediaCenterPlayer.aspx?u=aHR0cDovL211ZGhhY2VudGVyLnR2ZXllcy5jb20vZG93bm9vYWRnYXRld2F5LmFzcHgvVXNlcklEPTI3Nzg1NSZNREIEPTExNzM4MDgwJk1EU2VIZD0yNzcxJIR5cGU9TWVkaWE%3D>.

Adam Bender, *HRDC Seeks Pai Recusal on Securus and ICS as Company's Deal Encounters More Headwinds*, COMMUNICATIONS DAILY (Aug. 11, 2017) (Quoting Professor Sandoval on CPUC merger approval process and contract issues).

Curtis Eichelberger, *Cinemoi Founder says AT&T -Time Warner merger will harm independent programmers, innovation*, MLEX, MARKET INSIGHT, April 12, 2017 (citing SCU Law Professor and a former CPUC Commissioner Catherine Sandoval, regarding zero rating, a critical media industry issue. "One of the questions will be: Is AT&T's wireless platform increasing the ability of AT&T to raise rivals' costs in exchange for being zero-rated? She said." In that case they would force the independent to pay them fees to be listed as zero-rated. "Or it can relegate them to the data cap while affiliated content goes zero-rated.")

**LANGUAGE SKILLS:**

Fluent in Spanish. Reading knowledge of Portuguese and French.

**COMMUNITY SERVICE AND ACTIVITIES:**

**ASSOCIATION OF AMERICAN LAW SCHOOLS**, Treasurer, Section on Communication, Media & Information Law Section, 2019 to present.

**CALIFORNIA EMERGING TECHNOLOGY FUND, (CETF), BOARD OF EXPERT ADVISORS**, 2007-2014, and February 2017 to present. Serve as expert advisor to leverage public and private sector investments to promote Internet access and adoption.

**CATCH THE NEXT**, Board of Directors Member, February 2019-present. Non-profit working to increase college readiness and completion for Latino and other underserved communities.

**California Judicial Selection Advisory Committee**, 2011-January 2019. Appointed by Governor Brown to evaluate judicial applications and recommend state judicial appointments.

**City of San Francisco Blue Ribbon Panel on Municipal Fiber**, 2017-2018. Member of Blue-Ribbon panel convened by the City of San Francisco to evaluate options to promote high-speed broadband Internet access to all San Francisco residents and businesses.

**FRESH LIFELINES FOR YOUTH (FLY)**, Board Member, 2007-2010. Fly assists youth referred by the judicial system and at risk-youth to develop decision-making and life skills.

**SOCIAL SCIENCES RESEARCH COUNCIL, NECESSARY KNOWLEDGE FOR THE PUBLIC SPHERE, 2007-2009.** Grant selection committee and expert resource.

**MINORITY MEDIA AND TELECOMMUNICATIONS COUNCIL**, Authored 2010 Minority Broadcast Ownership study, consulted with MMTC as expert scholar, and spoke at several MMTC Conferences.

**RHODES SCHOLARSHIP TRUST, MEMBER, CALIFORNIA SELECTION COMMITTEE**, 2003 and 2004. Interviewed applicants and selected California's nominees for Rhodes Scholarship.

**LEUKEMIA AND LYMPHOMA SOCIETY**, Completed and trained for 100 mile Lake Tahoe bike ride to support research, March to June 2002.

**NATIONAL LATINA ALLIANCE, Co-founder and member**, 1992-2000. Assisted in organization's formation and incorporation. Co-organizer, Latina student and parent career workshop.

**CRIPPLED CHILDREN'S SOCIETY (CCS) OF SOUTHERN CALIFORNIA, Board of Directors**, 1989-1993. Led construction of CCS Villa Malaga housing complex. *Awards*: Outstanding CCS volunteer, 1993.

**VILLA MALAGA HOUSING CORPORATION, Founding President**, 1989-1993, Board Member, 1994- 1996. Constructed 24-unit housing complex in East Los Angeles for low-income people with disabilities through collaboration of the Crippled Children's Society of Southern California, the County of Los Angeles and its Community Development Commission, and the U.S. Department of Housing and Urban Development.

**COMMISSION ON JUDICIAL PROCEDURES, COUNTY OF LOS ANGELES**, 1991-1993. Appointed by Los Angeles County Supervisor Gloria Molina to represent the First District. Initiated program to allow L.A. County jurors to donate jury duty fees to county services for children and the elderly.

**MEXICAN-AMERICAN LEGAL DEFENSE AND EDUCATIONAL FUND, Board of Directors**, Law Student representative, 1988-1989.

**YALE UNIVERSITY**, 1984-present, activities include:

*Catherine J. Kisse-Sandoval, Scholar of the House Fellowship, Yale University, La Casa Cultural*, Mentor recipients of Yale Latinx academic research fellowship established in 2014 in my name; *Alumni Schools Committee*, Interviewed students applying for Yale College admission; *Association of Yale Alumni*, served as representative; *Yale Latino Alumni Association*, Founding Board of Directors; *Yale Chicano Alumni Association*, Founding member and Vice-Chairperson

**COMMENDATIONS FOR SERVICE AND ACADEMIC ACHIEVEMENT:**

The California Public Utilities Commission (2017)  
The National Association of Regulatory Utility Commissioners (2017)  
The County of Monterey (2016)  
The City of Los Angeles (2015 and 1984)  
The California State Assembly (1984)  
The County of Los Angeles (1984)  
The City of Montebello (1984)

**AWARDS AND COMMENDATIONS:**

Energy, Environment, and Ethics, Conference, Oxford University, Certificate of Recognition and Completion as Conference Organizer and Speaker, July 2019  
The Utility Reform Network, Sylvia Siegel Policy Listening Award, 2018  
Asians in Energy and Hispanics in Energy, Energy Visionary Award, 2018  
Carmel River Watershed Conservancy, Leadership Award, Carmel River Restoration, 2016  
American Indian Chamber of Commerce of California, Warrior Award, 2016  
Latinos in Information Science & Technology Award, 2015  
Women of Excellence in IT & Business Award, 2015  
Mexican American Opportunity Foundation, Woman of the Year Award, 2015  
Society of Black Engineers and SDG&E, Summer Engineering Experience for Kids Camp Award, 2014  
Commendation for Energy Education and Technology Leadership, Los Angeles Mayor Garcetti, 2014  
United Church of Christ, Donald H. McGannon Award, 2014  
Association for Demand Response and Smart Grid, Leadership Award, 2013  
NIU, One Million New Internet Users Valentia (Bravery, Courage, Boldness) Award, 2013  
The Greenlining Institute, Big Brain Award, 2012  
Chicana/Latina Foundation Legacy Award, 2011  
Hispanas Organized for Political Equality, Ray of Hope Award, 2011  
Latino Journal, Leadership Award, 2011  
Profile of Excellence, ABC Channel 7, San Francisco, 2011  
Public Interest and Social Justice Achievement Award, Santa Clara University School of Law, 2010  
National Association of Black Telecommunications Professionals, Patrice Johnson Award for Excellence in Public Service, 1998  
FCC Chairman's Special Achievement Award, 1997  
FCC Performance Award, 1996  
FCC Special Act and Group Act Awards, 1995  
The Mexican-American Legal Defense and Educational Fund, Leadership Award, 1984  
Named One of the Top Ten College Women in America, 1984, Glamour Magazine.  
Awarded Rhodes Scholarship to study at Oxford University, 1984. First Latina Rhodes Scholar.  
Selected as the City of Montebello's Ambassador to Ashiya, Japan, 1977.

**Dated:** January 2020