The Future of California's Communications Grid

A CPUC En Banc – May 20, 2019

**California Public Utilities Commission
Communications Division En Banc
"The Future of California's Communications Grid"**

May 20, 2019, 10:00 a.m. to 5 p.m.

**Sacramento City Hall, Council Chambers
915 I St, Sacramento
Webcast: http://adminmonitor.com/ca/cpuc/en_banc/20190520/
More information: http://www.cpuc.ca.gov/CDenbanc/**

California's Communications Grid

Recent wildfires have underscored the critical role the communications grid plays in warning the public, alerting and allowing first responders to communicate with each other, and connecting wildfire victims to emergency services and loved ones. The communications grid, like power and water, is critical infrastructure, yet the state still relies on a patchwork of statutes and rules from the previous decade that often hinder the state's ability to ensure access to safe, reliable, and affordable services.

The communications market is changing rapidly. What began as a statewide, copper-based telephone network of franchise monopoly local exchange companies has evolved into a diverse, multi-provider and multi-technology broadband network that relies on copper, fiber optic, wireless, and satellite infrastructure. The California Public Utilities Commission (CPUC) Communications Division is holding a workshop to hear from a wide range of stakeholders to better understand the state's communications needs and challenges in the coming years. This workshop is the first in a series of stakeholder engagement opportunities to address how the current processes and regulations will need to evolve to stay relevant to Californians.

NOTE: Although a quorum of Commissioners, their advisors or other decision-makers may be present, no action will be taken at this event. This En Banc is independent of any CPUC proceeding, and panelists are forbidden from making ex parte comments related to open proceedings during their presentations or discussions.

Morning Session

Introductory Remarks from Commissioners (10:00-10:30)

Affordability and Access (10:35-11:30)
The Affordability and Access panel will focus on the communications needs of low income and disabled populations in the coming years. Closing the broadband adoption gap continues to be a challenge. Questions addressed include: What issues may arise as network speeds increase and devices proliferate, and how will communications services continue to be affordable?

Moderator: Catherine Sandoval, Associate Professor Santa Clara University School of Law

Panelists: Sunne Wright McPeak, President and CEO, California Emerging Technology Fund
Angela Siefer, Executive Director, National Digital Inclusion Alliance
Ana Maria Johnson, Program Manager, Public Advocate's Office

Emergency Preparedness and Response (11:30-12:30)
The Emergency Preparedness and Response panel will focus on the demand drivers and challenges for emergency communications within the state in the coming years. The CPUC has open proceedings on utility Public Safety Power Shut-Off (PSPS) and protections for wildfire victims – both of which affect communications services and providers. In addition, the Legislature is considering several bills dealing with 9-1-1 surcharges, wireless alerts, traffic throttling, and Voice over Internet Protocol. Given that backdrop, how will the needs of first responders and victims of natural disasters likely evolve over time?

Moderator: Alice Stebbins, Executive Director, CPUC

Panelists: Budge Currier, 9-1-1 Branch Manager, Public Safety Communications, CalOES
Kevin Guerrero, Staff Chief, Fire Protection Operations, CALFIRE
Scott Howland, CIO and Chief, Information Management Division, California Highway Patrol
Jeff L. Reeb, Director, Chief Executive Office, Office of Emergency Management Los Angeles County Emergency Operations Centers

Break for Lunch: 12:30-1:30

Afternoon Session

Libraries and Education (1:30-2:25)
High-speed communications networks, like the California Research and Education Network (CalREN), enable libraries and schools to go beyond book-based learning by offering multimedia resources and training for people of all ages. Examples include software coding, 3D printing, and device lending. Currently, 70%of the State's 1,132 main and branch libraries are now connected or will connect to CalREN. The latest data from K12 High Speed Network show that 80% of California's K-12 schools are connected to CalREN, with more than half connected to 1 Gigabits per second or higher. The Libraries and Education panel will focus on the demands libraries and schools will put on the communications grid as more and more activity occurs on the Internet.

What challenges do libraries and schools face in the coming years with regards to the communications grid?

Moderator: Blair Levin, Policy Advisor, New Street Research and Non-Resident Fellow, Brookings Institution Metropolitan Policy Project

Panelists: Anne Neville-Bonilla, Director, California Research Bureau

Jerry Winkler, Director, Educational Data Management Division, California Department of Education

Louis Fox, President & CEO, CENIC

Luis Wong, Chief Executive Officer, California K-12 High Speed Network

Economic Growth and Prosperity (2:30-3:25)

Businesses large and small – from the family farm to the multi-national corporation – require internet connectivity to function, but the lack of broadband options in agricultural and rural areas prevents many businesses outside California's major cities from evolving to embrace 21st century business models. What are the challenges to economic growth and prosperity created by the lack of access to the communications grid?

Moderator: Lloyd Levine, President, Filament Strategies

Panelists: Eric Brown, President, California Telehealth Network and OCHIN Broadband Network Services

Terrance Rodgers, Economic Development Officer, Rural County Representatives of California

Robert Tse, Office of the Assistant Administrator, Telecommunications Program, USDA

David Witkowski, Executive Director, Civic Technology Initiatives, Joint Venture Silicon Valley

Cybersecurity and Communications (3:30-4:25)

Banking transactions, online purchases, reservations, and e-mail are all encrypted. According to Network World, modern public-key encryption is sufficient for enterprise requirements, but experts believe the status quo will soon be threatened by quantum computing. This is just one example of how cybersecurity and encryption will continue to be critical areas in the coming years, but how will they likely evolve? The Cybersecurity and Communications panel will discuss the challenges in the coming 5-10 years.

Moderator: Danjel Bout, Program Manager, Utility Cyber Security Branch, CPUC

Panelists: Marc A. Glenn, Senior Cybersecurity Intelligence Analyst, Cal-CSIC

Vitaliy Panych, Deputy Chief Information Security Officer, CA Dep't of Technology

Kellyn Wagner Ramsdell, Intelligence Analyst, Cyber Security Team, Northern California Regional Intelligence Center

Closing Comments (4:30-4:45)