



CALCOM CONNECT

CALIFORNIA COMMUNICATIONS ASSOCIATION



2018 MEMBERSHIP DIRECTORY





**YOU.
US.
TOGETHER.**
*Making
Communication
Happen.*



More
Information:
www.ptsupply.com



Call
Us:
1-800-238-7514



Email
Us:
marketing@ptsupply.com

BECAUSE RURAL MATTERS

At Sierra Tel, we know our customers and we know our network. That's why we are busy extending and constructing a state-of-the-art fiber optic network to deliver even faster speeds.

We've been
building
communications
networks for our
customers in Rural
Central California
since 1895.
We've got this.



Learn more at SierraTel.com • Call 559-683-4611

TABLE OF CONTENTS

2018



ABOUT CALCOM

4 WHO IS CALCOM, OUR MISSION, BENEFITS, ANNUAL EVENTS, AND HOW TO JOIN CALCOM



ASSOCIATION INFORMATION

6 BOARD OF DIRECTORS

6 EXECUTIVE COMMITTEE



CALCOM COMMITTEES

- 7 ASSOCIATE MEMBERS
- 7 CARRIER RELATIONS
- 8 HR/SAFETY
- 8 MARKETING
- 9 PUBLIC POLICY
- 10 SMALL COMPANY
- 11 TARIFF
- 11 TRAINING



MEMBER COMPANIES

13 MEMBER COMPANIES



ASSOCIATE MEMBERS

19 ASSOCIATE MEMBERS



RELATED ORGANIZATIONS

- 40 NATIONAL ASSOCIATIONS
- 40 WESTERN STATE ASSOCIATIONS
- 41 GOVERNMENT AGENCIES

CALCOM CONNECT

e-Newsletter



Sign-up for our monthly *CalCom Connect E-Newsletter*. It's our way of keeping our members informed on industry news, meetings and events, and legislative updates. If you have a press release or feature article you'd like to include in the newsletter, please send your submittal to lindsay@calcomassn.org.

ABOUT CALCOM

Committed to customers, Connected to our communities...



Who is CalCom?

CalCom was founded in 1917 and we have served our members for 100 years. Historically, CalCom has focused on telecommunications services, but today's world is a broadband communications world, and we're 100% on board to help our members provide broadband to every person in California. Together, we share experiences, learn from each other, embrace competition and learn to compete in the industry more effectively.

We have a rich heritage and respected standing in the telecom industry, which encourages our members to actively participate in association business. We are primarily comprised of 'Member Company's; independent privately-owned communications network providers, and 'Associate Members' who supply those companies with products and services.

Our members are experts at getting communications services into underserved rural areas where the largest service providers pass over; and together we are influential in educating legislators and regulators, through lobbying efforts, to make rational decisions on CalCom's behalf.

Find out more about who we are at:
www.calcomassn.org

Our Mission

CalCom fosters learning and industry excellence by working with service providers, manufacturers, and vendors to accelerate broadband deployment and adoption with the goal of empowering every person in California with affordable broadband services.

CALCOM CONNECT

2018 ISSUE



601 University Avenue, Suite 177
Sacramento, CA 95825
P: (916) 567-6700
F: (916) 922-3648
info@calcomassn.org
www.calcomassn.org

ASSOCIATION STAFF

Lindsay Olson
Executive Director
lindsay@calcomassn.org

Mariann Loomis
Office Manager/Member Services
mariann@calcomassn.org

Fran Prisco
Bookkeeper, Prisco & Associates

Yolanda Benson
Lobbyist, Government Strategies, Inc
ybenson@teamgsi.net

DESIGN/PRODUCTION

Katie Throckmorton
kthrock80@gmail.com
P: (559) 281-3468

Published March 2018.
© 2018 CalCom Association.
All rights reserved.

The contents of this publication may not be reproduced by any means, in whole or in part, without prior written consent of the publisher.

▶ Benefits

CalCom creates opportunities to connect businesses and encourages partnerships in the communications industry.

Our association is dedicated to providing a forum for members to network with one another, share industry trends and new technologies, educate legislators and regulators, provide training opportunities to communications personnel, and connect vendors with members in an effort to build state of the art networks across California.

Membership in CalCom has tremendous benefits for all businesses associated with communications. CalCom has nine active committees, which continue to be the lifeblood of the association. These committees keep the association and its membership up to date on their accomplishments. CalCom also actively serves our members by making sure the CA Public Utilities Commission (CPUC) and state legislators have the information they need to make rational decisions.

- Become educated on current business models and practices that maximize return on investment
- Collaborate with experts in your industry to share best practices and find answers to questions
- Promote your business to decision-makers through speaking opportunities, event sponsorships, and advertising opportunities
- Participate in fun and informative networking events
- Empower your employees with educational and technical training opportunities

As a member, your company listing will be included in this annual Membership Directory. You will also receive a copy of the Directory. (Multiple copies available upon request).

▶ Annual Events

CalCom hosts the Annual Showcase & Tech Expo in Sacramento each year, designed to showcase the best the industry has to offer to our members. We also produce an Annual Fall Conference which offers our executive members education, training, and networking opportunities. Both events include social events, which allows our members to network in a casual and fun setting!

Learn more about CalCom online at www.calcomassn.org or email us at info@calcomassn.org

▶ Join CalCom

If you are interested in becoming a member of CalCom, it's easy to do! Contact our office for a member application or download it from our website at www.calcomassn.org. Complete the application, and mail, fax, or email it to:

Mariann Loomis, Member Services

CalCom

601 University Ave., Suite 177

Sacramento, CA 95825

Email to: mariann@calcomassn.org

Fax to: (916)922-3648

Associate Membership dues are only \$400 per year.

Member Company dues are based on the company's annual broadband revenue.



ASSOCIATION INFORMATION

Board of Directors

Name	Company	Phone	Email
<i>Rose Cullen</i>	Calaveras Telephone	209-785-2211	rose.cullen@caltel.com
<i>Ed Ormsbee</i>	Cal-Ore Telephone Co.	530-397-7003	eormsbee@calore.net
<i>Paul Nolin</i>	Calix	303-807-3970	paul.nolin@calix.com
<i>Eric Votaw</i>	Ducor Telephone	559-534-2211	evotaw@varcomm.biz
<i>Matt Boos</i>	Ponderosa Telephone	559-868-6322	mjboos@ponderosatel.com
<i>Rhonda Armstrong</i>	Sebastian	559-846-7861	rmstrong@sebastiancorp.com
<i>Cindy Huber</i>	Sierra Telephone	559-642-0209	cindyh@stcg.net
<i>Gail Long</i>	TDS Telecom	541-516-8210	gail.long@tdstelecom.com
<i>Brenda Shepard - COB</i>	Volcano Telephone	209-296-1447	brendas@volcanotel.com

Executive Committee

Name	Company	Phone	Email
<i>Rose Cullen</i>	Calaveras Telephone	209-785-2211	rose.cullen@caltel.com
<i>Matt Boos</i>	Ponderosa Telephone	559-868-6322	mjboos@ponderosatel.com
<i>Brenda Shepard - COB</i>	Volcano Telephone	209-296-1447	brendas@volcanotel.com



Associate Members

The Associate Member Committee is operated by the Associate Members and serves as a liaison between the operating telephone companies of CalCom and the Associate Members. This Committee works with the Executive Director, Lindsay Olson, and the Training Committee to put on the annual Suppliers Showcase & Tech Expo and two (2) golf tournaments.

Name	Company	Phone	Email
<i>Paul Nolin - Chair</i>	Calix	303-807-3970	paul.nolin@calix.com
<i>Clay Harris</i>	Condux International	262-237-4480	charris@condux.com
<i>Bill Mathews</i>	Cordell	909-971-9100	bill@cordell.net
<i>Mike Spoon</i>	Corning	530-945-0978	mike.spoon@corning.com
<i>Caroline Krivda</i>	Graybar	916-288-4100	caroline.krivda@graybar.com
<i>Jeff Olson</i>	Hubbell	626-243-8607	jolson@hubbell.com
<i>Gary Murphy</i>	KLW Company	408-722-1334	gary@klwco.com
<i>Dianne Dickey</i>	Leoch Battery	619-942-0419	dianne.dickey@leoch.us
<i>Kim Lindeberg</i>	The Lindeberg Group	510-325-1250	tlg@pacbell.net
<i>Helen Woosley</i>	Nor Cal Battery	209-993-7038	helen.woosley@norcalbattery.com
<i>Steve Wolles</i>	TelCom Sales Group	408-230-2082	swolles@telcomsalesgroup.com
<i>Frank Soos</i>	Walker and Associates	805-510-4887	frank.soos@walkerfirst.com

Carrier Relations

The Carrier Relations Committee assists member companies in the communications and sharing of information concerning access related issues.

Name	Company	Phone	Email
<i>Yvonne Wooster - Chair</i>	Calaveras Telephone	209-785-2211	ysmythe@caltel.com
<i>Rose Cullen</i>	Calaveras Telephone	209-785-2211	rose.cullen@caltel.com
<i>Eric Votaw</i>	Ducor Telephone	559-534-2211	evotaw@varcomm.biz
<i>Fred Lofy</i>	Ponderosa Telephone	559-868-6376	fredl@ponderosatel.com
<i>Monika Brandle</i>	Sierra Telephone	559-642-1380	monikab@stcg.net
<i>Amber Stewart</i>	Siskiyou Telephone	530-467-6154	a.stewart@siskiyoutelephone.com
<i>Rick McCarley</i>	Volcano Telephone	209-296-1435	rickm@volcanotel.com

CALCOM COMMITTEES

HR/Safety

The HR/Safety Committee serves to heighten awareness and sensitivity to human resources and safety issues and to educate company owners and managers on the need to continually reassess HR and safety policies and procedures.

Name	Company	Phone	Email
<i>Cody Richardson</i>	Calaveras Telephone	209-785-2211	crichardson@caltel.com
<i>Joleen Hogan</i>	Cal-Ore Telephone	530-397-7014	joleen@calore.net
<i>Chris Thorns</i>	Ponderosa Telephone	559-868-6345	chris@ponderosatel.com
<i>Robin Stith</i>	Sebastian	559-261-8252	rstith@sebastiancorp.com
<i>Conchita Lopez</i>	Sebastian	559-846-4898	clopez@sebastiancorp.com
<i>Michelle Pannett</i>	Sierra Telephone	559-642-0109	michellep@stcg.net
<i>Allan Davis - Chair</i>	Sierra Telephone	559-642-1658	alland@stcg.net
<i>Denise Reynolds</i>	Siskiyou Telephone	530-467-6168	d.reynolds@siskiyoutelephone.com
<i>Dede Harder</i>	Volcano Telephone	209-296-1408	dedeh@volcanotel.com

Marketing

The Marketing Committee will assist the Board of Directors in establishing the new CalCom vision, adding value to member benefits, recruiting new members and creating marketing materials for distribution to potential and current members.

Name	Company	Phone	Email
<i>Cheryl (Stone) Hoag</i>	Calaveras Telephone	209-785-2211	cheryl@caltel.com
<i>Kim Lindeberg</i>	The Lindeberg Group	510-325-1250	tlg@pacbell.net
<i>Tory Richtmyer</i>	Mid-State Consultants	435-623-6671	trichtmyer@mscon.com
<i>Helen Woosley</i>	Nor Cal Battery	209-993-7038	helen.woosley@norcalbattery.com
<i>Cheryl McQuone - Chair</i>	Ponderosa Telephone	559-868-6393	cherylm@ponderosatel.com
<i>Dan Rule</i>	Sierra Telephone	559-642-0580	danr@stcg.net
<i>Frank Leschinsky</i>	Volcano Telephone	209-296-1427	frankl@volcanotel.com

Public Policy

The Public Policy Committee provides CalCom Members a forum for the timely identification, consideration, and resolution of legislative and broad industry issues.

Name	Company	Phone	Email
<i>Yvonne Wooster</i>	Calaveras Telephone	209-785-2211	ysmythe@caltel.com
<i>Ed Ormsbee</i>	Cal-Ore Telephone	530-397-7003	eormsbee@calore.net
<i>Mark Schreiber</i>	CWC	415-433-1900	mschreiber@cwclaw.com
<i>Patrick Rosvall</i>	CWC	415-433-1900	prosvall@cwclaw.com
<i>Eric Votaw</i>	Ducor Telephone	559-534-2211	evotaw@varcomm.biz
<i>Yolanda Benson</i>	Government Strategies	916-446-2211	ybenson@teamgsi.net
<i>Pam Loomis</i>	Loomis Advocacy Solutions	916-662-1011	ploomis@swmconsult.com
<i>Chad Duval</i>	Moss Adams, LLP	209-955-6100	chad.duval@mossadams.com
<i>Dan Douglas - Chair</i>	Ponderosa Telephone	559-868-6395	dand@ponderosatel.com
<i>Matt Boos</i>	Ponderosa Telephone	559-868-6322	mjboos@ponderosatel.com
<i>Rhonda Armstrong</i>	Sebastian	559-846-7861	ramstrong@sebastiancorp.com
<i>Dave Clark</i>	Sebastian	559-846-4892	dclark@sebastiancorp.com
<i>Al Baumgarner</i>	Sierra Telephone	559-642-0238	alb@stcg.net
<i>Cindy Huber</i>	Sierra Telephone	559-642-0209	cindyh@stcg.net
<i>Monika Brandle</i>	Sierra Telephone	559-642-1380	monikab@stcg.net
<i>Jim Lowers</i>	Siskiyou Telephone	530-467-6171	j.lowers@siskiyoutelephone.com
<i>Gail Long</i>	TDS Telecom	541-516-8210	gail.long@tdstelecom.com
<i>Brenda Shepard</i>	Volcano Telephone	209-296-1447	brendas@volcanotel.com



CALCOM COMMITTEES

Small Company

The Small Company Committee provides the CalCom ILEC Members a forum for the timely identification and consideration of ILEC regulatory and industry issues.

Name	Company	Phone	Email
<i>Rose Cullen</i>	Calaveras Telephone	209-785-2211	rose.cullen@caltel.com
<i>Ed Ormsbee</i>	Cal-Ore Telephone	530-367-7003	eormsbee@calore.net
<i>Mark Schreiber</i>	CWC	415-433-1900	mschreiber@cwclaw.com
<i>Patrick Rosvall</i>	CWC	415-433-1900	prosvall@cwclaw.com
<i>Eric Votaw</i>	Ducor Telephone	559-534-2211	evotaw@varcomm.biz
<i>Pam Loomis</i>	Loomis Advocacy Solutions	916-662-1011	ploomis@swmconsult.com
<i>Chad Duval</i>	Moss Adams, LLP	209-955-6100	chad.duval@mossadams.com
<i>Dan Douglas</i>	Ponderosa Telephone	559-868-6395	dand@ponderosatel.com
<i>Matt Boos</i>	Ponderosa Telephone	559-868-6322	mjboos@ponderosatel.com
<i>Fred Lofy</i>	Ponderosa Telephone	559-868-6376	fredl@ponderosatel.com
<i>Rhonda Armstrong</i>	Sebastian	559-846-7861	ramstrong@sebastiancorp.com
<i>Dave Clark</i>	Sebastian	559-846-4892	dclark@sebastiancorp.com
<i>Al Baumgarner</i>	Sierra Telephone	559-642-0238	alb@stcg.net
<i>Cindy Huber</i>	Sierra Telephone	559-642-0209	cindyh@stcg.net
<i>Monika Brandle</i>	Sierra Telephone	559-642-1380	monikab@stcg.net
<i>Jim Lowers - Chair</i>	Siskiyou Telephone	530-467-6171	j.lowers@siskiyoutelephone.com
<i>Gail Long</i>	TDS Telecom	541-516-8210	gail.long@tdstelecom.com
<i>Brenda Shepard</i>	Volcano Telephone	209-296-1447	brendas@volcanotel.com



Tariff

The Tariff Committee provides a forum for intercompany discussions of tariff concepts, regulatory decisions, industry changes and related issues.

Name	Company	Phone	Email
<i>Rose Cullen - Chair</i>	Calaveras Telephone	209-785-2211	rose.cullen@caltel.com
<i>Yvonne Wooster</i>	Calaveras Telephone	209-785-2211	ysmythe@caltel.com
<i>Waihun Yee</i>	Cal-Ore Telephone	530-397-7007	waihun@calore.net
<i>Eric Votaw</i>	Ducor Telephone	559-534-2211	evotaw@varcomm.biz
<i>Fred Lofy</i>	Ponderosa Telephone	559-868-6376	fredl@ponderosatel.com
<i>Dave Clark</i>	Sebastian	559-846-4892	dclark@sebastiancorp.com
<i>Monika Brandle</i>	Sierra Telephone	559-642-1380	monikab@stcg.net
<i>Jim Lowers</i>	Siskiyou Telephone	530-467-6171	j.lowers@siskiyoutelephone.com
<i>Gail Long</i>	TDS Telecom	541-516-8210	gail.long@tdstelecom.com
<i>Rick McCarley</i>	Volcano Telephone	209-296-1435	rickm@volcanotel.com

Training

The Training Committee is the principal sponsor and coordinator of education and training opportunities for management and craft employees.

Name	Company	Phone	Email
<i>Cheryl (Stone) Hoag - Chair</i>	Calaveras Telephone	209-785-2211	cheryl@caltel.com
<i>Andrea Taylor</i>	Calaveras Telephone	209-785-2211	andrea@caltel.com
<i>Cody Richardson</i>	Calaveras Telephone	209-785-2211	crichardson@caltel.com
<i>Bob Hensley</i>	Cal-Ore Telephone	530-397-5200	bob@calore.net
<i>Frank Alva</i>	Consolidated	916-786-1316	frank.alva@consolidated.com
<i>Robyn Husmann</i>	Sebastian	530-367-3300	rhusmann@sebastiancorp.com
<i>Dave Smith</i>	Sierra Telephone	559-642-0294	davids@stcg.net
<i>Marc McNally</i>	Sierra Telephone	559-642-0269	marcm@stcg.net
<i>Dan Rimmer</i>	Siskiyou Telephone	530-467-6145	d.rimmer@siskiyoutelephone.com
<i>Steve Stone</i>	Volcano Telephone	209-296-1468	steves@volcanotel.com
<i>John Lundgren</i>	Volcano Telephone	209-296-1417	johnl@volcanotel.com



Past CalCom Chairmen of the Board

C.A. Rolfe, 1917	R.L. Doyle, 1974
F.H. Wright, 1918	R.L. Ohlson, 1975
A. Wardman, 1919	C.A. Nutter, 1976
D.S. Parker, 1920-1921	R.E. Hoeper, 1977
C.A. Rolfe, 1921-1928	D.C. Williams, 1978
C.H. Lorbeer, 1929	S.E. Davis, 1979-1980
A. Wardmann, 1930-1933	R.H. Edgar, 1981-1982
C.F.Mason,, 1934-1953	W.D. Griffith, 1983-1984
W.G. Wade, 1954	E.L. Silkwood, 1985-1987
R.D. Crowe, 1955	D.L. Oestreicher, 1987-1988
F.H. Macgougan, 1956	J.F. Miles, 1988-1990
J.C. Newman, 1957	K.M. Kramer, 1990-1992
J.P. Maguire, 1958	J.C. Graves, 1992-1994
D.H. Strahl, 1959	A.A. Johnson, 1994-1996
H.W. Holmwood, 1960	Matt Boos, 1996-1999
W.G. Snyder, 1961	Tim McCallion, 1999-2001
A.R. Stacey, 1962	Brian Strom, 2001-2002
P.A. Nenzel, 1963	William Barcus, 2002-2005
H.J. Evans, 1964	Jerry Flynn, 2005-2007
A.C. Knapp, 1965	Earl Bishop, 2007-2008
C.A. Gibbs, 1966	Scott Barber, 2008-2010
J.E. Bigelow, 1967	Mitch Drake, 2010-2012
A.G. Cooley, 1968	Kirby Smith, 2012-2013
W.G. Sebastian, 1969-1970	Eric Wolfe, 2013-2014
J.R. Wise, 1971	Mike Shultz, 2014-2015
J.W. Welch, 1972	Rhonda Armstrong, 2015-2016
R.C. Abrams, 1973	Brenda Shepard, current Chairman



**MEMBER
COMPANIES**

Calaveras Telephone Company

P.O. Box 37
 513 Main Street
 Copperopolis, CA 95228
 Phone: (209) 785-2211 Fax: (209) 785-3550
 www.caltel.com

State Assembly Districts: 25
State Senate Districts: 1
Counties Served: Calaveras
Number of Exchanges: 2
Affiliates: Caltel Internet, Long Distance & Cablevision

OFFICERS & KEY CONTACTS

- ▶ **President:** *James H. Tower*
- ▶ **Vice President:** *John Tower*
- ▶ **Secretary:** *Mary Kimura*
- ▶ **Chief Financial Officer:** *Rose Cullen*
 rose.cullen@caltel.com
- ▶ **Information Technology:** *Dennis Haggerty*
 dhaggerty@caltel.com
- ▶ **Inside Plant:** *Dan Richardson*
 danl@caltel.com
- ▶ **Outside Plant:** *Dave Atkinson*
 datkinson@caltel.com
- ▶ **Regulatory Manager:** *Yvonne Wooster*
 ysmythe@caltel.com
- ▶ **Sales & Marketing:** *Cheryl (Stone) Hoag*
 cheryl@caltel.com

Cal-Ore Telephone Co.

P.O. Box 847
 719 West 3rd Street
 Dorris, CA 96023-0847
 Phone: (530) 397-2211 Fax: (530) 397-2345
 www.calore.net

State Assembly Districts: 2
State Senate Districts: 1, 4
Counties Served: Siskiyou and Modoc
Number of Exchanges: 4

OFFICERS & KEY CONTACTS

- ▶ **President/General Mgr.:** *Edward Ormsbee*
 Phone: (530) 397-7003
 eormsbee@calore.net
- ▶ **Controller:** *Waihun Yee*
 Phone: (530) 397-7007
 waihun@calore.net
- ▶ **Operations Manager:** *Bob Hensley*
 Phone: (530) 397-5200
 bob@calore.net
- ▶ **Human Resources:** *Joleen Hogan*
 Phone: (530) 397-7014
 joleen@calore.net
- ▶ **Purchasing:** *Marc Estep*
 Phone: (530) 397-7006
 marc@calore.net
- ▶ **Regulatory:** *Ed Ormsbee*
 Phone: (530) 397-7003
 eormsbee@calore.net
- ▶ **Revenue Requirements:** *Moss Adams, LLP*
 Phone: (209) 955-6100



Ducor Telephone Company

P.O. Box 700
23473 Avenue 56
Ducor, CA 93218-0700
Phone: (559) 534-2211 Fax: (559) 534-2260

DUCOR ADMINISTRATIVE OFFICE

9950 W. Van Buren St., Suite 135
Phoenix, AZ 85323

State Assembly Districts: 2, 30, 34
State Senate Districts: 4, 16, 18
Counties Served: Tehama, Tulare & Kern
Number of Exchanges: 3
Number of Affiliates: 3

OFFICERS & KEY CONTACTS

- ▶ **President/CEO:** *Eric Votaw*
Phone: (559) 534-2211
evotaw@varcomm.biz
- ▶ **CFO/Assistant General Manager:** *Jenifer Vellucci*
Phone: (559) 534-2211
jvellucci@varcomm.biz

DUCOR EXCHANGE

P.O. Box 700
23473 Avenue 56
Ducor, CA 93218-0700
Phone: (888) 539-5234 Fax: (559) 534-2260
▶ **General Manager:** *Eric Votaw*
evotaw@varcomm.biz

RANCHO TEHAMA EXCHANGE

RTR Box 5277
515 Rancho Tehama Rd., Unit 2
Corning, CA 96021-5277
Phone: (888) 546-5443 Fax: (530) 585-2260
▶ **General Manager:** *Eric Votaw*
evotaw@varcomm.biz

KENNEDY MEADOWS EXCHANGE

HC74 Box 2D-11
98890 Kennedy Meadows Rd.
Inyokern, CA 93527
Phone: (888) 539-5234 Fax: (559) 850-0060
▶ **General Manager:** *Eric Votaw*
evotaw@varcomm.biz

Pinnacles Telephone Company

340 Live Oak Road
Paicines, CA 95043
Phone: (831) 389-4500 Fax: (831) 389-4595
www.pintelco.com

State Assembly Districts: 28
State Senate Districts: 12
Counties Served: San Benito
Number of Exchanges: 2

OFFICERS & KEY CONTACTS

- ▶ *Steven Bryan, Jr.*
srbryanjr@pintelco.com
- ▶ *Nathan Bryan*
natbryan@pintelco.com
- ▶ *Lucy Bryan*
lucy@pintelco.com



Ponderosa Telephone Company

P.O. Box 21
47034 Road 201
O'Neals, CA 93645-0021
Phone: (559) 868-3312 Fax: (559) 868-3404
www.goponderosa.com

State Assembly Districts: 25, 29, 34
State Senate Districts: 14, 18
Counties Served: Fresno, Madera, San Bernardino
Number of Exchanges: 8

OFFICERS & KEY CONTACTS

- ▶ **Chairperson:** *E.L. Silkwood*
Phone: (559) 868-6337
luanne@ponderosatel.com
- ▶ **President:** *Kristann (Kristi) Silkwood Mattes*
Phone: (559) 868-6346
kristism@ponderosatel.com
- ▶ **General Manager:** *Matthew J. Boos*
Phone: (559) 868-6322
mjboos@ponderosatel.com
- ▶ **Financial Director:** *Dan Douglas*
Phone: (559) 868-6395
dand@ponderosatel.com
- ▶ **Network Facilities Design Manager:** *Todd Westfall*
Phone: (559) 868-6307
todddw@ponderosatel.com
- ▶ **Regulatory Manager:** *Fred Lofy*
Phone: (559) 868-6376
fredl@ponderosatel.com
- ▶ **Customer Ops. Director:** *Eric Vargas*
Phone: (559) 868-6351
ejvargas@ponderosatel.com
- ▶ **HR/Safety Manager:** *Chris Thorns*
Phone: (559) 868-6345
chris@ponderosatel.com

Sebastian

7600 N. Palm Ave.
Fresno, California 93711
Phone: (559) 432-5800
www.sebastiancorp.com

OFFICERS & KEY CONTACTS

- ▶ **President:** *William S. (Bill) Barcus*
bbarcus@sebastiancorp.com
- ▶ **Executive VP:** *Ruth Barcus*
rbarcus@sebastiancorp.com
- ▶ **Secretary:** *Susan Moran*
smoran@sebastiancorp.com

- ▶ **Human Resources:** *Robin Stith*
Phone: (559) 261-8252
rstith@sebastiancorp.com
- ▶ **Marketing:** *Brandon Dukes*
Phone: (559) 261-8250
bdukes@sebastiancorp.com

KERMAN LOCATION

811 South Madera Avenue
Kerman, CA 93630
Phone: (559) 846-9311 Fax: (559) 846-6127 (1st Floor)
Fax: (559) 846-7516 (2nd Floor)

State Assembly Districts: 31
State Senate Districts: 15
Counties Served: Fresno
Number of Exchanges: 1

- ▶ **General Manager:** *Rhonda Armstrong*
Phone: (559) 846-7861
armstrong@sebastiancorp.com
- ▶ **Assistant General Manager:** *Tom Dominico*
Phone: (559) 846-4869
tdominico@sebastiancorp.com
- ▶ **Regulatory:** *Dave Clark*
Phone: (559) 846-4892
dclark@sebastiancorp.com

FORESTHILL LOCATION

P.O. Box 1189
23990 Foresthill Road
Foresthill, CA 95631-1189
Phone: (530) 367-2222 Fax: (530) 367-3600

State Assembly Districts: 4
State Senate Districts: 1
Counties Served: Placer
Number of Exchanges: 1

- ▶ **General Manager:** *Rhonda Armstrong*
Phone: (530) 367-7780
armstrong@sebastiancorp.com
- ▶ **Customer Service:** *Robyn Husmann*
Phone: (530) 367-3300
rhusmann@sebastiancorp.com

Sierra Telephone

CORPORATE OFFICE

49150 Road 426
P.O. Box 219
Oakhurst, California 93644-0219
Phone: (559) 683-4611 Toll Free: (877) 658-4611
Fax: (559) 641-6066
www.sierratel.com

State Assembly Districts: 25

State Senate Districts: 14

Counties Served: Mariposa, (Eastern) Madera

Number of Exchanges: 3

OFFICERS & KEY CONTACTS

- ▶ **Executive Chairman:** *John H. Baker*
- ▶ **President:** *Cynthia A. Huber*
cindyh@stcg.net
- ▶ **Vice President Operations:** *Jeffrey D. Busto*
jeffb@stcg.net
- ▶ **Central Office Manager:** *Dennis Womack*
Phone: (559) 683-2423
dennisw@stcg.net
- ▶ **Customer Care Manager:** *Dave Norman*
Phone: (559) 642-0157
davidn@stcg.net
- ▶ **Human Resources Manager:** *Michelle Pannett*
Phone: (559) 642-0109
michellep@stcg.net
- ▶ **Finance Director:** *Al Baumgarner*
Phone: (559) 642-0238
alb@stcg.net
- ▶ **Information Services Manager:** *Dan Scott*
Phone: (559) 642-1655
dans@stcg.net
- ▶ **Outside Plant Manager:** *James (J.C.) McNally*
Phone: (559) 642-0290
jcm@stcg.net
- ▶ **Regulatory Manager:** *Monika Brandle*
Phone: (559) 642-1380
monikab@stcg.net
- ▶ **Business Development Manager:** *Dan Rule*
Phone: (559) 642-0580
danr@stcg.net

The Siskiyou Telephone Company

CORPORATE OFFICE

P.O. Box 157
30 Telco Way
Etna, CA 96027-0157
Phone: (530) 467-6000 Fax: (530) 467-6401
www.sisqtel.net

State Assembly Districts: 2

State Senate Districts: 4

Counties Served: Siskiyou

Number of Exchanges: 7

Affiliates: Siskiyou Communications, Siskiyou Long Distance, Golden Bear Broadband

OFFICERS & KEY CONTACTS

- ▶ **President:** *James T. Lowers*
Phone: (530) 467-6171
j.lowers@siskiyoutelephone.com
- ▶ **Vice President:** *Brenda Kellogg*
Phone: (530) 467-6102
b.kelloggs@siskiyoutelephone.com
- ▶ **Secretary/Treasurer:** *Kisten Berryhill*
Phone: (530) 467-6158
k.berryhill@siskiyoutelephone.com
- ▶ **Operations Manager:** *Dan Rimmer*
Phone: (530) 467-6145
d.rimmer@siskiyoutelephone.com
- ▶ **Accounting Manager:** *Amber D. Stewart*
Phone: (530) 467-6154
a.stewart@siskiyoutelephone.com
- ▶ **Human Resources Manager:** *Denise Reynolds*
Phone: (530) 467-6168
d.reynolds@siskiyoutelephone.com
- ▶ **Plant Accountant:** *Leslie Hurlimann*
Phone: (530) 467-6181
l.hurlimann@siskiyoutelephone.com
- ▶ **Commercial Manager:** *Brenda Kellogg*
Phone: (530) 467-6102
b.kellogg@siskiyoutelephone.com
- ▶ **Chief Information Officer:** *Kisten Berryhill*
Phone: (530) 467-6158
k.berryhill@siskiyoutelephone.com
- ▶ **Chief Technology Officer:** *Michael C. Bray*
Phone: (530) 467-6133
m.bray@siskiyoutelephone.com
- ▶ **Safety:** *James T. Lowers*
Phone: (530) 467-6171
- ▶ **Inside Plant Manager:** *Dan Rimmer*
Phone: (530) 467-6145
d.rimmer@siskiyoutelephone.com
- ▶ **Switching Manager:** *Dan Rimmer*
Phone: (530) 467-6145
d.rimmer@siskiyoutelephone.com
- ▶ **Outside Plant Manager:** *Dave Guiney*
Phone: (530) 467-6107
- ▶ **Regulatory:** *James T. Lowers*
Phone: (530) 467-6171
- ▶ **Revenue Requirements:** *James T. Lowers*
Phone: (530) 467-6171
- ▶ **Marketing Manager:** *Brenda Kellogg*
Phone: (530) 467-6102
b.kellogg@siskiyoutelephone.com

TDS Telecom

WESTERN REGION

P.O. Box 1004
Redmond, OR 97756-1004
Phone: (541) 516-8210 Fax: (541) 516-8239
www.tdstelecom.com
▶ **Manager, State Government Affairs:** *Gail Long*
gail.long@tdstelecom.com

CALIFORNIA OPERATING COMPANIES

Operating Headquarters for Happy Valley and Hornitos
18025 Olinda Road
Anderson, CA 96007-8262
Phone: (888) 837-8020 Fax: (530) 357-2208

Headquarters for Winterhaven
512 2nd Ave.
Winterhaven, CA 92283
Phone: (888) 837-8020 Fax: (916) 572-5533

Happy Valley State Assembly Districts: 2
State Senate Districts: 4
Counties Served: Shasta, Tehama, Trinity
Number of Exchanges: 5

Hornitos State Assembly Districts: 25
State Senate Districts: 14
Counties Served: Mariposa
Number of Exchanges: 4

Winterhaven State Assembly Districts: 80
State Senate Districts: 40
Counties Served: Imperial
Number of Exchanges: 1
Affiliates: TDS Long Distance

Vast Networks

7447 N. Palm Bluffs Ave., Suite 105
Fresno, CA 93711
Phone: (559) 554-9100 Fax: (559) 442-6047
www.vastnetworks.com

Counties Served: Amador, Calaveras, Colusa, El Dorado, Fresno, Kern, Kings, Madera, Mariposa, Merced, Monterey, Nevada, Placer, San Benito, San Francisco, San Joaquin, San Mateo, Santa Clara, Stanislaus, Sutter, Tulare, Tuolumne and Yuba

OFFICERS & KEY CONTACTS

▶ **CEO:** *David Nelson*
dnelson@cvin.com
▶ **CO:** *Jan Dubiakova*
jdubiakova@cvin.com

▶ **Director of Marketing:** *Mike Stewart*
Cell: (559) 240-8482
mstewart@vastnetworks.com
▶ **Operations Manager:** *David Douglas*
douglassd@cvin.com

Volcano Telephone Company

CORPORATE OFFICE

20000 E. Highway 88
P.O. Box 1070
Pine Grove, CA 95665-1070
Phone: (209) 296-7502 Fax: (209) 296-1471

State Assembly Districts: 10
State Senate Districts: 1
Counties Served: Amador, Calaveras, Alpine, El Dorado
Number of Exchanges: 4
Affiliates: Volcano Long Distance, Volcano Vision, Volcano Internet Provider, Volcano Telecom, Inc.

OFFICERS & KEY CONTACTS

▶ **President/General Manager:** *Sharon Lundgren*
Phone: (209) 296-1415
sharonl@volcanotel.com
▶ **Vice President:** *John Lundgren*
Phone: (209) 296-1417
johnl@volcanotel.com
▶ **CO:** *Brenda Shepard*
Phone: (209) 296-1447
brendas@volcanotel.com
▶ **Outside Plant Engineering Mgr.:** *Steve Stone*
Phone: (209) 296-1468
steves@volcanotel.com
▶ **Director/Network Services:** *John Lundgren*
Phone: (209) 296-1417
johnl@volcanotel.com
▶ **Director/Information and Customer Services:**
William Harder
Phone: (209) 296-6399
williamh@volcanotel.com
▶ **Safety Manager:** *Kevin Alleen*
Phone: (209) 296-6360
kevin@volcanotel.com
▶ **Accounting Supervisor:** *Maria Irmer*
Phone: (209) 296-6352
mariai@volcanotel.com
▶ **Director/Human Resources:** *Delia Harder*
Phone: (209) 296-1408
dedeh@volcanotel.com
▶ **Director/Marketing:** *Duke Milunovich*
Phone: (209) 296-1450
dukem@volcanotel.com



**ASSOCIATE
MEMBERS**

Actelis Networks

Actelis Networks, the leader in high performance broadband over copper, makes G.SHDSL and VDSL2-based Ethernet First Mile over Copper Ethernet Access Devices, innovative VDSL and ADSL broadband amplifiers that extend the bandwidth and distance capabilities of any DSLAM, and Industrial Ethernet switches. Enabling reliable delivery of high speed Ethernet services and broadband access to more customers and the backhauling of Ethernet from more locations, Actelis turns copper into the strategic asset that optimizes networks with a better mix of cost, time to market, reliability and security than fiber, microwave, or other wireless technologies can provide.

www.actelis.com

47800 Westinghouse Drive

Fremont, CA 94539

Phone: (713) 459-0205

► **VP Marketing:** *Caron Tal Shkedy*

Phone: (713) 459-0205

carons@actelis.com

► **VP Product Marketing:** *Michal Winkler Solomon*

Phone: (510) 545-0145

mwinkler@actelis.com

AFL

AFL is an industry-leading manufacturer offering complete end-to-end fiber optic communication solutions. Highlights of our product offerings include fiber management systems, fiber optic cable, splice closures and connectors as well as fusion splicers, test equipment, related accessories and fiber optic training. www.aflglobal.com

170 Ridgeview Center Drive

Duncan, SC 29334

Phone: (864) 486-7219 Fax: (864) 486-7310

► **Regional Sales Manager:** *Nathan Mackey*

Phone: (661) 699-2908

nathan.mackey@aflglobal.com

Aldrich CPAs & Advisors LLP

(formerly AKT)

Aldrich CPAs & Advisors LLP provides a complete range of financial and advisory services with offices in Alaska, Oregon, and California. Services include:

- Financial statement audits
- Tax planning and preparation
- Operational reviews
- Strategic business planning
- Investment advisory and wealth management
- Due diligence
- Business valuations
- Retirement plan design and pension administration
- Benefit plan design and employee education

680 Hawthorne Ave SE, Suite #140

Salem, OR 97301

Phone: (503) 585-7774 Fax: (503) 364-8405

► **Partner:** *Amy Fenerty*

afenerty@aldrichadvisors.com

► **Partner:** *Doug Davison*

ddavison@aldrichadvisors.com

► **Partner:** *Scott Daniels*

sdaniels@aldrichadvisors.com

► **Senior Manager:** *Ryan Johnson*

rjohnson@aldrichadvisors.com

► **Manager:** *Chris Provencher*

cprovencher@aldrichadvisors.com

Amphenol Broadband Solutions

(All Systems Broadband)

Amphenol Broadband Solutions (ABS) provides innovative technologies to the world's Broadband Service Providers. ABS brings together the creative forces behind industry leaders Times Fiber, Holland Electronics, Extreme Broadband Engineering and All Systems Broadband to deliver forward-looking solutions across the entire spectrum of broadband network topologies; wireless, copper, fiber and satellite. www.amphenolbroadbandsolutions.com

26411 Ambia

Mission Viejo, CA 92692

Phone: (949) 697-4083

► **Director of Sales FSG West:** *Tom Belmont*

t.belmont@go-asb.com

▶ Altec Industries, Inc.

Altec is a leading provider of products and services to the electric utility, telecommunications, tree care, lights and signs, and contractor markets.

24128 Earl Court
Bella Vista, CA 96008
Phone: (530) 518-6319
▶ **Account Manager:** *Nick Franklin*
nicholas.franklin@altec.com

▶ American Power Systems

American Power Systems provides complete DC power solutions that include engineering design, products (batteries, DC plants, inverters, spill containment, safety equipment, etc), systems integration, and full life system services such as: project management, installation, maintenance logistics, removal services, and EPA certification battery disposal.

1627 Industrial Drive, Suite C
Stockton, CA 95206
Phone: (209) 467-8999 Fax: (209) 467-8997
▶ **Sales:** *Tom Treacy*
tomtreacy@ampowersys.com

▶ ANI Networks

Established in 1989, ANI Networks is committed to providing world class long distance voice services to over 400 CLEC, ILEC, Cable Providers, Hosted VoIP, Wireless and Switchless Reseller companies. As our industry continues to evolve, ANI Networks' strategic direction is simply to deliver unsurpassed quality for our wholesale customers and their subscribers. Our Direct Peering relationships in North America allow ANI to provide over 99% call completion-this is among the highest in the industry! We provide flexibility, reliability, and a 'best in class' customer support team backed by ANI's patented web portal. ANI's business plan is built on ensuring our customers' sustainability in the marketplace for today and for the future. www.aninetworks.com

250 Pilot Rd., Suite 300
Las Vegas, NV 89119
Phone: (702) 547-8423 Fax: (702) 547-8456
▶ **CEO:** *Denise McCue*
dmccue@aninetworks.com
▶ **General Mgr.-Interconnection Svcs.:** *Mark Speer*
mspeer@aninetworks.com

▶ ATL Communications, Inc.

ATL Communications is an administrative outsource provider specializing in Toll Free RespOrg services, Local Number Porting, sales and operations support for voice services, and regulatory affairs. We are the oldest and largest independent RespOrg in North America. We take a proactive approach to every task and take pride in our consistent, high quality customer service and operational integrity.

56825 Venture Lane, Suite 110
Sunriver, OR 97707
Phone: (541) 593-2900 Fax: (541) 593-2090
▶ **COO:** *Michael Rothchild*
michael@atlc.com

▶ BKD CPAs & Advisors

(formerly Kiesling Associates, LLP)

Kiesling Associates, LLP is not part of BKD CPAs & Advisors, a national CPA & advisory firm that understands your business and delivers the resources you need with a service style you'll value. BKD provides audit, accounting, tax, human resources, IT and regulatory professional services to the rural telecommunications industry.

111 S. Tejon St. Ste. 800
Colorado Springs, CO 80903
Phone: (719) 471-4290
▶ **Partner:** *David P. Aspenson*
daspenson@bkd.com
▶ **Director:** *Robert J. Bresnahan*
rbresnahan@bkd.com



▶ Calix

Calix is a global leader in access innovation. Its Unified Access portfolio of broadband access systems and software enables network and business transformation for communications service providers worldwide — allowing them to become the broadband service provider of choice to their subscribers.

www.calix.com

1035 N. McDowell Blvd.

Petaluma, CA 94954

Phone: (707) 766-3000 Fax: (707) 283-3100

▶ **Regional Sales Manager (West & Pacific Region):** *Paul Nolin*

Phone: (303) 807-3970

paul.nolin@calix.com

▶ **Senior Sales Engineer:** *Brad Petersen*

Phone: (323) 333-9224

bradley.petersen@calix.com

▶ **Senior Account Manager:** *Matt Snyder*

Phone: (707) 766-3127

matt.snyder@calix.com

▶ **TAC Escalation:** *Josh Levi*

Phone: (805) 692-3555

joshua.levi@calix.com

▶ CCI Systems

CCI delivers communication solutions and services across-the-network, aiding operators throughout the country. We combine forward-thinking engineering and the latest technology with practical field experience to grow our customer's business. At every stage—advising, creation, installation, optimization, assistance, and solution development—we work as a team to achieve a customer's goals. CCI delivers cutting-edge technologies in partnership with progressive engineers and industry leaders related to converged networks, access and media, mobility, data center, and cybersecurity. We build our services and solutions around these core technology focus areas to keep customers on the forefront of communications advancements.

www.ccisystems.com

105 Kent Street

Iron Mountain, MI 49801

Phone: (800) 338-9299 Fax: (906) 774-6117

▶ **Director of Sales & Fulfillment:** *Kae McGuire*

kae.mcguire@ccisystems.com

▶ **Account Manager:** *Brandon Shepherd*

brandon.shepherd@ccisystems.com

▶ CellStream, Inc.

CellStream was founded in 1998. We are a telecommunications consultancy firm. Our primary clients are the people that bring us the Internet and its associated technologies. From network and computing equipment manufacturers, to service providers and data networking companies, to technology experts. Our consulting strengths are in inter-networking, network design, network management, network protocols, computing, and engineering, with a focus on converged voice, video and data services over large, complex, high bandwidth wired/wireless networks and network solutions. CellStream consultants bring hundreds of years of cumulative, front-line experience across a range of specific technologies. From Optical to Wireless, and from hardware to software, our experience base can help in all aspects of our clients' needs. We found that along with our skills in consulting, design, and collaboration that our experience is often invaluable to our clients. This experience places us in a position of mentoring and educating our clients, and let to development of a training curriculum. Our enhanced Learning Services enable our clients to master technologies and processes in products and services anywhere/anytime using Internet technology with minimized training lead times and cost control. We offer a number of technical training courses, and we also support e-learning. www.cellstream.com

9812 Zembriski Drive

Plano, TX 75025

Phone: (866) 659-1014 Fax: (866) 659-1014

▶ **Contact:** *Andrew M. Walding*
a.walding@cellstream.com

▶ CHC Consulting, LLC.

CHC provides all facets of OSP telecom expertise, i.e., design, BIC, planning, conduit layout, quality review, clerical support and consulting services. www.chcconsulting.com

1845 West Orangewood Ave., Suite 300

Orange, CA 92868

Phone: (949) 250-0004 Fax: (949) 250-0006

▶ **President:** *Sue Cook*
scook@chcconsulting.com

▶ **VP of Business Development:** *Chris Cook*
ccook@chcconsulting.com

Ciena

Ciena is the specialist in transitioning the network from a technology platform cost center to a customer platform for new business opportunities.

10841 Success Cross Rd.
Nevada City, CA 95959
Phone: (530) 274-7661 Fax: (530) 274-7661
► **Contact:** *Chris Stecko*
cstecko@ciena.com

307 Legget Drive
Kanata, ON K2K 3C8
Phone: (613) 692-6617 Fax: (613) 599-0445
► **Senior Manager:** *Maureen Renaud*
mrenaud@ciena.com

Clearfield, Inc.

(formerly: APA Cables & Networks)

Clearfield, Inc. is a leading provider of fiber connectivity systems designed to meet the unique and demanding requirements of today's independent telephone, cable television and municipal networks. The Clearfield product line, including fiber frames and panels, OSP cabinets and optical components, offers an innovative, modular and scalable platform designed for use in central office and OSP architectures and has successfully been deployed in some of the harshest of FTTH environments. All full-line of fiber and copper assemblies complements the Clearfield solution.
www.clearfieldconnection.com

7050 Winnetka Ave. N., Suite 100
Brooklyn Park, MN 55448
Phone: (763) 476-6866 Fax: (763) 475-8457
► **Regional Sales Manager:** *Matt Quillin*
mquillin@clfd.net
► **Business Development Manager:** *Jon Gijwojna*
jgijwojna@clfd.net

CoBank

CoBank is a leader in delivering complete financial solutions to rural America. With 3.1 billion committed to more than 220 rural wireline and wireless communications companies nationwide. CoBank offers a wide range of financing services for upgrading and construction of facilities, acquisitions, working capital and general corporate purposes. Companies can take advantage of CoBank's full suite of cash management products, as well as leasing services through CoBank's subsidiary Farm Credit Leasing Services Corporation. With 92 billion in total assets, CoBank provides financing services to rural communications, energy, water and agribusiness companies. www.cobank.com

6340 South Fiddlers Green Circle
Greenwood Village, CO 80111
Phone: (303) 694-5946
► **SVP:** *Rob West*
rwest@cobank.com

CommScope

CommScope is a supplier of infrastructure components and systems for the telecommunications industry. Products include connectors, above and below-ground enclosures, cable accessories, fiber optic cabling, racks for copper and fiber networks, and much more. CommScope is developing, manufacturing, installing and maintaining the world's most advanced communications systems. www.commscope.com

1187 Park Place
Shakopee, MN 55379
Phone: (952) 403--8700 Fax: (952) 403-8234
► **Account Manager:** *Travis Novak*
Phone: (612) 220-4282
travis.novak@commscope.com



▶ CommSoft

In an IT world in which quality, experience and know-how can be hard to find, CommSoft stands out amongst the crowd. For over 30 years, we have been an industry-leading software development organization. Our end-to-end billing and OSS software suite can cover a myriad of voice, video, data, and wireless services from a common platform. Our all-encompassing product suite is also designed to meet the needs of each department in your company. www.commssoft.net

96 Thompson Hill Road
Rensselaer, NY 12144

Phone: (518) 720-3700 Fax: (518) 720-3713

▶ **Senior Marketing Coordinator:** *Kelsey Cruikshank*
marketing@commssoft.net

▶ **VP of Sales:** *Rick Bartlett*
richard.bartlett@commssoft.net

▶ Comstock Telecom

Comstock Telcom is a full-service supplier of new and refurbished central office and transmission equipment, including in-house repair and testing services.

5445 Equity Avenue
Reno, NV 89502

Phone: (775) 856-2227 Fax: (775) 856-2262

▶ **President:** *Rick Anderson*

▶ **Sales:** *Jim Hedgecoth*
jjim@comstocktel.com

▶ Condux International

Condux International is the worldwide leader in cable and fiber optic installation equipment. Based in Mankato, Minnesota, this is a made in the USA product. www.condux.com

145 Kingswood Drive
Mankato, MN 56001

Phone: (507) 387-6576

▶ **Director, Sales & Marketing:** *Clay Harris*

Phone: (262) 237-4480
charris@condux.com

▶ Consolidated Communications, Inc.

Consolidated Communications, Inc. is a leading broadband and business communications provider serving consumers, businesses of all sizes and wireless companies and carriers, across a 24-state service area. Leveraging its advanced fiber optic network spanning more than 36,000 fiber route miles, Consolidated Communications offers a wide range of communications solutions, including: data, voice, video, managed services, cloud computing and wireless backhaul. With its main California office in Roseville, the company's network is focused in Sacramento and Placer counties covering 583 square miles. Consolidated Communications is the 9th largest fiber provider in the United States.

Consolidated Communications offers training classes to CalCom members. Training focuses on field operations and can be provided at our facilities or the customer location.

www.consolidated.com

211 Lincoln Street
Roseville, CA 95661

▶ **Director Operations:** *Frank Alva*

Phone: (916) 786-1316
frank.alva@consolidated.com

▶ **Field Service Manager:** *Ron Fischer*

Phone: (916) 786-1163
ron.fischer@consolidated.com



Cooper, White & Cooper LLP

Providing comprehensive legal representation on matters of importance to telecommunications providers, their business partners, and their principals since 1896. www.cwclaw.com

201 California Street, 17th Floor

San Francisco, CA 94111

Phone: (415) 433-1900 Fax: (415) 433-5530
info@cwclaw.com

- ▶ *Sarah Banola*
sbanola@cwclaw.com
- ▶ *Priya Brandes*
pbrandes@cwclaw.com
- ▶ *Jamie Chou*
jchou@cwclaw.com
- ▶ *John Epperson*
jepperson@cwclaw.com
- ▶ *Alan Freeland*
afreeland@cwclaw.com
- ▶ *Walter Hansell*
whansell@cwclaw.com
- ▶ *Scott McLeod*
smcleod@cwclaw.com
- ▶ *Christopher Mead*
cmead@cwclaw.com
- ▶ *Patrick Rosvall*
prosvall@cwclaw.com
- ▶ *Mark Schreiber*
mschreiber@cwclaw.com
- ▶ *Beau Simon*
bsimon@cwclaw.com
- ▶ *Jed Solomon*
jsolomon@cwclaw.com
- ▶ *Ann Ten Eyck*
ateneyck@cwclaw.com
- ▶ *Kate Wheble*
kwheble@cwclaw.com

Cordell, Inc.

With more than 350 customers worldwide, Cordell is a leading provider of network solutions for telecom, power, railroad, airport industries. Cordell is a Calix Certified Partner, and approved by Metaswitch and GENBAND. Cordell is celebrating its 38th year (1979-2017) by providing a full range of alarm, traffic and IT systems for network, legacy, soft switch and SNMP applications. These include: VM Ware or server based Network Operations Centers (NOC) for SNMP/TL1/ASCII, Traffic engineering and Traffic Alarm Reporting Software. Cordell RTUs provide contact and analog along with environmental monitoring and controls. With more than 14,000 units in the field and interoperability partners like Metaswitch, GENBAND and Switch Support (4U), Cordell continues to be a major technological partner for our customers providing productivity and profitability with the use of its products. www.cordell.com

918 Palomares Avenue

La Verne, CA 91750

Phone: (909) 971-9100 Fax: (909) 971-9101
operations@cordell.net

- ▶ **President and CEO:** *William E. Mathews, III*
- ▶ **Operations Manager:** *John G. Ruiz*
- ▶ **Director of Engineering:** *Ken Woodmansee*
- ▶ **Customer Service Manager:** *Pete Kelly*

CORE Telecom Systems

Core Telecom Systems is an integrated supplier of new and surplus equipment and support services to the telecommunications industry. We offer superior value with world-class customer service across a wide variety of solutions from broadband switching, access, optical and fixed wireless transport to power, batteries and customized cabinetry, including fiber cable, connection and associated tools. Core is an authorized distributor for industry leading manufacturers, including: Tellabs, Coriant, Eltek, PPC (formerly M2FX), Cambium Networks, RG Nets, Smart RG, Positron, Ruckus Wireless, Primex, PSI, American Products, North Star Battery, Haze Battery, New Basis and Clearfield.

1131 North Warson Rd.

St. Louis, MO 63132

Toll Free: (888) 375-8826 Fax: (314) 372-0233

- ▶ **Senior Sales Manager:** *James Shell*
jshell@coretelecom.net
- ▶ **Senior Sales Manager:** *Shaun Plummer*
splummer@coretelecom.net
- ▶ **Marketing Manager:** *Heather Lamm*
hlamm@coretelecom.net

▶ Corning Optical Communications, LLC

Technology leader in Fiber to the Home, FTTH Solutions. Corning offers advanced technology, superior performance, high value, ease of installation, and exceptional quality. Manufacturer of fiber optics communications equipment: fiber optic distribution hardware (racks & shelves), passive optical devices, optical cross connects, connectors, splice closures, inside and outside plant fiber cable, splicing and connectorization equipment, fiber optic talk and test equipment, and subscriber network interface devices. www.corning.com

- ▶ **Pacific Regional Account Manager:** *Mike Spoon*
Cell: (530) 945-0978
mike.spoon@corning.com
- ▶ **Customer Service and Project Quotes for Carrier Distribution:** *United States Broadband Networks*
Phone: (800) 743-2671
ccsamericas@corning.com
- ▶ **Engineering Technical Assistance:**
Phone: (800) 743-2671

▶ Cronin Communications

Consulting firm specializing in strategic planning, organizational development, market research, feasibility studies, marketing, staff training and business expansion. www.cronincom.net

- 938 T St NW
Washington, DC 20001
Phone: (202) 232-1107
- ▶ **President:** *Timothy E. Owens*
towens@cronincom.net
 - ▶ **Marketing Manager:** *Kristen Mertens*
Phone: (952) 431-9101
kmertens@cronincom.net

▶ Ditch Witch Equipment Co., Inc.

Ditch Witch Equipment Company, Inc., established in 1964, is a full service equipment dealership providing sales, service, parts and rentals of underground construction and cable locating equipment.

- 929 Stillwater Road
West Sacramento, CA 95605
Phone: (916) 371-6000 Fax: (916) 371-6185
- ▶ **President:** *Rob Kilgour*
rkilgour@dwsac.com
 - ▶ **Systems Manager:** *Blair Kilgour-Reese*
blair@dwsac.com
 - ▶ **Sales Manager:** *Garry Paschal*
gpaschal@dwsac.com
 - ▶ **Sales Manager:** *Robert Terzich*
robert@dwsac.com
 - ▶ **Product Specialist:** *Ron Groat*
rgroat@dwsac.com
 - ▶ **Service Manager:** *BJ Reese*
bjreese@dwsac.com
 - ▶ **Parts Manager:** *Chris Pera*
cpera@dwsac.com

▶ Dragon Communications

Manufacturers Representative Company supporting Copper, Fiber, and OSP Products into Communication Networks. www.dragoncomm.net

- 4400 Sandpiper Lane
Paradise, CA 95969
Phone: (530) 321-4328
- ▶ **President:** *Rhys Owen*
rhys@dragoncomm.net

▶ ESPI

ESPI designed, patented, manufactures and markets the most technologically advanced FTTH UPS available. A better battery, Thermo-Amp technology and advanced diagnostics insure battery back-up OpEx savings of up to 50%. www.espicorp.com

- 630 Lincoln Ave.
Clay Center, KS 67432
Phone: (877) 799-3774
- ▶ **V.P. Sales:** *Paige Wacker*
Phone: (785) 447-3214
paige@espicorp.com



Fiber Optic Supply, Inc.

Fiber Optic Supply Incorporated specializes in Fiber Optic Cable, Copper Cable and associated components. FOSI stocks and sells a complete inventory of products manufactured by: AMP, Cabletec, Fitel Lucent, Lucent, OFS Brightwave Technologies, 3M, Corning Cable Systems, Duraline, Prysmian and many more. FOSI maintains west coast warehouses; provides 24-hour delivery; on-line quote/ordering.

740 Clipper Hill Road
Danville, CA 94526
Phone: (415) 832-2243

► **Sales Director:** *Jenifer Perazzo*
jenifer@fosupply.com

► **Sales Mgr./CEO:** *Nicole Courtemanche*
Phone: (925) 216-1259
npcourt717@gmail.com

FibNet, Inc.

FibNet Inc, a complete broadband network solution provider. Our strategic partnership with companies like Ocean Cable and Communication Japan has not just been fruitful but we have been able to share their expertise in various grounds ranging from state-of-the-art non-burial terrestrial optical cable (based on submarine cable technology) for backhaul and backbone solutions. Our OCC cable product is ITU-T L.1700 standardized, which can be laid easily in all terrain with ease, DIY – Do-It-Yourself technology. Semi-burial or non-burial fiber protected by a continuous stainless steel metallic tube. Though protected by steel, it is thin in nature and very light to carry. The cable is tested to be rodent proof with non-flammability. The cable has no electromagnetic interference and does not carry any power supply. We shall prove ourselves more competent in terms of fast yet cost effective deployment of a network at any terrain and in any environment. www.fibnet.net

1760 Willow Pass Rd., Ste #A
Concord, CA 94547
Phone: (925) 326-8605
info@fibnet.net

► **Contact:** *Prashant Manandhar*
Phone: (510) 517-6633
prashant@fibnet.net

General Machine Products Co., Inc.

GMP is a world leader in manufacturing tools and equipment used to place and maintain cable in the Outside Plant (OSP) environment. Specifically, GMP supplies cable lashing machines, aerial cable blocks, fiber optic cable blowers and pullers, ratchet cable cutters, duct rodders, reels, tents, underground pulling equipment and bed-mounted winches for cable pulling. GMP also provides a Modular Plug Presser, arguably the best tool on the market for RJ-11 and RJ-45 remote connections that can be rated for Category 6. www.gmptools.com

3111 Old Lincoln Highway
Trevose, PA 19053
Phone: (215) 357-5500 Fax: (215) 357-6216

► **Director of Sales:** *Ted Clemens*
tclemens@gmptools.com

► **Operations Coordinator:** *Frank McKeown*
fmckeown@gmptools.com

► **Regional Sales Manager:** *Frank Zaccone*
fzaccone@gmptools.com

Genuine Cable Group

Stocking distributor of all types of wire and cable, specializing in central office power Telco-Flex cables. Manufacturer of cable assemblies, coaxial, twisted pair and fiber, logistical inventory management and kitting.

8590 W. Buckeye Road
Tolleson, AZ 85353
Phone: (623) 478-8700 Fax: (623) 478-8717

► **Sr. Vice President:** *Kevin McNamara*
kmcnamara@genuinecable.com

► **General Manager:** *Kurt King*
kking@genuinecable.com



Global Machinery

Global Machinery supplies new, used, and reconditioned utility and construction equipment to serve the Power & Electric, Telecom, Water & Sewer, and Landscaping industries. They offer a full range of equipment to meet sales, rental, and leasing requirements throughout northern California and the surrounding areas. Global Machinery is staffed by professionals with extensive backgrounds in the industries served. They also provide a wide range of tools and accessories, and a full-service shop to meet all service and repair requirements. From vacuum excavation to fiber installation to underground power construction, Global Machinery has the equipment to meet your needs.

3321 Airport Road
Sacramento, CA 95834
Phone: (916) 453-2780 Fax: (916) 382-7187

- ▶ **Sales Manager:** *Jim Cunningham*
jcunningham@globalmachinery.com
- ▶ **Operations Manager:** *Rick Harriman*
rharriman@globalmachinery.com

GNB Industrial Power

Network Power batteries manufactured by GNB Industrial Power provide energy storage solutions for critical systems that require uninterrupted power supply. Applications include telecommunications, computers, security systems, electrical power plant systems, and military equipment. www.exide.com/us/en/

13000 Deerfield Parkway
Milton, GA 30004
Phone: (209) 251-8587

- ▶ **Regional Manager:** *Mike Zaccagni*
michael.zaccagni@na.exide.com

Graybar

National Distributor with local stocks of outside plant and materials, station apparatus, key systems, PABX communication wire and cable, transmission equipment, protection equipment, inside plant materials, test equipment, both active and passive data products, fiber optic cable and accessories, and products for hybrid/coaxial cable television networks, for operating telephone companies, cable television companies, utilities in telecom, and competitive access providers.

3035 Prospect Park Dr., Suite 60
Rancho Cordova, CA 95670
Phone: (916) 288-4114 Fax: (916) 288-4299

- ▶ **Sales Representative:** *Caroline Krivda*
caroline.krivda@graybar.com
- ▶ **Customer Service:** Phone: (800) 688-8061

GVNW Consulting, Inc.

Provides a wide array of Financial and Management Consulting Services to independent telephone companies. Services include separations and traffic studies; access charge and rate case development; FCC and State tariff filings; accounting systems development; engineering planning and deployment; depreciation studies; CLEC planning and implementation; acquisitions and sales; evaluations; marketing and long range planning. www.gvnw.com

WESTERN REGION

8050 S.W. Warm Springs St., Suite 200
P.O. Box 2330
Tualatin, OR 97062
Phone: (503) 612-4400 Fax: (503) 612-4401

- ▶ **President & CEO:** *Jeffry H. Smith*
- ▶ **Consulting Manager:** *Dave Lashua*
- ▶ **Consulting Manager:** *Craig Blair*

Henkels & McCoy, Inc.

Henkels & McCoy designs, builds, and maintains infrastructure for the energy, communications, water and pipeline industries. We provide project management, engineering, construction, installation, maintenance, and training services to utility, commercial, industrial, and government customers. We are committed to increasing the speed and quality of communications for a variety of clients including telecommunication firms, Competitive Local Exchange Carriers (CLECs), utilities, government, private industry, and the military.

5000 NE 148th Ave.
Portland, OR 97230
Phone: (503) 255-5125 Fax: (503) 255-5129

- ▶ **Director Operations Northwest:** *Vic Beattie*
vbeattie@henkels.com

Hubbell Power Systems, Inc.

(Communications Division)

Hubbell Power Systems, Inc. manufactures OSP products from industry leading brands such as Quazite & PenCell underground enclosures/hand holes/vaults & pedestals, Hubbell polymer concrete equipment pads, Chance aerial hardware, anchors & tools, Anderson-Fargo deadends, grounding products, & connectors, and Opti-Loop aerial snowshoes. EMC Electric Motion Company & Windsor Fiber Optic Enclosures. *Enduring products and people you can depend on. . . we never compromise.* www.hubbellopowersystems.com

466 Foothill Blvd. #246
La Canada, CA 91011
Phone: (818) 636-0993

- ▶ **Territory Manager:** *Jeff Olson*
Cell: (626) 243-8607
jolson@hubbell.com

Innovative Systems, LLC

For many years, Innovative Systems has been a leading provider of solutions for the North American Tier 3 market with nearly 1200 systems deployed. eLation™, our OSS solution, includes integrated billing, financials, automated provisioning, ACS, and Staking and Mapping. The InnoStream™ server is our one-platform approach to IPTV solutions such as Middleware, VOD, Cloud DVR, Restart TV, HLS Packaging, Conditional Access, and the new IS-5112W set-top box. The APMAX™ hardware platform provides enhanced voice and hosted business solutions. The Innovative Systems Print Division specializes in full color printing of variable data statements and invoices for industries including telecom, utilities, and sanitation. www.innovsys.com

1000 Innovative Drive
Mitchell, SD 57301
Phone: (605) 995-6120 Fax: (605) 995-0084

► **CEO:** Roger Musick

► **Sales Director:** Howard Fuller

Phone: (605) 990-7264
howardf@innovsys.com

► **VP of Sales:** Scott Sobolewski

Phone: (605) 990-7261
scott@innovsys.com

ISPn

ISPn can supplement any facet of an ISP's business. We provide technical Help Desk Support (24x7 or customized hours), engineering, network monitoring, web order entry, vISP solutions, and hardware consultation. Since 1994, ISPn has offered its business partners a branded Internet product, while performing all or part of the back-end support. Call today and aim for excellence with ISPn!

14303 W. 95th Street
Lenexa, KS 66215
Phone: (913) 859-9500 Fax: (913) 859-9805

► **Director of Business Dev.:** Lana Moaveni Gill

Phone: (913) 307-5097
lana@ispn.net

► **Director of Operations:** Charlie Brenneman

charlie@ispn.net

KGP Logistics

KGP Logistics is a leading woman-owned distributor of voice, data, video and wireless products as well as integrated and logistics services. Our distribution product lines encompass more than 150,000 items, ranging from outside plant, central office network electronics and broadband communications equipment. KGP Logistics is committed to leveraging our long-standing strength in deployment services, equipment distribution and logistics with the lowest total cost solution. The dedication to deliver reliable and relevant service with an unwavering loyalty to Customer Service remains our objective at KGP Logistics – just as it has been for the past 34 years.

2501 Morristown Blvd.
Faribault, MN 55021
Phone: (507) 334-2268 Fax: (507) 334-2177

► **Contact:** Dale Putrah
dpputrah@kgptel.com

6030 W. Pontiac Drive
Glendale, AZ 85308
Phone: (602) 619-5745

► **Field Sales Manager:** Chris Bailey
christopherbailey@kgpco.com

KLW Company

KLW Company, established in 1984, is a manufacturers' rep organization servicing California and Nevada. KLW specializes in representing quality manufacturers of OSP construction and maintenance products for the telecommunications, wireless and CATV markets. Products represented include: Innerduct and couplers, micro-ducts and Future path, optical fusion splicer's lubricants for jetting and pulling of fiber cables, fiber optic trailers and tents, duct rodders and portable work lights, MDU housing for fiber optic cables, MDU fiber management systems for FTTX, directional drilling pipe and jetting equipment, utility marker posts, Fiber Optic Cable Ribbon & Loose Tube, Copper and Fiber Test Equipment, Aerial and Underground Tools and Equipment.

1282 Stabler Ln. Ste. 630#222
Yuba City, CA 95993
Phone: (408) 722-1334

► **Owner:** Gary Murphy
gary@klwco.com

► **AT&T No. Cal Account Mgr.:** Red Quijada

Phone: (408) 348-1603
red@klwco.com

► **AT&T & Frontier So. Cal Account Mgr:** Gerry Winter

Phone: (805) 551-2353
gerry@klwco.com

▶ Leoch Battery Corp.

Leoch Battery is a global manufacturer with a local, friendly presence. Our ASSURED TEL product line offers you flooded and VRLA lead acid batteries – in AGM, GEL, flat plate, tubular (OPzV, OPzS), and premium Pure Lead punched grid designs – as well as lithium iron phosphate in 48VDC configurations. Whether your specific need is long service life, high cycle life, high temperature tolerance or space limitations we have the battery to meet each of your telecommunication equipment requirements. Excellent quality. Exceptional technical support. Affordable price. www.leoch.us

19751 Descartes, Unit A
Foothill Ranch, CA 92610

Phone: (949) 588-5853 Fax: (949) 588-5966

▶ **Vice President of Business Dev:** *Dianne Dickey*

Cell: (619) 942-0419
dianne.dickey@leoch.us

▶ **Director of Telecom & UPS Sales:** *Donald Lenz*

Cell: (919) 710-2039
dlenz@leoch.us

▶ Lindeberg Group, Inc. (The)

Manufacturers Representative representing CommScope, Viavi Solutions (JDSU), and Fiberfox Fusion Splicers.

222 Arthur Court
Danville, CA 94526

▶ **President:** *Kim Lindeberg*

Cell: (510) 325-1250
tlg@pacbell.net

▶ Mapcom Systems

Mapcom Systems is the developer of M4 Solutions – a visual operations platform that allows service providers to manage their workforce, as well as fiber, coax and copper networks, including both outside and inside plant at the physical and logical levels. M4 Solutions enables users to integrate and correlate data from existing billing, accounting, GPS tracking, element management, network monitoring and vehicle-tracking applications in a powerful visual interface to all network elements. www.mapcom.com

601 Southlake Boulevard
Richmond, VA 23236-3921

Phone: (804) 743-1860 Fax: (804) 378-3566

▶ **President:** *Chuck Flournoy*
cflournoy@mapcom.com

▶ **Director of Sales/Acct. Management:** *Matt Gilbert*
mgilbert@mapcom.com

▶ **Client Care Manager:** *Ben Pleasants*
bpleasants@mapcom.com

▶ Metaswitch Networks

Metaswitch is the world's leading cloud native communications software company. We develop commercial and open-source software solutions that are constructively disrupting the way that service providers build, scale, innovate and account for communication services. www.metaswitch.com

399 Main Street, Second Floor
Los Altos, CA 94022

Phone: (214) 572-7804 Fax: (415) 513-1501

▶ **Marketing Coordinator:** *Nicole Drain*
nicole.drain@metaswitch.com

▶ Mid America Computer Corporation (MACC)

Full line service bureau, providing subscriber billing, rating, carrier access billing (CABS), programming and data processing services for independent telephone companies. www.maccnet.com

111 Admiral Drive
Blair, NE 68008

Phone: (402) 426-6222 Fax: (402) 533-5369

▶ **President:** *Craig Aman*
caman@maccnet.com

▶ **Client Relations Manager:** *Jill Arthur*
Phone: (402) 533-5227
jarthur@maccnet.com

P.O. Box 20545

Keizer, OR 97307

Phone: (503) 390-3331

▶ **National Sales Manager:** *Kathy Rea*

Cell: (503) 559-1119
krea@maccnet.com



Mid-State Consultants, Inc.

Providing all phases of engineering services, including consulting, field services and computer graphics to the telecommunications industry.

WEST COAST OFFICE

29781 SW Town Center Loop West

P.O. Box 808

Wilsonville, OR 97070

Phone: (503) 682-5911 Fax: (503) 682-5960

► **President:** *Terry D. Brown*

► **Vice President:** *Steven C. Kidd*

► **Regional Vice President:** *Glen Gines*

CORPORATE OFFICE

1475 North 200 West

P.O. Box 311

Nephi, UT 84648

Phone: (435) 623-8601 Fax: (435) 623-8610

Monroe Telephone Company

Oregon local exchange carrier.

P.O. Box 130

575 Commercial St.

Monroe, OR 97456

Phone: (541) 847-5135

► **President:** *John T. Dillard*

jtillard@monroetel.com

Moss Adams LLP

Accounting, RUS audits, taxes, depreciation, access charges, CABS, separations, cost studies, traffic studies, acquisitions, cooperatives, tariffs, rate cases, data processing consulting. Offices in principal cities of California, Oregon, Washington, Arizona and New Mexico. www.mossadams.com

3121 W. March Lane, Suite 200

Stockton, CA 95219-2303

Phone: (209) 955-6100 Fax: (209) 955-6199

► **Partner:** *Chad Duval*

Phone: (209) 955-6124

► **Senior Manager:** *Reinold Giesbrecht*

Phone: (209) 955-6110

► **Senior Manager:** *Ira Taylor*

Phone: (209) 955-6161

► **Senior Manager:** *Tym Rutkowski*

Phone: (509) 777-0137

MP Nexlevel of California, Inc.

MP Nexlevel is an outside plant construction company that specializes in installing cable and conduit infrastructures for Telcos, including "fiber-to-the-home." Services we provide include: trenching; directional drilling; rock cutting; pole and bridge attachment work; cable/conduit installation; cable termination/splicing; infrastructure testing/maintenance/repair and more. MP Nexlevel has been in business for over 35 years and employs more than 500 construction professionals. Whatever your project needs are, MP Nexlevel has the experience and the resources to deliver exceptional service and quality work. For all your infrastructure construction needs please call us at (320) 963-2400. www.mpnexlevel.com.

500 County Rd. 37E

Maple Lake, MN 55358

Phone: (320) 963-2423 Fax: (320) 963-2438

► **President:** *Larry Pribyl*

lpribyl@mpnexlevel.com

► **Sr. Vice President:** *Tim Pribyl*

tpribyl@mpnexlevel.com

► **VP Operations:** *Rob Pribyl*

rpribyl@mpnexlevel.com

► **VP of Business Development:** *Derek Groth*

dgroth@mpnexlevel.com

National Directory Assistance

National Directory Assistance (NDA) is a leading wholesale provider of Local and National Directory Assistance, Operator Services and Listings Management Services. NDA currently serves over 700 rural ILEC, CLEC, MUNI, VoIP and Wireless service providers across the United States. Wholesale directory look-ups are conveniently made available via the 411 dialing pattern. Beyond the wholesale look-up, members have access to a suite of web-based tools for enhanced customer service and exclusive control over listing data. A unique Operator Service platform requires no tariffs, pays commissions on billable calls and offers company branding. www.nationalda.com

12700 Townepark Way

Louisville, KY 40243

Phone: (502) 420-9899 Fax: (502) 244-4174

► **Partner:** *Stephen Ferry*

ferrysj@nationalda.com

▶ NEC Corporation of America

NEC Corporation of America, Carrier Solutions Unit, is a leading technology provider of microwave radio communication to carriers, enterprises, utilities and public safety networks. Headquartered in Irving, Texas, NEC Corporation of America is a North America subsidiary of NEC Corporation. NEC Corporation of America serves microwave radio communication systems in North America for over 30 years.

3929 John Carpenter Freeway
Irving, TX 75063
Phone: (214) 262-3607 Fax: (214) 262-3685
▶ **Manager, Sales & Marketing:** *Jerome Crews*
jerome.crews@necam.com

▶ NECA

Telecom Association – Manages revenue pools, files interstate tariffs and provides training.

6400 S. Fiddler's Green Circle, Ste. 1420
Greenwood Village, CO 80111
Toll Free: (800) 892-3322 Fax: (800) 551-1328
▶ **Director:** *Susan M. Barrett*
sbarret@neca.org
▶ **Manager, Member Service:** *Mark Roberts*
Phone: (303) 893-4405
mroberts@neca.org
▶ **Associate Manager:** *Holly Adams*
Phone: (303) 893-4428
hadams@neca.org

▶ NISC (National Information Solutions Cooperative)

NISC is a leading provider of software solutions and services for utilities and telecoms. NISC offers advanced, integrated solutions featuring automated workflows, electronic approvals, and more in areas billing and customer service, accounting, engineering & operations, meter data management, payment channels, cyber security and eServices / Apps. Over twenty million consumers in 50 states, Canada, and the South Pacific receive utility or telecommunications services from over 820 companies utilizing NISC advanced solutions. www.nisc.coop

3131 Technology Drive NW
Mandan, ND 58554
Phone: (866) 999-6472 Fax: (701) 667-1936
▶ **Manager Business Dev. & Sales:** *Todd Henecke*
todd.henecke@nisc.coop
▶ **Regional Business Manager:** *Kim Dudley*
kim.dudley@nisc.coop

▶ Nor-Cal Battery Co.

Nor-Cal Battery provides full sales and service of Battery and Rectifier solutions from cradle to grave. We offer full design engineering on battery products including but not limited to Enersys, NorthStar, Leoch, Deka and GNB. As a partner of GE (Lineage) we offer a full line of DC power systems as well as Eltek DC power systems. Nor-Cal can do full system integration offering (batteries-rectifiers-spill containment-battery watering stations, etc.) with installation and removal and provide disposal certificate of old batteries. We are a full product and service company with Battery Preventative Maintenance and monitoring programs available, we offer full load bank testing using the Alber BT2000 monitoring system. Nor-Cal Battery is your one stop supplier. www.norcalbattery.com

3432 D Cherokee Road
Stockton, CA 95205
Phone: (209) 993-7038 Fax: (209) 253-0235
▶ **Exec. Director Telecommunications:** *Helen Woosley*
helen.woosley@norcalbattery.com

▶ Optelian

Since 2002, Optelian has been providing reliable, telco-grade solutions to service providers and enterprises. Our modular and scalable equipment, software and services are cost effective. We are recognized as a trusted source, delivering exceptional customer care and support, from network planning and design to equipment installation, training, and professional services. Industry proven – Over 200 customers, 20,000 platforms, 300,000 wavelengths deployed. www.optelian.com

1325 Northmeadow Parkway, Suite 130
Roswell, GA 30076
Phone: (877) 225-9428 Fax: (613) 287-2001
▶ **Director of Sales-Western Region:** *Ralph Huff*
Ralph.huff@optelian.com



▶ Osmose Utilities Services, Inc.

Osmose helps pole owners lower the costs, manage the risks, and improve the performance of their outside plant through a unique combination of predictive and preventative maintenance, and engineering and design services. Osmose uses O-Calc® Pro software with Digital Measurement Technology (DMT™) and web-based project management tools to assist telecoms and engineering firms with pole loading analysis, make-ready and pole replacement design. Call Osmose for pole maintenance, joint use, and “double-wood” solutions. www.osmose.com

635 Hwy 74 S
Peachtree City, GA 30269
Phone: (770) 632-6700

▶ **Product Manager O-Calc Pro:** *Mike Rigney*

Phone: (315) 385-3842
mrigney@osmose.com

▶ **Delivery Supervisor:** *Leann Newcomb*

Phone: (916) 380-9238
lnewcomb@osmose.com

▶ **Director Business Development:** *Vertis McManus III*

Phone: (510) 501-0779
vmcmanus@osmose.com

▶ **Director Business Development:** *Dean McQuillan*

Phone: (702) 245-3567
dmcquillan@osmose.com

▶ PICS Telecom International

PICS Telecom is a reseller of new, used, and refurbished IT and Telecom equipment. Additionally, PICS provides white glove treatment by offering installation and de-installation services. Our Asset Consignment program helps companies recoup idle, unused assets. PICS Telecom utilizes its R2 certification in being able to safely and responsibly recycle equipment. www.picstelecom.com

1920 Lyell Avenue
Rochester, NY 14606
Phone: (585) 295-2000 Fax: (585) 295-2020

▶ **Regional Account Manager:** *Matthew Garlock*

Phone: (585) 785-5476
mgarlock@picstelecom.com

▶ Power & Tel

Power & Tel is a premier woman-owned wholesale distributor to the global communications marketplace. Our focus is being a cost-effective source of voice, data, video, and wireless products and material management solutions to all entities that are involved in building and maintaining communication and similar-type networks. Simply stated, we provide you efficient ways to get the material you need, where and when you need it.

SALES OFFICE

6151 Randolph Street
Commerce, CA 90040
Phone: (800) 247-0042 Fax: (515) 244-4757

▶ **District Sales Mgr. (CA, AZ, NV, & NM):** *Robin Mayne*

Phone: (714) 235-4775
robin.mayne@ptsupply.com

▶ **Account Manager:** *John Woods*

Phone: (901) 866-3131
john.woods@ptsupply.com

▶ Preformed Line Products

Manufacturer of full-range of telecommunications products including: reenterable splice closures that accommodate copper and fiber optic cable; organizers and fiber optic splice trays; buried service wire closures; bonding accessories and strand/open wire products. www.preformed.com

660 Beta Drive
Mayfield Village, OH 44143
Phone: (440) 461-5200 Fax: (440) 442-8816

▶ **Northwest Sales Manager:** *Mell Petersen*

mpetersen@preformed.com

▶ PUPCO, Inc.

PUPCO, Inc. is a manufacturer's representative for several companies in the Telecommunications Safety and Electronic Test Equipment. PUPCO, Inc. has been in business since 1979, and promotes product sales and training support for manufacturers in California, Nevada, Alaska, and Hawaii. www.pupcoinc.com

PO Box 2288
Morgan Hill, CA 95038
Phone: (408) 351-1041 Fax: (408) 266-5871

▶ **President:** *Thomas P. Roberts*

trpupco@sbcglobal.net

▶ **Contact:** *Greg Kimbrow*

gkpupco@sbcglobal.net

▶ Rep Com International, LLC

Manufacturers' Representatives of OSP Products

ACT Communications, Fiber Distribution Industries, Neptco, Petroflex, PowerTec Solutions International, Prysmian, Trace-Safe by Neptco, Viavi Solutions, Vivax/Metrotech, Westek.

1521 N. Cooper St., Suite 890
Arlington, TX 76011
Phone: (817) 649-7460

▶ **Northern California Territory Sales:** *Jeff Knuttila*

Phone: (925) 813-8370
jknuttila@repcom.com

▶ **Northern California/Northern Nevada**

Territory Sales: *Chuck Everhart*

Phone: (775) 450-2260
ceverhart@repcom.com

▶ **Southern California Territory Sales:** *Earl Langenberg*

Phone: (760) 822-7211
elangenberg@repcom.com

▶ Retech

DC Power Products and Services, Network Equipment Products and Services, Infrastructure Products and Services, and Facilities Services.

11375 Sunrise Park Dr., Suite 500
Rancho Cordova, CA 95742
Phone: (916) 822-3222 Fax: (916) 822-3202

▶ **Vice President:** *Dennis Pulos*

Cell: (916) 496-1774
dpulos@retechonline.com

▶ Ribbon Communications

Ribbon is a global leader in real-time communications and security solutions, providing communications software and infrastructure solutions to service providers and enterprises. The company's complementary product portfolio and expanded geographic reach provides customers with an expanded set of market-leading products and solutions. Ribbon is highly focused on providing customers with the best products and services to achieve positive business outcomes.

3605 E. Plano Parkway, Suite 400
Plano, TX 75074
Phone: (972) 521-5868 Fax: (972) 265-3592

▶ **Sales Director:** *Mike Titzer*

Cell: (612) 559-0058
mtitzer@rbbn.com

▶ RMWT (Rocky Mountain West Telecom)

RMWT is recognized throughout the telecommunications industry for our specialized communications consulting and engineering expertise. RMWT also provides wireless capabilities such as a wireless cell site construction. This includes but not limited to maintenance, repair, retrofit existing sites with updated equipment & inspections. We have experience with every type of cell site application and all types of platforms in which to serve.

22 N. Sheep Lane
P.O. Box 331
Nephi, UT 84648

Phone: (435) 623-4252 Fax: (435) 623-4351

▶ **President:** *Kyle Garrett*

kgarrett@rmwt.com

▶ **Vice President of Operations:** *Shane Day*

shane@rmwt.com

▶ S&S Solutions, LLC

Factory Representatives for telecommunication products

ARMORCAST vaults, pads, handholes/manholes, warning panels, safety barriers; ERICO quality grounding, bonding & connectivity solutions for electrical install and protection; ESPI Cost Effective Fiber to the Home UPS – ESPI designs & manufactures the most reliable FTTH UPS. Provides more than 14 hours of ONT battery backup (more than the FCC required 8 hours for 911 connectivity). Telco technicians rely on its ease of installation & reliability; EXFO Copper, Fiber & Protocol test equipment; FITEL fusion splicers, cleavers, Splice-on-Connectors; MEGGER electrical test equipment; PRYSMIAN/DRAKA fiber: aerial, ADSS, OPGW, FTTx, Building, Direct Buried, Drop, Duct, Microduct, Specialty, Underwater/ Submarine, Pre-Connectorized; REHAU RAUSPEED HDPE Microduct and high quality connectors and accessories provide an intelligent system solution for the deployment of Air Blown Fiber. Designed with a patented Trapezoidal inner grooving to enhance the flow of air within the Microduct for maximum blowing distances.

531 S. Mesa Drive
Mesa, AZ 85210

Phone: (480) 962-4849 Fax: (801) 365-5234

▶ **President:** *Buck Spears*

buck@sssolutions.us.com

Skylar Electric Company, Inc.

Dc Power provider. Engineer, furnish and install complete dc Power systems including batteries, rectifiers, power distribution, inverters, converters, and UPS. www.skylarelelectric.com

12911 Loma Rica Drive
Grass Valley, CA 95945
Phone: (530) 273-5100 Fax: (530) 273-8411

► **Contact:** *Sam Crowley*
samc@skylarelelectric.com

► **Contact:** *Dave Ferguson*
Phone: (530) 273-5100

Structural Designs

Architectural and Structural Engineering Drawings and Calculations for telecommunications sites. www.structuraldesigns.biz

P.O. Box 279
Fairfield, CA 94533
Phone: (916) 412-7896

► **Contact:** *Jim Burrows*
jim@structuraldesigns.biz

Superior Essex

Superior Essex Inc. is one of the largest wire and cable manufacturers in North America and a global leader in the market segments of communications cable and magnet wire/winding wire from our sixteen (16) ISO 9000 production facilities in the United States, United Kingdom, and Mexico. Superior Essex supplies communication wire and cable products to telephone companies, CATV companies, distributors and system integrators; magnet wire and insulation materials for motors, transformers and electrical controls and mechanical pump seals for industrial applications. We also have operations that convert copper cathode to copper rod for internal use and sale to other wire and cable manufacturers.

825 Norma Drive
Pismo Beach, CA 93449
Phone: (805) 779-0483

► **Regional Manager:** *Jeffrey M. Rhodes*
jeff.rhodes@spsx.com

Team Fishel

"Over the last 80 years, Team Fishel has become the standard for quality construction services for the broadband communications industry. With our focus on developing high performance Team-mates and our commitment to deliver best value solutions for our telecom and cable TV Customers, Team Fishel has built long-standing relationships with the leaders in the industry.

Today, we help Customers across the country provide complete network solutions for their broadband subscribers and commercial end users. With capabilities that include engineering, design, network construction, cable installation, in-house fiber splicing and system maintenance, Team Fishel is the Best Choice for comprehensive fiber network services." www.teamfishel.com

1819 S. 27th Ave.
Phoenix, AZ 85009
Phone: (602) 233-0658 Fax: (602) 233-2930

5878 Autoport Mall
San Diego, CA 92121
Phone: (760) 908-3044 Fax: (858) 658-0625
► **Bus. Dev. Mgr. Western Region:** *Greg Copleand*
glcopleand@teamfishel.com

► **Area Manager:** *Sal Padula*
Phone: (760) 525-1465
smpadula@teamfishel.com

647 Young Street
Santa Ana, CA 92705
Phone: (760) 525-1469 Fax: (714) 668-9695
► **Regional Area Manager:** *Mark Brady*
mabrad@teamfishel.com

► **Area Manager:** *Fernando Rocha*
Phone: (760) 908-6890
fmrcha@teamfishel.com

5431 W. Grant Line Rd.
Tracy, CA 95304
Phone: (916) 275-3278 Fax: (209) 830-4424
► **Project Manager:** *Dale Hagadorn*
dwhagadorn@teamfishel.com

TelCom Sales Group

951-2 Old County Rd., #289
Belmont, CA 94002
Phone: (408) 230-2380
► **Contact:** *Al Rodriguez*
alr@telcomsalesgroup.com
► **Contact:** *Steve Wolles*
swolles@telcomsalesgroup.com

Tetra Tech Construction, Inc.

Tetra Tech Construction, Inc. core services are: Telecom Engineering, Utility Construction, Micro-trenching, Intelligent Transportation Systems, Fiber Placing, and Wireless Platforms. We provide a full service design to build services specializing in broadband, communications, intelligent transport systems, fiber optic network platforms, and wireless infrastructure solutions. In order to assist our clients increasing demand for communication networks. www.tetratech.com

2817 S 46th Street
Phoenix, AZ 85040

Phone: (480) 398-3737 Fax: (480) 398-3740

► **Executive Vice President:** *Slade A. Ottney*

Phone: (602) 908-1009
slade.ottney@tetratech.com

► **CSI-CA Operations Manager:** *Calvin Yetter*

Phone: (714) 421-5470
calvin.yetter@tetratech.com

► **CSI-CO/CA Wireless Operations Mgr:** *Colin Hayes*

Phone: (303) 948-8766
colin.hayes@tetratech.com

► **Marketing Business Dev. Specialist:** *Jim Duff*

Phone: (859) 583-9910
jim.duff@tetratech.com

► **Executive Assistant:** *Rebecca Bussieres*

Phone: (480) 495-6015
becky.bussieres@tetratech.com

3M

6801 River Place Blvd.
Austin, TX 78726

Phone: (503) 819-5496 Fax: (512) 984-2016

► **Sales & Marketing:** *Joe Chapin*

jmchapin@mmm.com

United Tel-Supply, Inc.

Buy, sell and repair telecommunications network and power equipment. www.unitedtelsupply.com

PO Box 60724

San Angelo, TX 76906

Phone: (325) 262-4031 Fax: (325) 262-4628

► **Sales & Purchasing:** *Zack Barnes*

zack@unitedtelsupply.com

► **Sales & Purchasing:** *Todd Owens*

todd@unitedtelsupply.com

UNITEL Insurance

Comprehensive property and casualty insurance program and Risk Management Services designed exclusively for the telecommunications industry. www.unitelinsurance.com

1128 Lincoln Mall, Suite 200

Lincoln, NE 68508

Phone: (402) 434-7200 Fax: (402) 434-7272

► **National Program Director:** *Rand Moritzky*

Cell: (303) 601-2000
rmoritzky@unitelinsurance.com

► **Director, Risk Management Services**

(CHCM, CSM, CUSA): *Michael B. Hetzel*

Phone: (402) 434-7200

mhetzel@unitelinsurance.com

Vantage Point Solutions

Vantage Point Solutions is a national provider of engineering and consulting services for the broadband and financial industries. Vantage Point combines professional engineering, technical expertise and extensive regulatory knowledge to design technically advanced and economically viable solutions customized for each client. With over 200 employees and 400 clients in more than 44 states and international, Vantage Point has the vast experience necessary to understand and provide the best solution for any company. www.vantagepnt.com

2211 N. Minnesota Street

Mitchell, SD 57301

Phone: (503) 314-1056 Fax: (605) 995-1778

► **CEO:** *Larry Thompson*

larry.thompson@vantagepnt.com

► **Director of Customer Relations:** *Ginny Gardea*

ginny.gardea@vantagepnt.com



Veritel Technologies

Veritel Technologies is a Manufacturer Representative for leading transmission test equipment for fiber, copper and wireless networks and network hardware up to 500Gbps. Technologies we test include Ethernet, DS1/3, GPON, xDSL, OTN and Fibre Channel as well as fiber optics test and inspection tools and fusion splicers. www.veriteltechnologies.com

5318 E. 2nd Street, #110
Long Beach, CA 90802
Phone: (562) 987-0107

► **Principal:** *Steve Donovan*
sdonovan@veriteltechnologies.com

Vertiv

DC Power, engineering and installation services, pedestals, and cabinets.

13928 St. Paul Street
Thornton, CO 80602
Phone: (303) 478-3165

► **National Sales Manager:** *Joe Gabbard*
joe.gabbard@vertivco.com

Walker and Associates, Inc.

Walker and Associates is a national value added distributor of network products for broadband providers, including wireline, wireless, cable TV, government and enterprise network operators. Walker's extensive range of products from over 250 suppliers facilitates carriers' delivery of high speed internet, video, data and voice services to residential, business, and mobile users.
www.walkerfirst.com

CORPORATE OFFICE
7129 Old Hwy 52 N
Welcome, NC 27374
Toll Free: (800) WALKER1 Fax: (336) 731-1574

► **Regional Account Manager:** *Ben Dierker*
Phone: (303) 517-5432
ben.dierker@walkerfirst.com

► **Marketing Communications Event**
Specialist: *Emily Wilson-Craver*
Phone: (336) 731-5270
emily.wilson-craver@walkerfirst.com

Westek Electronics, Inc.

Westek Electronics, Inc. is a manufacturer of copper, coax and fiber cable assemblies. We manufacture test and patch cables for use with test sets and network equipment. www.westek.com

185 Westridge Drive
Watsonville, CA 95076
Phone: (800) 526-2673 Fax: (800) 526-3299
► **Strategic Account Manager:** *Amy Eades*
aeades@westek.com

Zyxel Communications

Zyxel, a pioneer in IP technology for over 25 years, provides a complete portfolio of multiservice LTE, fiber and DSL broadband gateways, home connectivity solutions, smart home devices, enterprise-class Ethernet switches, security and Wi-Fi equipment for small to mid-size businesses. Zyxel offers integrated, interoperable networking solutions based on open standards. Headquartered in Anaheim, California, Zyxel offers its partners service-rich solutions backed by a domestic team of logistical, sales, and technical support professionals, and Broadband Solution Engineers. www.zyxel.com/us/en

1130 North Miller Street
Anaheim, CA 92806
Phone: (800) 255-4101
► **U.S. Senior Sales Director:** *Bob McMillion*
Phone: (949) 338-8686
bbm@zyxel.com





CalCom TechExpo

April 2019 • DoubleTree Hotel, Sacramento

CalCom's Annual Tech Expo will offer broadband providers with a unique opportunity to discover the latest in technology, industry trends and products on the market. In addition, the show offers a full schedule of technical demonstrations, training seminars and social events, along with the chance to network with manufacturers and product specialists who represent over 70 exhibiting companies.

We hope to see you there!

REGISTER ONLINE:

www.calcomassn.org

(916)567-6700

info@calcomassn.org



EXHIBITS – NETWORKING – TRAINING



This event is coordinated by the CalCom Associate Member Committee



**RELATED
ORGANIZATIONS**

National Associations

National Association of Regulatory Utility Commissioners (NARUC)

1101 Vermont Avenue N.W., Suite 200
 Washington, D.C. 20005
 Phone: (202) 898-2200 Fax: (202) 898-2213
www.naruc.org
► Executive Director: *Greg White*
gwhite@naruc.org

National Exchange Carrier Association (NECA)

WESTERN REGION OFFICE
 6400 Fiddler's Green Circle, Suite 1300
 Englewood, CO 90111
 Phone: (800) 892-3322 Fax: (800) 551-1328
www.neca.org
► Director: *Susan Barrett*
sbarrett@neca.org

NTCA - The Rural Broadband Association

4121 Wilson Boulevard, Suite 1000
 Arlington, VA 22203
 Phone: (703) 351-2000 Fax: (703) 351-2001
www.ntca.org
► Chief Executive Officer: *Shirley Bloomfield*
sbloomfield@ntca.org

United States Telecom Association (US Telecom)

607 14th St. NW, Suite 400
 Washington, DC 20005
 Phone: (202) 326-7300 Fax: (202) 326-7333
www.usata.org
► President and CEO: *Jonathon Spalter*

WTA - Advocates for Rural Broadband

1361 Elm Street, Suite 7
 Helena, MT 59601
 Phone: (406) 443-6377
www.w-t-a.org
► Executive Vice President: *Kelly Worthington*
kelly@w-t-a.org
► Director, Government Affairs: *Derrick Owens*
derrick@w-t-a.org

Western State Associations

Alaska Telephone Association

201 East 56th Ave. Suite 114
 Anchorage, AK 99518-1283
 Phone: (907) 563-4000
www.alaskatel.org
► Executive Director: *Christine O'Connor*
info@alaskatel.org

Colorado Telecommunications Association (CTA)

1600 Broadway, Suite 1350
 Denver, CO 80202
 Phone: (303) 795-8080
www.colotelecom.com
► Executive Vice President: *Pete Kirchof*
petek@colotelecom.com

Nevada Telecommunications Association (NTA)

P.O. Box 34449
 Reno, NV 89533-4449
 Phone: (775) 827-0191 Fax: (775) 827-2788
www.nevtelassn.org
► Executive Director & Treasurer: *Mike Eifert*
eifert.nta@att.net

Oregon Telecommunications Association (OTA)

777 13th Street, Suite 120
 Salem, OR 97301
 Phone: (503) 581-7430 Fax: (503) 581-7457
www.ota-telecom.org
► Executive Vice President: *Brant Wolf*
bwolf@ota-telecom.org

Utah Rural Telecom Association (URTA)

257 East 200 South, Suite 800
 Salt Lake City, Utah 84111
 Phone: (801) 521-7900
www.urta.org
► Contact: *Kira Slawson*
kslawson@blackburn-stoll.com

Washington Independent Telephone Association (WITA)

PO Box 2473
 Olympia, WA 98507
 Phone: (360) 352-5453 Fax: (360) 352-8886
www.wita-tel.org
► Executive Director: *Betty Buckley*
bettyb@wita-tel.org

Government Agencies

▶ California Public Utilities Commission (CPUC)

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

San Francisco Office (Headquarters)

505 Van Ness Avenue

San Francisco, CA 94102

Phone: 415.703.2782 Toll Free: 800.848.5580

CURRENT COMMISSIONERS:

- ▶ **Michael Picker:** President
- ▶ **Martha Aceves:** Commissioner
- ▶ **Clifford Rechtschaffer:** Commissioner
- ▶ **Carla J. Peterman:** Commissioner
- ▶ **Liane Randolph:** Commissioner

▶ Federal Communications Commission (FCC)

445 12th Street, SW

Washington, DC 20554

Phone: 1-888-CALL-FCC (1-888-225-5322)

fccinfo.gov

CURRENT COMMISSIONERS:

- ▶ **Ajit Pai:** Chairman
ajit.Pai@fcc.gov
- ▶ **Mignon Clyburn:** Commissioner
mignon.Clyburn@fcc.gov
- ▶ **Michael O'Rielly:** Commissioner
mike.O'Rielly@fcc.gov
- ▶ **Brendan Carr:** Commissioner
brendan.Carr@fcc.gov
- ▶ **Jessica Rosenworcel:** Commissioner
jessica.Rosenworcel@fcc.gov

▶ National Telecommunications and Information Administration (NTIA)

NTIA is an agency of the United States Department of Commerce that serves as the President's principal adviser on telecommunications policies pertaining to the United States' economic and technological advancement and to regulation of the telecommunications industry.

www.ntia.doc.gov

Herbert C. Hoover Building

U.S. Department of Commerce

NTIA

1401 Constitution Avenue, N.W.

Washington, D.C. 20230

Phone: (202) 482-2000



NOTES

Turnkey Utility Construction Contractor



Providing Complete Utility Construction Services to the
Communications, Power, and Gas industries since 1973



266 Industrial Blvd, Suite B San Carlos, CA 94070 (650) 486-1359 www.mpnexlevel.com

Ultimately Affordable and High Reliable Broadband for Rural Areas
New ITU-T Recommendation L.1700 & supplement 22
Thin, Light, Robust, Flexible, Watertight Long optical Cable Installable in DIY

Different Cable Demand for Direct burying,
Suspending, Submerging (Heavy Machinery Needed)
Civil Works ≥ 8 k US\$ / km
Cable cost 1-8 US\$ / km
Manhole 4-8 k US\$ / km
Pipe 8 k US\$ / km
Not Applicable to Very Difficult Terrain



Same Cable for Ground's Surface, Direct burying,
suspending, submerging with everyday Tools
Civil Works 0.3 - 3 k US\$ / km
wages 1 - 10 US\$ / km
Progress 300m/day by 10 workers
Cable cost > 1 k US\$ / km
Manhole Not Needed
Pipe Not Needed



Korea Telecom at UNESCAP Sept 2013



Easy pickaxe-laying, Bhutan May 2013



Brought to you by:

Fibnet

Phone: 1 855 537 8632 Email: info@fibnet.com <http://www.fibnet.com>

Turn Smart Home Complexity into Opportunity



Ask about how our cloud and software platforms, systems, and services can help you deliver a sensational Smart Home experience.

For more info contact us at www.calix.com/SmartHomeCA

