



Rural Telecommunications Infrastructure (RTI) Grant Program



RTI Update
2nd Half 2009
Issue #2

CPUC Communications Division



Cover Photos

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| Top Left | After photo for Yurok Tribe. RTI Update #1 showed the view without a power/telephone pole. Electrical infrastructure is now on the poles with telephone to be installed. |
| Middle left | Pine Mountain Learning Center in the wintertime. This is a new potential project to bring telephone service to a school and a campground. |
| Bottom left | New cell tower on Pickett Peak in Trinity County providing cellular service to Ruth Lake area and powered by solar and propane. |
| Top right | Pine Mountain Learning Center school buildings |
| Middle right | US Forest Service lookout tower on Bear Mountain in Shasta County for Indian Springs School District project. A nearby cell tower might make this lookout unnecessary and allow the Forest Service to have overnight rentals as with other unused mountain lookouts. |
| Bottom right | Anacapa Island, part of the Channel Islands and the Channel Islands Telephone Company project now undergoing California Environmental Quality Act review. |



Trinity County's Pickett Peak Cell Tower went live in time for the Ruth Lake Lion's Club Rodeo and the 15th Annual Summer Festival July 31-August 2, 2009. The cell tower is powered by solar with propane backup.

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What is RTI

- Provides funds to construct telecommunications infrastructure to low-income, rural communities without telephone service
- Program extended until December 31, 2012
- Funding level maximum of \$5 million per project up to \$40 million, ending 2012
- Amount available for grants - approximately \$30 million of the \$40 million appropriated

Project Review Process

The review process for RTI projects includes the following steps:

Phase 1 Submission

A qualifying community submits a Phase 1 application based on Decision (D.) 03-09-071 Attachment-A which includes:

- Community Information
- Qualifying Financial Information – the median income of a qualifying community must not exceed the Lifeline income limitation for a family of four
- Letter from a governmental agency willing to act as fiscal agent
- Letters of support from county board of supervisors, emergency service providers and school district and other affected agencies
- Letters from 75% of unserved residents. Each letter must state the resident agrees to subscribe to and pay for telephone service for three years while continuing to reside in the community.

CD reviews application and if application meets requirements, an approval letter is sent to Community Representative with notification that a Phase 2 application may now be submitted.

Since CPUC is the lead agency for environmental review, a Proponents Environmental Assessment (PEA) might be required in the Phase 1 approval letter.

Phase 2 Submission

A qualifying community will submit the phase 2 application based on D.03-09-071, Attachment-A including:

- Applicant Information – information regarding community
- Statement of Need – Statement on how telephone service will affect the community
- Type of Technology Chosen – justification for the chosen technology; discussion about different technologies considered; other service providers in community; types of phone service to be provided as a result of proposal;
- Project Location
- Project Feasibility Study – engineering feasibility study and engineering maps – may be done by LEC or applicant depending if this is in an exchange area
- Project Timeline – project deliverables
- If requested PEA included

CD reviews Phase 2 application and convenes Government Industry Group to review technology recommended for project.

After Government Industry Group meeting, CD assesses their comments and how to include them in applicant's project.

CEQA Review

If CD approves project for CEQA Stage then a Commission Resolution approves a CEQA review of project.

CPUC Approval

Upon successful completion of CEQA review, CD may request Commission approval of project for construction and approval to enter into contract with Fiscal Agent.

Approved CPUC Projects

Placer County – Iowa Hill Project Grant \$2.5 million – Remaining balance: \$757,000



Left photo: trenching for copper cable and conduit for future fiber deployment.
Right photo: chip seal on road after trench is filled in.

This project was approved by Resolution T-16846, June 9, 2004.
Revised scope and increased dollar amount in R.T-17012.
Revised scope and increased dollar amount in R.T-17114.

This project brings telephone service to Iowa Hill in Placer County, an area without commercial power and telephone service. Foresthill Telephone Company is building the infrastructure and will be the provider of dial tone. Between 72 and 90 homes will receive telephone service with this project.

A microwave signal will be sent from Foresthill to a new solar powered tower to be constructed on Kings Hill.

From Kings Hill, underground trench was dug and copper conduit and empty conduit, for future fiber deployment, was placed all the way to Iowa Hill. Copper will be installed to the premises for all but a few homes that have requested telephone service. Rights of way were not permitted in some cases and some homes will receive telephone service by antenna receiver and battery backup.

This project will be completed in 2010.

Milestones completed:

- 43,882 feet of trench
- 45,699 feet of 1.25" conduit placed
- 45,589 feet of 2" conduit placed
- 48,680 feet of 100X22BFC placed in conduit
- 5,000 feet of 100X22BFC direct buried cable plowed
- 4,412 feet of 50X22BFC direct buried cable plowed
- 1,190 feet of 6X22BFC direct buried drop plowed
- 92 pedestals placed
- 93,216 square feet of chip seal overlay placed
- 20,494 square feet of double chip seal overlay placed
- 444.36 hours of splicing labor completed

**Yurok Tribe – Along the “Wild and Scenic Klamath River”
Grant \$2.5 million - Remaining balance: \$778,000**



Before and After: Construction along the Wild and Scenic Klamath River to bring electricity and telephone service to Tribe members. Left: Military Reservists provided free labor to build a portion of the infrastructure as a training opportunity; Right: Electrical and telephone infrastructure in place.

This project was approved by Resolution T-16846, June 9, 2004.

The Yurok Tribe received a Rural Utilities Services grant to bring electricity to Tribe members. After the power poles and electrical lines are installed, telephone plant will be installed.

When the project is completed, 16 miles of telephone plant will have been installed providing telephone service to over 40 Tribal residents, a public safety office, and a Head Start school. The terrain is mountainous and securing rights-of-way is time consuming.

The Tribe has organized this project on their own and have done an important job in bringing electricity and telecommunications to Tribal members. This project will be completed in 2010.

Trinity County

Grant \$2.5 million - Remaining balance: \$732,000



Left: Mad River cell tower; Right: Pickett Peak cell tower went live on July 30, 2009.



Above: Solar panels will charge batteries and propane tanks feed a backup generator to provide power to Pickett Peak cell tower. Note recent forest fire damage.

[This project was approved by Resolution T-16846, June 9, 2004.](#)

Trinity County has built two cell towers, Pickett Peak and Mad River. The Pickett Peak cell tower is operational and providing cellular service. One more cell tower in Hyampom will be built in spring 2010. These cell towers will provide telephone service for local residents, travelers on U.S. Highways 36 and 299 and for emergency services.

The Pickett Peak tower went live on July 30, 2009, in time for the Ruth Lake Lion's Club Rodeo and the 15th Annual Summer Festival July 31-Aug 2. The Forest Service has requested all equipment owners on the mountain to connect to the Pickett Peak tower and to remove clutter on the mountain top.

Pickett Peak has solar panels that charge a bank of batteries and utilizes propane tanks and generator for backup power. As of February 11, 2010, there is at least eight feet of snow on Pickett Peak.

The Mad River cell tower has been constructed and is awaiting the connection of telecommunications equipment.

Each tower will provide service to over 100 nearby residences and travelers along state route 36.

**Indian Springs School District – Shasta County
Grant \$2.5 million - Remaining balance: \$1.8 million**



Views from Bear Mountain
Top left: Shasta Lake Top Right: Forest Service lookout
Bottom: Southwest view with State Route 299 in foreground

[This project was approved by Resolution T-16943, June 16, 2005.](#)

Indian Springs School District (ISSD) plans to build three cell towers in Shasta County. ISSD has identified cell tower locations and have received interest from a cellular carrier. ISSD is in the California Environmental Quality Act review phase.

Approved for California Environmental Quality Act (CEQA) Review

Channel Islands Telephone Company Project Project Funding Request: \$2.5 million



The Channel Islands Telephone Company project, if approved, will bring reliable telephone service to the Channel Islands, offshore Ventura.

The CEQA review was authorized by Resolution T-17151 on August 21, 2008.

In this potential project, Channel Islands Telephone Company plans to provide basic telephone service, cellular, broadband and emergency telephone service to tens of thousands of visitors annually, US Park Service employees, researchers and aircraft and vessels that travel to the islands. As most of the land is part of the National Park system, installing communications equipment must be carefully planned out to meet stringent environmental requirements. The project is in the CEQA review stage.

Siskiyou Telephone Company – Godfrey Ranch Project
Project Funding Request: \$2.173 million



Above: Typical Siskiyou County road – steep drop-off from the road - in some places hundreds of feet.

[The CEQA review was authorized by Resolution T-17205 on June 18, 2009.](#)

This potential project is within the Siskiyou Telephone Company's Sawyer's Bar exchange. The Sawyer's Bar exchange is located in extremely rugged and mountainous terrain served by very narrow paved and gravel roads.

Godfrey Ranch consists of a cluster of at least 6 residences located approximately 5 miles east of Forks of Salmon. The distance between residences is less than $\frac{1}{4}$ mile.

**Siskiyou Telephone Company – Eddy Gulch Project
Project Funding Request: \$1.065 million**

Above: Typical Eddy Gulch Road

[The CEQA review was authorized by Resolution T-17207 on August 20, 2009.](#)

This potential project is within the Siskiyou Telephone Company's Sawyer's Bar exchange. The Sawyer's Bar exchange is located in extremely rugged and mountainous terrain served by very narrow paved and gravel roads.

As of April 30, 2007, Siskiyou Telephone served only 147 phone lines in the entire Sawyer's Bar exchange. Of these 44 are business (USFS, school and post office) and 103 are residential, 58 of which are Lifeline.

Eddy Gulch consists of a cluster of at least 8 residences scattered along Eddy Gulch Road. The distances between residences varies between ¼ mile to at least one mile.

Ready for CEQA resolution

None at this time.

Potential Projects awaiting Phase 2 submission

Pine Mountain Learning Center – Pine Mountain Club



Left: Pine Mountain Learning Center Right: Wintertime

CAMP CONDOR
→



Above: View from Camp Condor

Pine Mountain Learning Center (PMLC) is a school located near the city of Pine Mountain Club, west of Lebec on Highway 5. At least 65 children attend this school. Senior citizens work at the school.

PMLC would need five telephone lines, Camp Condor, a summer camp on the school grounds would need two lines and a USFS Fire Station, Apache Creek, along the route, would receive telephone service.

The school currently uses cellular service that is not reliable in this mountainous area. Snow in winter and the possibility of fires in fire season underscore the need for reliable communications.

Completed Projects

Tule River Indian Tribe – Near Porterville Grant \$860,000 – Completed 2009



Left: Newly installed fiber optic with the Tule Tribe town center in distance. Right: New telecommunications plant atop Cow Mountain

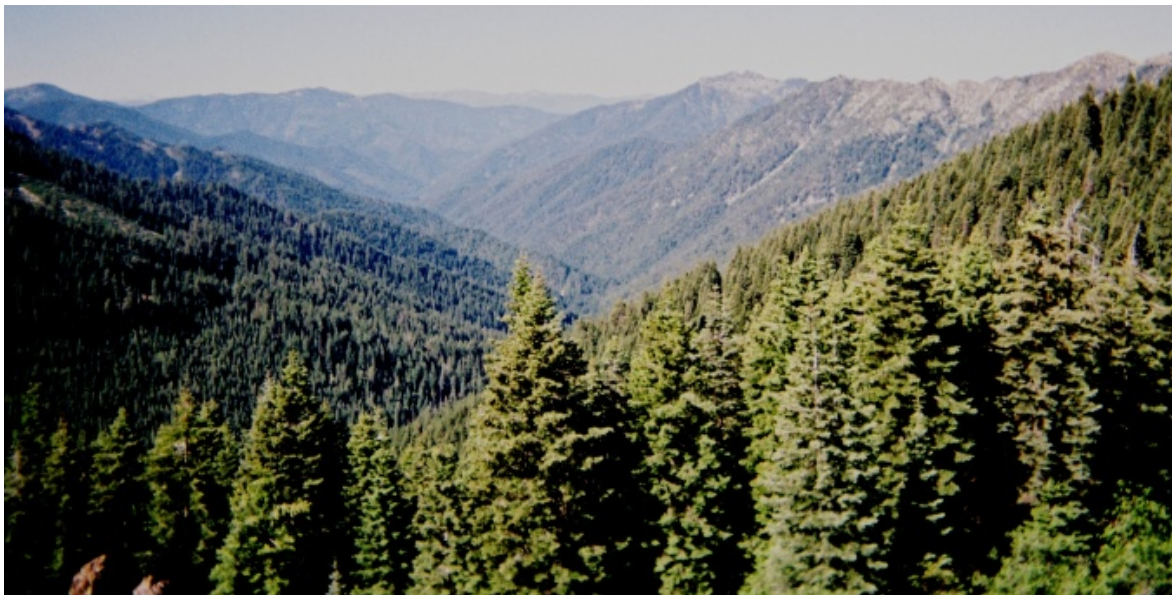
[This project was approved by Resolution T-16944, June 16, 2005.](#)

On Wednesday, March 18, 2009, the Tule River Indian Tribe hosted a network dedication ceremony for their newly completed telecommunications infrastructure.

The Tule River Indian Reservation Tribal Council has completed construction of a Fiber-to-the-Premises (FTTP) network with grants from the US Department of Agriculture--Rural Utility Services (RUS) and the Commission's RTI Grants Program and is the first RTI project to finish. Currently, Tribe residents are receiving telephone service via copper wire but over time, will be moved over to FTTP. This network, which began constructing cables in March, 2008, will provide telephone service to as many as 70 residents on the 55,000 acre reservation.

In addition to having provided new telephone services with the building of an infrastructure backbone, the grant served as a basis for a \$796,000 matching funds grant from the RUS to build additional cables and extend broadband throughout the reservation. With these two projects, about 280 residences will now be connected to the outside world via telephone service and high-speed Internet. Together, the two projects have also served as an economic stimulus for training members of the tribe in telecommunications skills, creating five permanent full-time jobs, and initiating a variety of distance learning, telemedicine and community safety programs.

**Siskiyou Telephone Company – Nordheimer Flat Project
Grant \$969,000 - Remaining balance: \$896,000**



Siskiyou County

Top left: Local resident makes call on new telephone line. Top Right: Roads are narrow and rockslides always a threat. There are few flat areas in this mountainous area. Bottom: View from atop Sawyers Bar Road looking West

The CEQA review was authorized by Resolution T-17138 on May 29, 2008.

This project was approved by Resolution T-17204 on April 16, 2009.

The construction phase of this project has been completed. Not all of the construction invoices have been submitted. The project provides line extensions to Nordheimer Flat, an unserved area located within Siskiyou Telephone Sawyers Bar Exchange Area.

The Nordheimer Project runs undergrounded telecommunications lines to two private residences and a United States Department of Agriculture (USDA) Forest Service campground. The USDA Forest Service campground does not have telephone service, and is requesting two phone lines. One line is to be dedicated for connection

to a computerized system for monitoring water quality at the campground. The other line is to be dedicated for public safety, providing emergency services for campground users and aid with fighting forest fires.

Project Location Map

