PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Communications Division **RESOLUTION T-17408**
Broadband, Policy & Analysis Branch **September 5, 2013**

R E S O L U T I O N

RESOLUTION T-17408 Conditionally Approving Additional CASF Funding of up to $9,928,715 to the California Broadband Cooperative to Complete the Digital 395 Project

SUMMARY

This Resolution conditionally approves additional California Advanced Services Fund (CASF) funding of up to $9,928,715 to complete the Digital 395 Project. This additional funding would enable Digital 395 to cover: (1) the costs of new poles or undergrounding fiber due to the new pole loading factors adopted by the Commission in D.12-01-032; (2) unanticipated boring costs arising from certain permits due to environmental and cultural sites consideration; (3) construction costs for the distribution backbone to connect anchor institutions, communities, and other broadband providers; and (4) remaining administration and overhead labor costs to complete those tasks.

BACKGROUND

On December 20, 2007, the Commission approved Decision (D.) 07-12-054, which established the CASF program for the purpose of providing matching funds of up to 40 percent of the total project costs for the deployment of broadband infrastructure in unserved and underserved areas in California.[1] Resolution T-17143 approved on June 12, 2008, adopted application requirements, scoring criteria for the award of funds, and a prescribed timeline for other filings and notifications including a projected Commission Meeting date for final approval of award(s).

[1] Senate Bill (SB) 1193 (Chapter 393, Stats. of 2008) established the California Advanced Services Fund as a new public purpose program. The Commission later increased the grant award to 70 percent for unserved areas and 60 percent for underserved areas in D.12-02-015, pursuant to SB 1040 (Chapter 317, Stats of 2010). The grants addressed in this resolution were awarded under the original terms.

On July 9, 2009, the Commission adopted D.09-07-020 establishing new schedules and plans for filing, review and approval of an additional round of broadband project requests. This Decision also provided the potential for the applicants to seek CASF program funding while pursuing funding for broadband deployment grants issued under the American Recovery and Reinvestment Act (ARRA).[2] Because the federal grants under ARRA funded up to 80% of the project, the Commission provided applicants in D.09-07-020 the opportunity to seek an additional 10% funding coverage from the CASF, leaving only 10% for the applicant to provide.

On December 3, 2009, the Commission adopted Resolution T-17232, awarding up to $19,294,717 to the California Broadband Cooperative (CBC) to construct the Digital 395 Middle Mile Project. The amount represented 19% of the total estimated project cost, with the NTIA funding 80%, and the remaining 1% is comprised of $337,400 worth of in-kind contributions from local governments and $666,726 from Praxis Associates.

Once complete, the Digital 395 Project will be a 530-mile 150-Gigabit high-capacity fiber optic middle mile/backhaul route along US Highway 395 from southern terminus at Barstow, California (San Bernardino County) to the Nevada state line at Topaz Lake (Mono County) in the North, ultimately terminating in Carson City, NV. The Project will create route diversity and redundancy between Southern California and Nevada, enhancing communications and public safety, telemedicine and national security. In its application, the CBC estimated that the Digital 395 Project area contained 28,127 households, 2,571 businesses, and 168 community anchor institutions, including 74 educational, 12 health care, 11 library and 26 public safety entities. The area also contains 41 additional anchor institutions including: military bases, courthouses, municipal utilities, regional Federal offices for the Bureau of Land Management and the US Forest Service.[3]

The Commission approved an alternate resolution funding 19% of project costs (instead of the standard 10% allowed for ARRA funded projects) for the following reasons:

- The scope and scale of the project presented a once-in-a-lifetime opportunity to connect an entire region of the state to the digital "superhighway."

- As an open network, Digital 395 will allow interconnection with other carrier facilities at any technically feasible point.

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[2] The American Recovery and Reinvestment Act appropriated $7.2 billion for grants and loans to support broadband deployment.
[3] Resolution T-17232 at p. 9-13.

- The Digital 395 project will create 706 direct and indirect jobs and 397 induced jobs as calculated under the ARRA guidelines.

- The Cooperative's not-for-profit business model and lack of established financial history made applying for traditional loan programs nearly impossible, thus necessitating a 19% CASF grant-match funding request.

- If ARRA funds would not have been available, the project would have requested the standard 40% grant from CASF ($40,597,687 in CASF funding). The fact that because of ARRA funding the CASF program is only being asked for half ($19,294,717) of what it normally would commit to a project like this was meaningful in the Commission's decision to fund the 19% of the project costs requested.

In addition to the short-and long-term economic benefits, the Commission noted that a fiber line along California's Eastern Sierra region will enhance the ability to maintain communication links in the event of a disaster.

DISCUSSION

On April 8, 2013, Communications Division staff (CD) met with representatives of CBC to discuss project cost overruns on the Digital 395 Project and to request additional CASF monies to complete the Project due to unexpected cost overruns. CD instructed the CBC to submit a formal request for the additional funding, along with an explanation and supporting documentation of the unanticipated expenses. On June 17, 2013, the CBC submitted its formal request for $10,866,961 in additional CASF funding. On July 18, 2013, it submitted a follow-up memorandum. In the interim, CD and CBC representatives have held numerous discussions by phone and email.

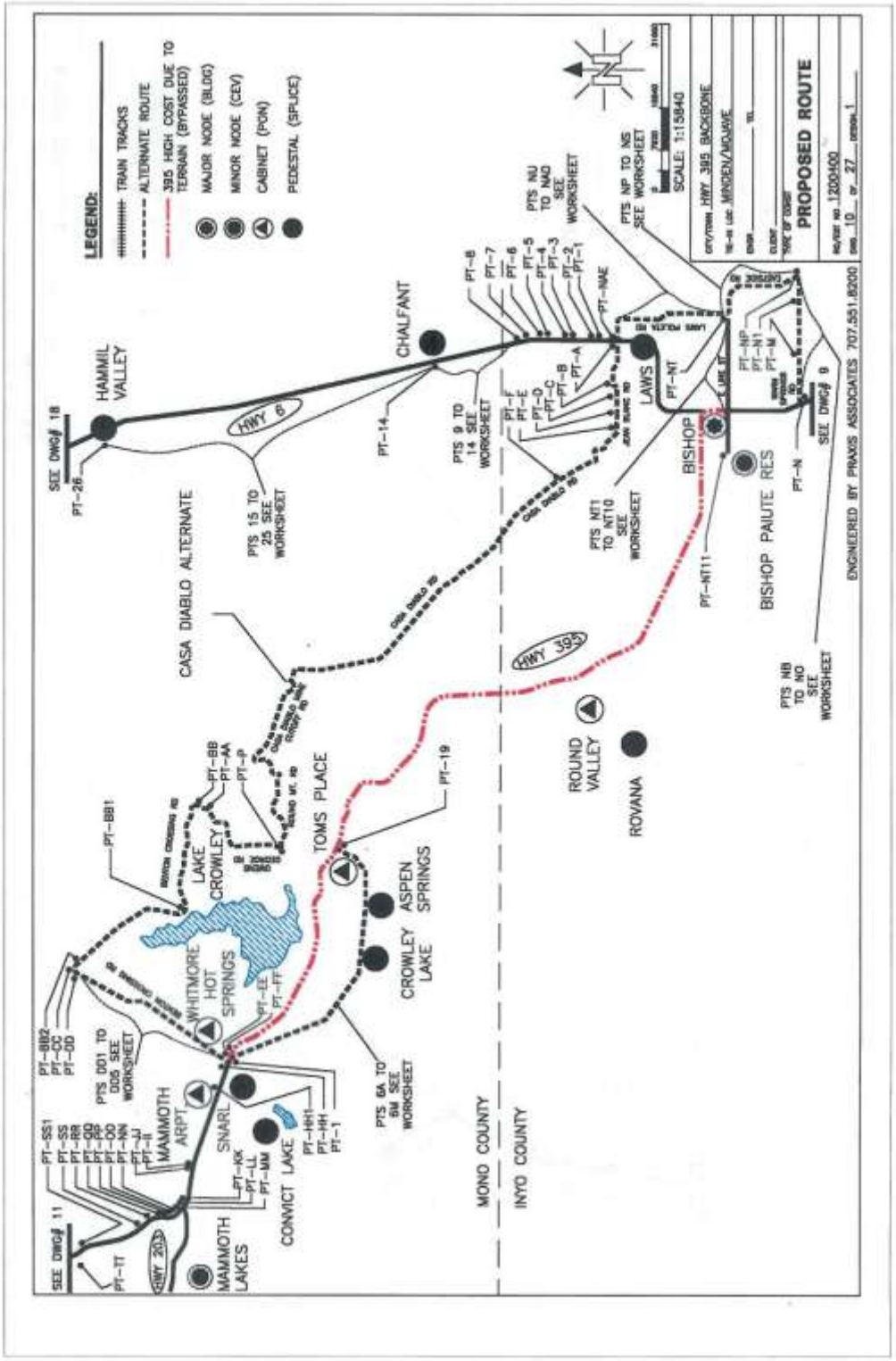
In its review, CD found both that some of the cost increases resulted from exogenous factors, and other cost increases were unforeseen by the CBC when it applied. Given that three unfinished tasks still require CEQA review, and the Commission cannot recommend funding without that study, CD removed the cost of those tasks from the CBC request. Given the importance of the Digital 395 Project, and the need for a unified and redundant network to meet the region's growing economic development and safety needs, CD recommends providing conditionally funding of $9,928,715, as outlined in the ordering paragraphs in this Resolution.

I. Pre-Construction Assumptions and Environmental Reviews

Pre-Construction Assumptions

In reviewing the CBC's CASF original grant application, which the Commission approved when it passed Resolution T-17232, CD found considerable evidence that CBC understood some of the challenging terrain it would need to operate in, and attempted to find more conducive construction routes to complete the Project as budgeted. For example, the map entitled "Proposed Route Map Submitted As Part of CASF Application" shows the proposed route from Bishop to Mammoth Lakes. At that time, the CBC already intended to avoid construction along Hwy 395 due to the high cost of constructing near wetlands, narrow shoulders and high-cost boring a route along Highway 395 would require. As a result, CBC planned to use dirt roads in the Inyo National Forest maintained by Mono County. Since Mono County graded these roads on an annual basis, the CBC assumed that other agencies would categorize the roads as disturbed, and that it would be able to lay the fiber by plowing along the shoulder of these roads.

Proposed Route Map Submitted As Part of CASF Application



Federal and State Environmental Reviews

Given that both federal and state funds financed the Project, it required environmental review under both the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). As such, both the Commission and the National Telecommunications and Information Administration (NTIA) conducted environmental reviews in advance of project construction. The NTIA was the federal lead agency responsible for compliance with NEPA, while the Commission served as lead agency for CEQA compliance.

In its review, the NTIA determined that an Environmental Impact Statement was not necessary for the Digital 395 Project. In a July 15, 2013 letter to CD, the NTIA noted that ARRA directed it to "establish and implement BTOP (Broadband Technology Opportunities Program) 'as expeditiously as practicable.'"[4] In an attempt to carry out this directive and be in compliance with NEPA and the National Historic Preservation Act (NHPA), the NTIA required applicants to complete an Environmental Questionnaire (EQ). The EQ contained a detailed narrative describing:

1) What the project proposes to do;
2) How it would be constructed and implemented; and
3) What natural and human resources may be impacted.[5]

Based on its review of the EQ, NTIA required CBC to prepare an Environmental Assessment (EA). In requiring an EA instead of an Environmental Impact Statement (EIS), the NTIA noted concerns that conducting an EIS would have "delayed the project far beyond the Recovery Act's intended three-year timeframe for BTOP projects." The CBC completed its EA in May 2012, when the NTIA also issued its Finding of No Significant Impact (FONSI).

The Commission's decision to grant CASF funding triggered the requirement for environmental review under the California Environmental Quality Act (CEQA).[6] On November 10, 2011, the Commission approved Resolution T-17347, adopting a Mitigated Negative Declaration for the Project, pursuant to the CEQA.

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[4] July 15 letter from Anthony G. Wilhelm, Associate Administrator of NTIA's Office of Telecommunications and Information Applications to the Commission.

[5] Ibid.

[6] Section 21000 et seq. of the California Public Resources Code [PRC]) and the State CEQA Guidelines (Title 14, Section 15000 et seq. of the California Code of Regulations [14 CCR 15000 et seq].

Pursuant to CEQA and Rule 2.4 of the Commission's Rules of Practice and Procedure, the Commission examined the Project to determine potential environmental impacts to avoid adverse effects and restore or enhance environmental quality to the fullest extent possible. Commission staff prepared a "Draft Initial Study and Notice of Intent to Adopt a Mitigated Negative Declaration (MND)" for the proposed project, in accordance with CEQA, to provide the public and responsible and trustee agencies with information about the potential environmental effects of the proposed project.

Based on the analysis in the NEPA EA and CEQA Initial Study, the Commission determined that the Project would "have no significant impacts on the environment in the areas of aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and services systems."[7] The MND required a number of mitigation measures as part of its findings.

Programmatic Agreement

The CBC did not obtain a FONSI until 17 months into the Project, more than twice the standard time most BTOP projects took to obtain a FONSI, according to the NTIA.[8] BTOP recipients typically received clearance to begin construction once the NTIA issued the FONSI. The CBC's FONSI, however, incorporated a Programmatic Agreement (PA) with 21 signatories, requiring the CBC to complete certain consultations to obtain the permits from federal agencies under Section 106 of the National Historic Preservation Act on a segment-by-segment basis, totaling 79 segments.

Given the policy inconsistencies among some of the major federal agencies, the NTIA suggested that the PA process would help align the divergent requirements among the different agencies and other parties to the agreement. The PA also meant the Project could start and evolve over time. The NTIA released the first segments for construction in August 2012. Thus, less than 30% of the Project was available to construction before the 2012 winter snowfall in Mono County. The CBC estimates that the PA directly increased the Project budget by $2 million in consulting fees, along with an estimated $250,000 in coordination and project management fees. The largest costs resulted from fees paid to the agencies, tribal monitoring expenses, and the mandated methods for

[7] Resolution T-17347 Attachment B.

[8] July 15 letter from Anthony G. Wilhelm, Associate Administrator of NTIA's Office of Telecommunications and Information Applications to the Commission

avoiding 465 cultural sites, which normally requires horizontal directional boring, costing $12.3 million.

Changes to Route

The EA and PA process, along with the Caltrans Broadband Policy, forced the CBC to alter the Project route. Additionally, the CBC faced challenges obtaining right-of-way permits, as Caltrans does not own all of the underlying land upon which Highway 395 was constructed. Instead, several agencies own the land, including the Bureau of Land Management (BLM), United States Forest Service (USFS), and Los Angeles Department of Water and Power (LADWP). As a result, the CBC used county roads and LADWP patrol roads to comply with Caltrans policy. The following three maps illustrate the route changes in response to these conditions:

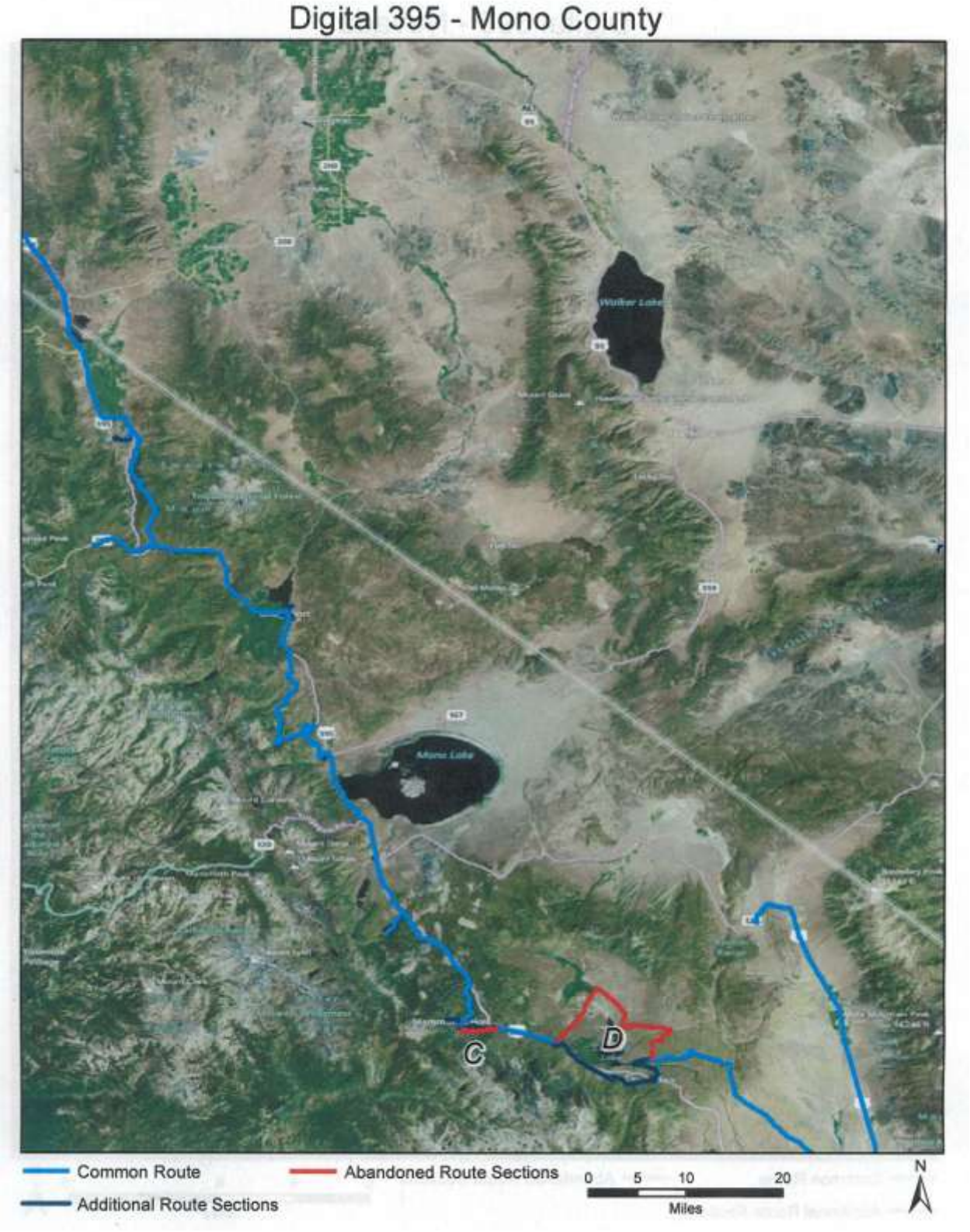
- In the Town of Mammoth, the CBC rerouted the backbone from Mammoth Creek Road to State Route 203, due to cultural sites along the creek. The Inyo National Forest Service required this route changing in order to release the segment for construction. (Segment C on the Map no page 9)

- The initial route of some of the segments was up Casa Diablo Mine Road to Round Mountain Road, then to Benton Crossing Road, with an additional segment back to Crowley Lake/Tom's Place. The extensive wetlands at Benton Crossing concerned the CBC. The owner of the Crowley Dam (Los Angeles Department of Water and Power) allowed the CBC to cross the dam. Additionally, Mono County placed two conduits on the dam during a paving project, allowing the CBC to shorten the construction. (Segment D on the map on page 9)

- To comply with the Caltrans Broadband Policy, the CBC used county roads and Los Angeles Department of Water and Power (LADWP) owned roads. The construction methods were more efficient, since there were fewer culverts and obstacles. (Segments E, F and G on the map on page 10)

- South of Lone Pine, the CBC avoided a 1,200 foot section of land below historic lakebed levels around Owens Lake. The State Lands Commission requested the route alteration, adding ten miles to the overall alignment. (Segment G on the map on page 10)

The map does not show the route alterations required due to the changes in pole loading calculations, as required by D. 12-01-032., and discussed further below in Section II A.


Digital 395 - Mono County
Walker Lake
Mono Lake
C
D
Common Route
Abandoned Route Sections
Additional Route Sections
0 5 10 20
Miles
N

Digital 395 - Inyo
E
F
G
Common Route
Abandoned Route Sections
Additional Route Sections
0 5 10 20
Miles
N

Digital 395 - Kern & San Bernardino Counties

II. Digital 395 Cost Increases

Overall, the Project incurred cost overruns in various budget categories totaling $25,076,816. The CBC managed to offset $14,200,000 of those costs through a number of cost control measures. For example, its competitive bidding process resulted in materials costing $5.5 million less than expected. The CBC claims that maintaining a "flat" organization by minimizing staff size resulted in reducing staffing expenses by $2.1 million. Also, by outsourcing underground construction, the CBC asserts it saved $5 million in equipment costs.

Table 1. Digital 395 Cost Increases

Budget Category	Reason	Overrun Amount
A. Construction	Commission Decision 12-01-03 revised pole loading calculations, making most aerial construction options uneconomic. The CBC estimates that burying fiber in certain proposed areas, while replacing poles in others will total $2,764,003. Those costs will increase costs under the Construction category such that it will now experience an overrun of $332,390. The CBC separately accounted for costs increases due to environmental/cultural factors.	$332,390
B. Environmental/Cultural	Costs increased mostly due to three key tasks: 1. CDFW[9] 2081 permit for Desert Tortoise mitigation. 2. Costs to comply with NHPA Section 106 3. Costs to bore around ephemeral waterways, wetlands and special species	$22,121,421
C. Administration	Costs increases mostly due to OCIP Insurance and Legal expenses.	$2,090,662
D. Permits (non-environmental) &	The CBC budgeted $1,294,606 and expects actual costs to be $1,687,214.	$392,608

[9] California Department of Fish and Wildlife

Rights-of-Way	The biggest factor in unexpected ROW costs was Caltrans. The CBC agreed to provide twelve strands of fiber (valued in excess of $2.5 million) at no cost in exchange for ROW, assuming no ROW fees. In subsequent meetings Caltrans determined it would charge for staff time and encroachment fees, which have totaled $387,974.	
Network Operating Center	CBC decided it needed a system that would inventory assets, manage the business process flow from sales, through asset assignment and activation, to billing and collections. CBC asserts that this system will reduce on-going operational costs and promote network sustainability. (Not discussed elsewhere in the Resolution.)	$139,735
Total		**$25,076,816**

Table 2. Digital 395 Cost Savings

Budget Category	Cost Savings
Materials	$5,804,389
Nodes	$8,597
Anchors & Points of Interconnection	$973,573
Service Interconnect	$336,521
Vehicles, Tools & Equipment	$4,956,105
Wages and Salaries	$2,130,671
Total	**$14,209,856**

A. Construction: New Pole Loading Factors

When the Commission passed Resolution T-17232 in December 2009, the CBC intended to install fiber on existing utility poles in certain locations, including in the areas listed

in the table below. On January 12, 2012, the Commission approved D. 12-01-032, revising pole loading factors, among other regulations, in an effort to reduce fire hazards associated with overhead power and telephone lines. Based on the revised standards, 38% of the poles in areas of the Digital 395 Project listed in the table below failed testing and will need to be replaced at an average cost of $15,000 per pole, if the CBC wishes to install fiber on these poles. The segment into June Lake would be considerably more expensive, as replacing poles along a portion of this route would require placing the poles by helicopter. The cost for each route requiring the replacement of poles or burying the fiber underground is outlined below. The CBC estimates that replacing all failed poles, instead of burying the fiber would increase costs by an additional $464,907.

Table 3. Cost Increases Due to Changes in Pole Loading Calculations

Area	Aerial Budget Estimate	Cost to Bury Fiber	Difference
Burying Fiber			
Benton Reservation	$23,386	$200,688	$177,302
June Lake	$34,357	$1,069,731	$1,035,374
Johannesburg	$28,582	$149,047	$120,465
Lone Pine Reservation	$8,960	$125,742	$116,782
Coso College	$13,569	$152,390	$138,821
Round Valley	$69,580	$697,651	$628,071
Conway Summit Towers	$1,732	$199,176	$197,444
Sage Flat	$13,569	$141,464	$127,895
Total	$220,585	$2,968,828	$2,542,154
Replacing Poles	Original Estimate	Cost to Replace Poles	
Bernasconi/Palisades	$26,850	$221,850	$195,000
Total			$2,764,003

Given that these cost increases are the direct result of a Commission safety mandate passed more than two years after the Commission approved the Project grant award, CD finds these cost increases to be beyond the control of the CBC and unforeseen at the time of its application. Additionally, CD recommends funding this request in full to ensure that these communities, including two Native American reservations (Benton and Lone Pine Reservations), would otherwise not have access to Digital 395 fiber. Finally, CD recommends funding this request in full because several areas within or near the Project area in Mono County rate high or very high in CAL FIRE's Fire Hazard Severity risk assessment.[10]

[10] See map on D. 12-01-032, Appendix C-2 for Fire Threat Map prepared by CAL FIRE Fire and Resource Assessment Program.

B. Environmental and Cultural Resources Management ("Environmental/Cultural")

In the budget submitted when it applied for a CASF grant on July 15, 2009, the CBC estimated environmental consulting costs at $2,368,000. In its June 17, 2013 letter to the Commission, the CBC wrote that "Initial projections of the Environmental Studies for the Environmental Assessment and Project Monitoring combined were $2,371,178, based on initial estimates (the CBC received in September 2010 from prospective environmental consultants)."[11]

CBC's Environmental and Cultural Resources categorical costs exceeded these initial budget projections by more than $22 million. The CBC attributes these costs overruns primarily to three key tasks: 1) mitigation measures to protect the Desert Tortoise, 2) mandatory boring around cultural sites and 3) mandatory boring to avoid waterways, wetlands and special species.

Table 4. Environmental Costs

Line Item	Estimate	Actual	Difference
Environmental Assessment	$2,371,178	$3,085,581	$714,403
PA Analysis	$0	$1,850,297	$1,850,297
Biological Monitoring	$0	$1,847,791	$1,847,791
Monitoring Contract Modifications	$0	$784,000	$784,000
Inyo National Forest Survey	$0	$200,000	$200,000
Independent Monitoring (Parallel Waterways)	$0	$65,000	$65,000
Post Construction Monitoring	$0	$75,000	$75,000
Tribal Monitoring	$0	$425,242	$425,242
CDFW Permits	$0	$3,678,625	$3,678,625
SWPP (Storm Water Pollution Prevention Plan)	$0	$194,237	$194,237
Cultural Site Avoidance*	$0	$12,286,826	$12,286,826
Total	**$2,371,178**	**$24,492,599**	**$22,121,421**

* *The CBC initially estimated it would cost $11,842,071 to bore around identified cultural sites. This estimate appears in the Construction budget.*

[11] In September 2010, CBC received bids from three consultants to manage the Project's environmental and cultural resources work. One consultant's bid totaled $1,629,907, estimating 14,213 hours of work on tasks such as: the Environmental Assessment, the Mitigated Negative Declaration, biological and archeological resources surveys and site monitoring site recording, and obtaining other permits. The second and third consultants respectively estimated $198,952 and $89,170 in costs, with much more limited work scopes in their proposals.

B1. Mitigation Measures to Protect the Desert Tortoise

The Desert tortoise (*Gopherus agassizii*) is a species of tortoise native to the Mojave Desert and Sonoran desert of the southwestern United States and northwestern Mexico and the Sinaloan thornscrub of northwestern Mexico. The Mojave Desert Tortoise population has declined by as much as 90% since the 1950s. As a result, US Fish and Wildlife Services designated the Mojave Desert Tortoise as "threatened" under the Endangered Species Act.[12] It is unlawful to touch, harm, harass or collect wild desert tortoises.

Under provisions in CEQA and the Fish and Game Code, the California Department of Fish and Wildlife (CDFW) may issue management agreements for development or construction in tortoise habitat. Effects of the developments on tortoises are often offset through land acquisition, construction of protective fences, and other actions that minimize or eliminate threats to tortoises and their habitats. The Bureau of Land Management (BLM), with assistance from the Desert Tortoise Preserve Committee, established the Desert Tortoise Natural Area (DTNA) in 1976. The DTNA encompasses over 25,000 acres of public land northeast of California City. Additionally, in conjunction with the CDFW, the Desert Tortoise Preserve Committee protects approximately 5,000 acres (4,340 acres in Kern County, 710 acres in San Bernardino County, and 80 acres in Riverside County) of desert tortoise habitat from human activity.

The Mitigation Monitoring and Reporting Plan (MMRP) adopted by the Commission when it approved the Mitigated Negative Declaration for the Project, pursuant to the CEQA, contained 20 categories of required measures under the Biological Resources section, including 14 specific mitigation measures to ensure that the Project will have no significant impact on the Desert Tortoise population.[13]

In its July 15, 2013 letter to the Commission in support of CBC's claims, the NTIA asserted that although the initial CBC budgets included an Environmental Assessment and plans to protect endangered species such as the Desert Tortoise, the length and details of those negotiations caused the CBC to exceed its environmental budget early in the Project, even before it completed its required Biological Assessment. The US Fish and Wildlife Service found that the Project would not substantially impact the species, while CDFW ruled that it could. CDFW assessed $3,678,625 in mitigation fees, which

[12] 12178 Federal Register / Vol. 55, No. 63 / Monday, April 2, 1990

[13] Resolution T-17347 Attachment B

would be used to purchase land. CDFW determined the Project disturbed 438 acres of tortoise habitat and assessed a fee to purchase three times that amount's worth in land.

The NTIA directed the Project to not survey the route through the Desert Tortoise habitat, since the agency believed an Environmental Assessment would be sufficient for a linear fiber project. CDFW did not concur, but agreed to allow the survey to take place in advance of construction. Results of this survey would then be used if any adjustments were to be made to the mitigation fees.

CBC counsel met with CD on June 1, 2012 to discuss Incidental Take Permit 2081-2012-004-06, required for the Project to begin construction. Before it would issue the permit, CDFW required CBC to provide a letter of credit or bond in the amount of approximately $3,678,625. Since CBC did not have the bonding capacity to post such a large bond, CDFW agreed to accept the Commission's assurance that the permit costs are the types of costs that would be covered within the Project. In a June 5, 2012 letter to CDFW, CD wrote:

> "CD staff asked CBC if the general category of permits in the budget includes items such as the Incidental Take Permit 2081-2012-004-06 for construction of the Digital 395 High Speed Broadband Communications network. CBC stated to CD staff that the permit costs in the budget are inclusive of the Incidental Take Permit 2081-2012-004-06."[14]

In passing Resolution T-17347, the Commission adopted significant mitigation measures to protect the desert tortoise, a threatened species. CDFW calculated the tortoise mitigation fee at $3,678,625. CBC indicated in June of 2012 that even with the cost increases due to the permit fees, the Project at that time was on budget. However, CBC now claims that without further funds from the Commission to pay for the tortoise mitigation fee, the Project will be in jeopardy. CBC has indicated that it is negotiating with CDFW to reduce the mitigation fee, as its monitors observed only one tortoise in the area of potential impact. According to the Project's Annual Biological Report, on December 26, 2012, monitors observed a live desert tortoise in its burrow located approximately eight feet from the project right of way, within the designated bombing range area of the China Lake Naval Air Weapons Station in Ridgecrest. The designated desert tortoise monitor observed the area closely while equipment was near and reduced passage as much as possible in order to minimize disturbance to the tortoise. The designated monitor was in full consultation with the US Fish & Wildlife Service and CA Department of Fish & Wildlife during the operation and communicated

[14] June 5, 2012 letter from Michael C. Amato, Communications Division Interim Director, to Kimberly Nicols, California Department of Fish and Game (now California Department of Fish and Wildlife Services).

throughout the day of the tortoise's activity to these agencies. The Tortoise did not appear disturbed during construction activities.

Additionally, monitors observed two additional tortoises located inside the China Lake Naval Air Weapons Station, but outside the area of potential impact. On December 28, 2012, monitors observed two live hibernating desert tortoises in burrows. One tortoise was approximately 70 feet north of the alignment. The second was approximately 150 feet north of the alignment. As such, the Project biologist designated the tortoise as incidental. The animals were not disturbed by construction activities in area.

B2. Mandatory Boring to Avoid Cultural Areas

CBC anticipated mandatory boring for roadways, culverts and stream crossings comprising approximately 36.15 miles out of the Project's total 530 miles. Based on the bids it received from vendors to perform the work, CBC estimated it would cost $11,842,071 to bore around identified cultural sites.

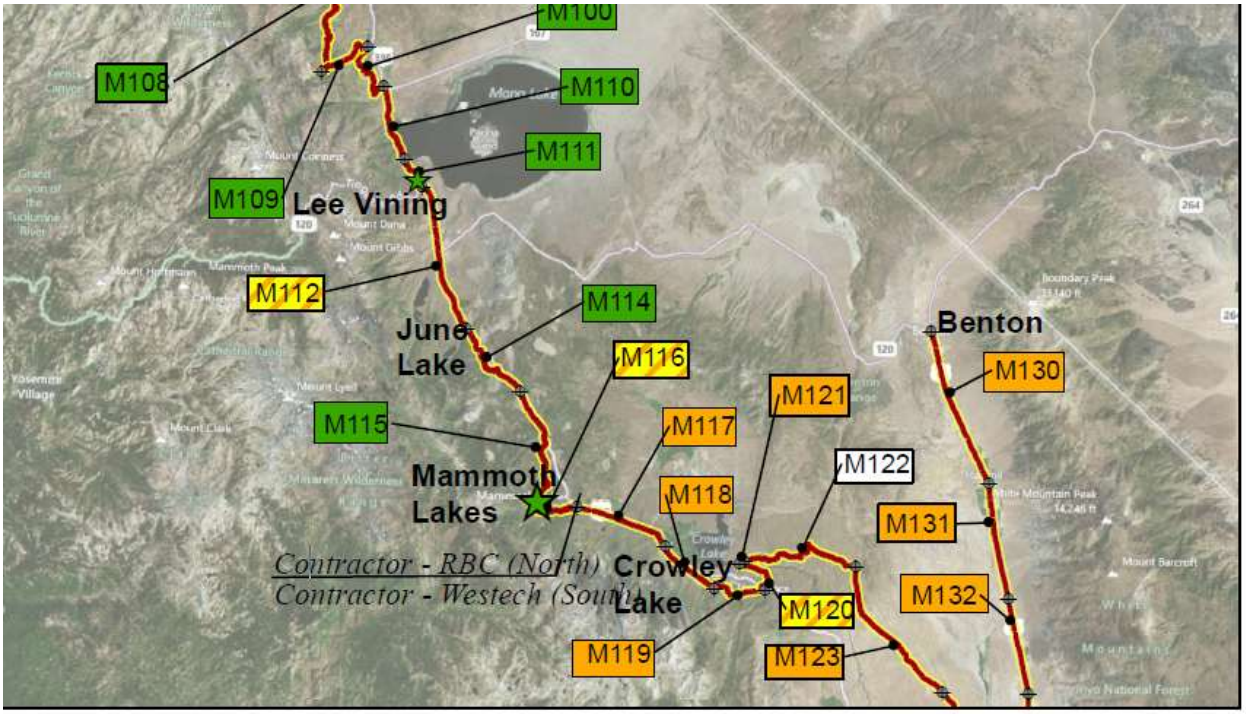
The Project incurred a variety of cost increases associated with compliance with Section 106 of the National Historic Preservation Act of 1966 (NHPA). These costs included database studies of the entire project route and the development of a Programmatic Agreement (PA). The PA required CBC to conduct a Class III Archaeology/Cultural Resources survey. The PA defined methods for analysis, the process for dispute resolution, and established a Tribal Monitoring Plan to incorporate the interests of Native Americans whose ancestral lands were impacted by the project. Given the project timeframes, the 21 signatories of the Agreement determined that all sites in the Area of Potential Effect (APE) were "eligible," and that "no impact" to them was to be allowed. CBC asserts that this process of analysis resulted in increased consulting fees and a Tribal Monitoring Plan. BLM, USFS and Caltrans assessed review fees. CBC estimates that the need to bore around cultural sites required boring an additional 30.8 miles, increasing project costs by $10,074,817.27.

Original Estimate	Estimated Costs as of June 17, 2013	Difference
$11,842,071	$21,916,888.27	$10,074,817.27

<u>CD Review of Cultural Site</u>

In its review of Digital 395 cost overruns in June 2013, CD inspected the segment identified as "M122" on the image below. CD chose this site because CBC had not yet received approval to construct this segment from the Inyo National Forest Service (INF). CBC identified this segment as the most difficult segment to obtain INF permits, though constructing other segments faced similar challenges. The INF asserts that "NTIA, the lead agency for Section 106 compliance, utilized 'avoidance' of identified cultural sites as the construction implementation plan, which is why known sites were

bored under when installing the cable."[15] CBC estimates that boring around cultural sites contained in this segment alone will increase project costs by $951,000.



CD observed that the dirt road CBC will need to construct through Round Mountain Road, was graded. As part of Mono County's Maintained Mileage, the County grades its dirt roads on an annual basis. According to its records, the County last graded Round Mountain Road on April 20, 2013.[16]

[15] July 24, 2013 email from Diana Pietrasanta, Forest Recreation and Lands Staff Officer, Inyo National Forest, to Commission staff

[16] July 2, 2013 email from Jeff Walters, Acting Mono County Director of Public Works, to Commission staff.

Inyo National Forest, Mono County, Round Mountain Road

Inyo National Forest, Mono County Round Mountain Road: stake marks proposed fiber location

According to the INF, it "defines an archaeological site depending on the context of artifacts found in a cultural survey, which is required prior to any ground disturbing activities. Finding a few flakes (obsidian that was worked by Native Americans to make arrowheads, for example) would be noted (recorded) in a survey, but may not be a site. Site definition would depend on concentrations or distributions of the artifacts and the presence or absence of cultural features. An artifact is any cultural item over 50 years old."[17]

The Project alignment traverses an area of rich historic and cultural value, including village sites, the Volcanic Tablelands, and lithic scatter. Northwest of Bishop, the Volcanic Tablelands is roughly 11,840 acres of volcanic landscape formed more than 700,000 years ago by materials spewing from the Long Valley caldera. The Paiute-Shoshone Indians once resided in this high desert landscape leaving behind an extensive collection of perfectly chiseled petroglyphs in the rocks. This is also an area of historic seed collecting by Paiute Indians.[18] The Bishop Paiute Tribe still uses spiritual areas in the Volcanic Tablelands. As part of its effort to preserve these cultural resources, the INF has required considerable survey work from CBC, and has required CBC to resubmit surveys.

The theft and desecration of some petroglyphs last year may have heightened cultural sensitivities,[19] as have errors made by CBC subcontractors. In one instance, a construction crew adversely impacted one cultural site in a different segment in the Inyo National Forest when it accidentally trenched, instead of bored, without the presence of monitors to observe this process, as required under the PA.

With assistance from CBC's Project archeology consultant, CD staff noticed small obsidian fragments in the area, isolated artifacts, including the two in the photograph below.

[17] July 24, 2013 email from Diana Pietrasanta, Forest Recreation and Lands Staff Officer, Inyo National Forest, to Commission staff.

[18] http://www.blm.gov/ca/st/en/fo/bishop/volcanictablelands_caso.html

[19] http://articles.latimes.com/2012/nov/18/local/la-me-petroglyphs-theft-20121119

Two obsidian flakes identified by the CBC archaeologist

Currently, CBC is working to obtain construction permits from the INF between the towns of Mammoth Lakes and Bishop. The NTIA reports that the INF took 113 days to issue a permit for archaeological studies with correct personnel information and has "consistently missed the comment deadlines established in the PA." Further, the NTIA adds "Negotiating with the INF and providing additional information has consumed financial resources that CBC would otherwise have been able to use for construction," and that the INF "has required additional survey data for its segments that go beyond our experiences with other US Forest Service reviews of BTOP projects." These delays, according to the NTIA, "have caused CBC to spend money redeploying construction equipment and crews to other segments to avoid a complete shutdown."[20]

CBC and its vendors underestimated the environmental and cultural resources review required to construct within the Project area. CBC did not anticipate the need to bore

[20] July 17 letter from Anthony G. Wilhelm, Associate Administrator of NTIA's Office of Telecommunications and Information Applications to the Commission.

along dirt roads graded annually by County authorities. Despite this, CD recommends the Commission consider these cost overruns as allowable.

B3. Mandated bores due to waterways, wetlands and special species

The Digital 395 route crosses or runs adjacent to numerous streams, wetlands and other water resources, both permanent and ephemeral (seasonal). To limit impact, the NTIA-approved FONSI required CBC to install conduit using directional drilling at stream crossings or by bridge attachments. Prior to construction, the FONSI required CBC to receive the following types of permits authorizing boring: 404 (Army Corp of Engineers – surface water), 401 (Regional Water Quality Control Board -- wetlands) and the 1602 (Streambed Alteration Agreement).

CBC negotiated the ability to plow in ephemeral waterways and streams mainly as part of the 1602 Streambed Alteration Agreement with CDFW, potentially saving the Project over $1 million in boring costs under the Project's mitigation and monitoring plan. The trenching of dry streambeds, when appropriate and technically feasible, allowed CBC to reduce costs by not having to bore and also reducing 'tie-ins' which typically must be constructed at the beginning and end of bores.

Under the 1602 Streambed Alteration Agreement, CBC would have been allowed to plow through dry ephemeral streams. The CBC alleges that delays in obtaining the permits delayed the project timetable. Therefore, some of the ephemeral streams were not dry during construction. This necessitated the need to drill and increased project costs

Agency	Date Applied	Date Permit Granted
401 RWQCB Permit	November 7, 2011	May 8th, 2012
404 ACOE Permit	November 7, 2011	March 14th, 2012 & April 27th, 2012
1602 Streambed Alteration Agreement	November 8, 2011	July 6th, 2012

One example illustrating how delays in obtaining permits led to cost overruns for the Digital 395 project is with regard to Segment M-107. In this segment, the wetlands were dry adjacent to the roadway, thus CBC could install the fiber using a plow. Due to delays caused by Caltrans paving conflicts, along with an early rain, however, the area flooded. As a result, the CBC needed to bore the three-mile section at a cost of $60.00/ft, well in excess of the cost to plow ($2.50/ft), leading to $318,380 in additional costs to bore for the segment.

The Army Corps of Engineers issues the 404 permits. When having to reroute the backbone around the Owens Lake, although the streams were ephemeral (dry), because the dry lake was once navigable, the issuance of permits fell under the jurisdiction of the Army Corp of Engineers. These additional permit costs were approximately $145,490 in Segment I-116. These costs were incurred after the Project was initiated and the route subsequently was changed. The bids the CBC initially received for work on this segment did not reflected these costs since the streams were dry during the entire project.

The total cost of the unanticipated boring related to the 401, 404 and 1601 permits was $2,292,948.58

C. Unforeseen Administration Costs

CBC's Administration expenses overran the initial estimate of $6.8 million by roughly $2.1 million, a 31% increase. The "Administration" category includes general expenses unrelated to engineering, construction and related operations, but does not included wages and salaries. The table below outlines expenses for this budget category.

Table 5. Administration Costs

Line Item	Estimate	Actual	Difference
Travel	$3,390,574	$1,745,239	(2,185,335)
OCIP (Insurance)	$0	$4,054,505	$4,054,505
Legal & Regulatory	$188,458	$582,108	$393,651
Project Office/Depot Rent	$349,100	$511,677	$162,577
Grant Administration	$900,000	$485,990	(414,010)
Preapplication*	$306,860	$302,890	($3,970)
Other	$1,130,364	$1,213,609	$83,245
Totals	**$6,805,356**	**$8,896,018**	**$2,090,662**

** The CASF grant did not fund preapplication expenses*

Legal expenses and insurance premiums were the two principal drivers of cost increases in the Administration category. Legal expenses increased from $188,000 to $393,000. While CBC anticipated fees for filings and contracts, it soon learned that legal matters required full time activities. All contracts (vendor, contractor, agency, etc.) required extensive legal involvement, as did Right-of-Way permits. Though CBC asserts its lawyers saved the Project extensive time and money through their work, legal costs as a category grew to more than double the estimated amount.

The need for Praxis Associates, the principal sub-recipient of the grant, to purchase an Owner Controlled Insurance Policy (OCIP) alone increased Projects costs by over

$4,000,000. When it applied for both ARRA and CASF grants, CBC assumed that Praxis Associates, its main contractor with a controlling interest in CBC, would receive vendor treatment. After the ARRA award, Praxis learned that its status changed from vendor to sub-recipient. In addition to preventing the company from including a profit in the costs it charged CBC, this change increased the risk assumed by Praxis as a sub-recipient, as Praxis had planned on self-performing the work. Praxis contracted approximately $34 million to construction vendors through multiple federal, state and local ROW owners. The OCIP protected not only Praxis but the Federal, State, and Local 3rd parties involved with property ownership or maintenance interest, as well as any 3rd parties that may have incurred bodily injury due to the Project. Below is a breakdown of each insurance policy purchased.

1) Workers' Compensation: $1,352,651
2) General Liability: $1,036,544
3) Excess Liability: $522,037
4) Builders' Risk: $109,774
5) Pollution Liability: $106,908

D. Unforeseen Cost Increases in Permits (non-environmental) and Rights-of-Way

The CBC initially estimated permitting costs at $1,294,606; it now expects final actual costs to be $1,687,214, a 30.3% overrun. The table below outlines the CBC's permit budget.

Table 6. Permitting Costs

Line Item	Estimate	Actual	Difference
Federal	$425,773	$340,235	($85,538)
Caltrans/NDOT	$0	$394,604	$394,604
State	$0	$49,103	$49,103
County/City	$0	$429,820	$429,820
Private/Conduit Agreements	$0	$273,277	$273,277
Other	$868,833	$200,175	($668,658)
Total	**$1,294,606**	**$1,687,214**	**$392,608**

The key element accounting for the cost increase in the Permit category is the CBC's incorrect assumption that it provided Caltrans with twelve strands of fiber (valued in excess of $2.5 million) at no cost in exchange for Right-of-Way. In subsequent meetings with Caltrans, the CBC learned that Caltrans would charge for staff time and encroachment fees, totaling $387,974.

Throughout the permit approval process, CBC experienced complications because Caltrans did not own the underlying land upon which Highway 395 was constructed. Instead, the underlying land was largely owned by Bureau of Land Management, US Forest Service, and the LADWP. CBC spent several months seeking alternative routes, one of which included patrol roads on LADWP lands. After an extensive period of negotiation, in which the City of Los Angeles sought $1 million for land use (or a proportion of revenues), a mediation settlement established cost recovery, estimated at $144,000, for services payable to the LADWP. City-related expenses, apart from those of the City of Los Angeles itself, included permits that involved special assessments for repaving ($180,000) as well as full-time city monitoring of construction in Carson City and Douglas County. Although each of the seven tribes along the Project alignment granted Rights-of-Way at no fee, over 400 allotments administered by the Bureau of Indian Affairs required $36,000 in fees. These fees were subsequently paid to the Allotment owners.

III. Funding Request

As a result of these unforeseen cost increases, the CBC on June 17, 2013 submitted a formal request for $10,866,961 in additional CASF funding. These funds would finance the $3,678,625 CDFW incidental take permit and the completion of the Project, including the necessary work on Segment M122, thereby ensuring a unified network (installing the backbone segment and avoiding cultural sites via boring, at an estimated cost of $1,247,144). The funds would also finance the costs of burying fiber or replacing poles in the following areas, as discussed above: Benton Reservation, June Lake, Johannesburg, Lone Pine Reservation, Coso College, Round Valley, Conway Summit Towers, Sage Flat and Bernasconi/Palisades. Additionally, the funds would finance the CDFW Incidental Take Permit, with the conditions outlined above. The funds will finance distributing the backbone to connect anchor institutions, communities, and providers, including CASF applicants, such as:

- Benton non-Tribal Aerial Anchor Institutions
- Big Pine Distribution and Anchor Institutions
- Big Pine Distribution
- Big Pine Anchors
- Lee Vining Distribution
- Lone Pine TV Distribution
- Lone Pine Anchors
- Mammoth Distribution
- Connects M103 to M103.900
- Independence Distribution
- Independence Anchors - I110900
- Ridgecrest
- Ridgecrest - K104 Paving

- Walker River (Need permit)
- Walker Distribution
- Walker Anchors
- Backbone - Conway Summit
- AT&T cell tower, top of Conway Summit
- M107900 - Bridgeport Jack Sawyer
- Bridgeport Indian Colony
- M127 Backbone (USMC)
- USFS Topaz
- USMWC Drop
- Walker Wellness Center
- Mammoth Welcome Center
- SNARL
- Benton Tribe
- M130.120 - Inspection Station - Benton
- Coso College
- Bernasconi/Palisades
- ORVO
- Lone Pine Tribe Tribal Office conduit
- Lone Pine Tribe Tribal Office
- Human Service – Ridgecrest
- Hosp Hm Health Agency (RIDG)
- Sierra Vista Education Ctr.
- June Lake
- Johannesburg
- SCHAT Net
- Several cell tower sites

Finally, these funds would finance remaining Administration and "overhead" labor costs to complete these tasks.

Given that the CBC estimates to complete these tasks are only estimates, CD recommends that the Commission adopt measures to ensure Project completion, or, in the event of additional cost increases, that its priorities are met. Specifically, CD recommends the measures outlined in Section V of this Resolution.

Since the MND was completed, there have been route modifications to avoid environmental and cultural resources and to connect anchor institutions at physical locations different than originally assumed. Pursuant to CEQA, the Commission has considered whether the changes from the project studied in the MND require the preparation of a subsequent CEQA document. California Code of Regulations (CCR) Section 15162 of the State CEQA Guidelines describes the conditions under which preparation of a subsequent MND would be appropriate. Preparation of a subsequent

MND would be appropriate if the Commission determines, on the basis of substantial evidence in light of the whole record, that one or more of the following conditions is met:

1) substantial changes are proposed in the project which will require major revisions of the previous ND/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects;

2) substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous ND/MND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the ND/MND was adopted, shows any of the following:

    a. the project will have one or more significant effects not discussed in the previous ND/MND;

    b. significant effects previously examined will be substantially more severe than shown in the previous ND/MND

    c. mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or

    d. mitigation measures or alternatives which are considerably different from those analyzed in the previous ND/MND would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

We find that with all but three of the proposed modifications, none of the conditions described in CCR Section 15162 of the State CEQA Guidelines calling for preparation of a subsequent MND are anticipated to result. The modifications represent only minor technical changes or additions and the existing mitigation measures are sufficient. Thus, a subsequent MND is not required for the approval of the majority of the funding request. However, the Commission does not currently have adequate information to determine whether the approval of the following modifications would trigger the need for a subsequent MND:

- Segment I104 in Inyo County, connecting Round Valley;
- Segment I108 in Inyo County, connecting several anchor institutions and cell tower sites along Poverty Rd.; and
- Segment I113 in Inyo County, connecting Lone Pine Reservation Tribal Office.

CBC estimates completing these three tasks in total will cost $938,246. CBC's funding request for these segments cannot be approved at this time. After the Commission has sufficient information to determine whether conditions contained in CEQA Guidelines Section 15162 are present, the CBC may then request funding for these segments.

IV. Potential Funding Sources

In its review of the CBC funding request, CD staff examined the ability of other entities to finance a portion of it, in an effort to ensure California ratepayers would not pay for the entire request. CD found no other entity able to fund even a portion of the request, in the limited time necessary to complete the Project.

CD first asked the NTIA staff if the agency could provide additional funds to complete the Project. In a July 15, 2013 letter, NTIA staff responded that it could not finance any portion of CBC's request. The American Recovery and Reinvestment Act of 2009 (aka "ARRA," Public Law 111-5) authorized the NTIA to implement the Broadband Technology Opportunities Program (BTOP), a $4.7 billion one-time competitive matching grants program to expand broadband services to unserved and underserved areas, improve broadband access for public safety agencies, stimulate the economy and create jobs. BTOP made 2-year competitive grants to states, nonprofit organizations, and broadband service providers, requiring a 20 percent matching investment from nonfederal funding sources. Although the NTIA did not exhaust all of the funds allocated to it under the ARRA, its grant making authorization expired on September 30, 2012 and was not renewed by Congress. Additionally, the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act required the return of unused Recovery Act funds to the Treasury.[21] Thus, while many federal grant programs allow agencies to reallocate excess funds from awards that are under budget to those needing additional funding, any grant funds that remain unexpended by BTOP recipients are unavailable for reallocation to other projects. Therefore, at this time, the NTIA cannot fund any of the CBC request.

CD also found that CBC cannot currently provide additional funding. The CBC is a not-for-profit organization set up exclusively for Digital 395 project. Almost all of its funds derive from ARRA and CASF grants. The Commission could arrange for the CBC to reimburse it for some funding provided, but that would severely limit the CBC's ability to operate the Project post-construction.

CD analysis found that Praxis Associates, the main CBC contractor, also was limited in its ability to contribute. When preparing the grant applications, Praxis intended to be a

[21] Public Law 111-203, Title XXIII (Pay it Back Act, §1306), 124 Stat. 1376, 2135-2136

vendor (contractor) to CBC, the grant recipient. Instead, Praxis, as determined by the NTIA, is a grant sub-recipient, meaning that it maintains responsibility for executing a portion of the recipient's federal grant award. In addition, because federal grants are designed to reimburse the recipient for actual eligible costs, award recipients and sub-recipients may not add a profit component to any costs charged to the grant. Because Praxis was not allowed to add profit to its cost reimbursement, its wherewithal to finance the Project is limited.

After a discussion with the Mono County Administrator, CD found Mono County cannot contribute, as it has roughly $30 million in unaccounted, long-term liabilities, with only a $71 million annual budget.

CD determined that the Town of Mammoth Lakes, the largest and only incorporated city in Mono County, cannot contribute, as it recently exited bankruptcy.

The Commission may fund the CBC request, however. First, the CASF contains sufficient funds to finance this request. Second, the Commission possesses the authority to do so. In passing Resolution T-17352, the Commission found it "reasonable to approve CASF grantee applications for additional CASF funding to cover cost increases in CASF-funded projects, so long as those cost increases result from factors beyond the recipient's control."[22]

V. Staff Recommendation

After extensive analysis, CD concluded that the project incurred cost increases resulting from exogenous factors and cost increases resulting from factors unforeseen by the applicant when it applied.

Despite CD finding that some of the cost increases may have resulted from factors under the control of the grantee, CD recommends providing $9,928,715 to finance the Project tasks, as outlined in Section III and the Ordering Paragraphs. Although CD's analysis finds that some of the cost overruns may be attributed to factors under the CBC's control, that does not diminish the extraordinary environmental, cultural, historic preservation and other agency requirements the Project faced. According to the NTIA, these requirements were "[f]ar beyond those that the typical BTOP construction project must satisfy."[23]

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[22] Resolution T-17352 approved $1,540,258.40 in additional CASF funding for IP Networks' Highway 36 Project in Humboldt and Trinity Counties.

[23] July 17 letter from Anthony G. Wilhelm, Associate Administrator of NTIA's Office of Telecommunications and Information Applications to the Commission.

The location of the Project resulted in an unusually high level of review. The Project traverses three U.S. Bureau of Land Management (BLM) areas, four U.S. National Forests, two Department of Defense installations, seven Native American tribal reservations and an endangered species habitat. The CBC estimates that it interacted with 47 agencies during the life of the Project.

Examples of the difficulties the Project weathered include:

- CBC did not obtain a FONSI until 17 months into the Project, more than twice the standard time most BTOP project took. BTOP recipients typically are cleared to begin construction once the NTIA issues the FONSI. The CBC's FONSI also incorporated a Programmatic Agreement (PA) allowing CBC to complete the required consultations and obtains the required permits from federal agencies under Section 106 of the National Historic Preservation Act on a segment-by-segment basis. Most BTOP recipients did not need a PA. The few that did need a PA required only a few signatories. CBC's PA has 21 signatories, "far more than any other PA created for BTOP," according to the NTIA.[24]

- While preparing its EA, CBC discovered that the Project traversed two tribal allotments. In one case, the CBC reengineered the Project route to avoid the allotment; in the other, the CBC spent an estimated 12 months negotiating and then implementing a process to obtain permission for the right-of-way through the allotment, a process that included sending 600 letters and working with 400 separate landowners.

In addition to considering the unusually difficult challenges CBC encountered during the life of the Project, CD recommends the Commission approve CBC's request for additional funds to complete the Project, thereby ensuring that Digital 395 operates as one unified network.

The ramifications of the Commission not funding this request include:

- The Project would not complete the segment through the Inyo National Forest, leaving a gap in the backbone. The route would be divided in two sections, without a complete path, potentially reducing revenues below CBC sustainable levels. County of Mono will still have to "operate in two parts" – one served in from the south (760 Area Code) and from the north (530 Area Code). Cell towers and major last mile providers would not get route redundancy and service quality guarantees. In some cases their points of presence will not be installed and migration of mobile

[24] *ibid*

coverage to 4G would be deferred or limited to certain areas. Several local service providers would be unable to execute their plans to provide last mile broadband Internet service, including current CASF Infrastructure Grant applicants.

- According to CBC, the Project most likely would need to close down in August 2013, with layoffs and no further construction of the network or connection to anchor institutions, due to the need to pay the $3,678,625 in mitigation fees owed the CDFW.

- The communities of Walker, Benton, Bridgeport, June Lake, Big Pine, Independence, Lone Pine, Round Valley and Johannesburg would not receive the Digital 395 fiber, leaving residents, businesses and anchor institutions with their current Internet service options. Over a dozen schools would not be connected, two hospitals, and multiple governmental offices, including the county seat of Inyo County. Additionally, the USMC Mountain Warfare Training Center would not be connected to the network. Several key research installations affiliated Sierra Nevada Aquatic Research Laboratory (UC Santa Barbara) and Owens Valley Radio Observatory (Cal Tech) would not receive Digital 395 fiber.

- Under the terms and conditions of the NTIA's BTOP program, the federal government could recover the percent of the project not completed from CBC. This means that the NTIA could require reimbursement of approximately $9 million in matching funds that were already awarded to the Project.

Benefits of funding this request, thereby allowing Digital 395 to operate as a unified network are outlined below.

- *Increased Safety*. Mono County intends to develop an Emergency Services network that connects all sheriff substations, fire stations, and paramedic quarters in Mono County, as well as similar locations in Inyo and Kern Counties. A unified network will allow information sharing, including access to RMS across a secure network, and to use the network to push 911 call information. While the County would be able to connect facilities to the northern segment, it would be unable to access sites in Inyo and Kern Counties.

- *A redundant network*. The largest single potential risk facing Mono County emergency services is the potential of a cut to the fiber trunk line heading south from Bridgeport, shutting down its 911 service capabilities. Phone services for the main portion of the County are routed to the south. A cut in the fiber in Ridgecrest, Inyokern, Mojave, or anywhere between there and Bridgeport would impact 911

services. Having redundant link going north would open up the opportunity for an alternative connection, should the main line be cut.[25]

- Mono County also hopes to use Digital 395 backhaul to support its radio communications network, which currently consists of sites throughout Mono County in the form of ridge-top repeaters, and other base stations at remote outposts and substations. Having a complete and redundant network is critical in order to make this effective.

- Mono County asserts its agencies will reduce costs by connecting to Digital 395 while increasing capacity (versus its current provider).

Payment Conditions

Given that the CBC estimates to complete these tasks are only estimates, CD recommends that the Commission adopt measures to ensure Project completion, or, in the event of additional cost increases, that its priorities are met. Specifically, CD recommends the measures outlined below.

1. The Commission reserves $3,678,625 specifically to pay the California Department of Fish and Wildlife (CDFW) mitigation fee. If the CDFW reduces the fee, the payment to CBC shall be reduced accordingly.
2. The Commission directs CBC to complete the Project within the scope and budget specifications provided in this Resolution. Should CBC need further funding to do this, CBC and Praxis Associates, its sub-recipient, will be responsible for providing it. Furthermore, the Commission should ensure that it reserves the right to seek recompense equal to the amount of the CASF grant, should the CBC fail to ensure a completed, unified Digital 395 network project.

3. The Commission identifies its priorities for allocation of this funding, to ensure the CBC meets those expectations.

4. As a condition of receiving payment of additional funds, the Commission requires CBC to provide CD staff with all invoices regarding the cost overruns identified in Table 1, as well as the job orders for work not yet complete.

COMPLIANCE REQUIREMENTS

[25] According to Mono County officials, cuts to the current cable generally occur on an annual basis.

CBC should comply with all guidelines, requirements, and conditions associated with the granting of CASF funds as specified in Resolution T-17143 and the submission of FCC Form 477, among others.

COMMENTS

In compliance with PU Code §311(g), a notice letter was emailed on August 5, 2013, informing all parties on the CASF Distribution List of the availability of the draft of this resolution for public comments at the Commission's documents website at http://www.cpuc.ca.gov/PUC/documents/. This letter also informed parties that the final conformed Resolution adopted by the Commission will be posted and available at this same website.

The Commission received comments from the following individuals and organizations, all in support of financing the request: Byng Hunt, Chair of the Mono County Board of Supervisors; Ralph Obenberger, Mono County Sheriff; Jim Leddy, Mounty County Administrative Officer; and Dr. Michael Ort, COO of the California Broadband Cooperative. Additionally, after the deadline for submitting comments passed, staff received a letter from Erik Leitch, encouraging the Commission to approve the CBC funding request, due to the need to secure increased bandwidth for the Owens Valley Radio Observatory, which is owned and operated by the California Institute of Technology.

Supervisor Hunt, Sheriff Obenberger and Mr. Leddy all discussed the need to ensure for end-to-end connectivity in order to improve the public safety and quality of service benefits of the network. Additionally, Supervisor Hunt and Mr. Leddy identified additional areas of concern, including connecting communities and anchor institutions such as June Lake, the Benton Reservation and other tribal lands, the Mountain Warfare Training Center, Round Valley School in Inyo County, the community of Walker and several providers.

The Commission reaffirms its insistence that the CBC ensure a unified Digital 395 network, as discussed elsewhere in the resolution, including Ordering Paragraph 5. In addition to providing end-to-end connectivity, the Commission recognizes the needs presented by Mono County officials. It therefore directs the CBC to work with CD staff in meeting as many of these priorities as possible, in accordance with Ordering Paragraphs 5-7. In particular, the Commission emphasizes the need to build the fiber route to June Lake, which is the highest priority identified by Mono County officials, after ensuring a unified network.

In his comments, Dr. Ort disagreed with Staff Finding #4, that some of the cost increases may have been caused by poor planning on the part of CBC and Praxis Associates. Dr. Ort argued that this finding was inaccurate because "the project required continuous planning to adjust to the ever-changing requirements of the PA (programmatic agreement), the timeframes for construction, severe weather, materials and equipment, logistics, staffing, rights of way, permits, and so forth." Dr. Ort further asserts that "project planning enabled for a nearly 450-mile underground fiber system to be constructed in about 15 months through incredible harsh terrain."

Staff Finding #4 is hereby revised to reflect staff findings in a more accurate manner.

Dr. Ort requested that the Commission grant CD staff the authority to repurpose any saved funds from a reduced California Department of Fish and Wildlife Services mitigation fee to use to cover the three project segments requiring additional review under CEQA, asserting this would save staff the time required to prepare an additional resolution approving funds for these segments at a later date.

While the Commission agrees that Dr. Ort's suggestion would reduce staff workload, such action would not be in compliance with CEQA. CEQA requires the Commission to study the environmental impacts of a discretionary decision prior to approving it. In effect, approving Dr. Ort's suggestion would be a discretionary decision without CEQA review. Therefore, the Commission denies this request. Ordering Paragraph 4 will remain unchanged.

Dr. Ort also identified several minor factual errors in the draft resolution, including:

1. On Page 2, Paragraph 3: The network is currently capable of delivering 150 Gbps, not 10 Gbps due to the evolution of fiber electronics since CBC filed the application in 2009.

2. On Page 7, Paragraph 3: The network was broken into 79 segments for project administration. These are only the backbone segments and do not include adjunct laterals and distribution areas which many of the backbone segments have.

3. On Page 16, Paragraph 3: The California Department of Fish and Wildlife Services imposed a 3:1 mitigation ratio, not the 4:1 ratio noted in the draft resolution.

4. On Page 21, Paragraph 3: CBC contractors only trenched without a monitor through one cultural site requiring boring, not three.

5. On Page 25, Paragraph 1: "After the ARRA award, Praxis learned its status had changed from vendor to Sub-Recipient…" Dr. Ort asserted that, "After [a] significant amount of discussion, the NTIA ruled that Praxis could not be a Contractor on the project due to its involvement in the development of the application, design work, and participation in CBC governance." Dr. Ort also argued that Praxis faced the option of either assuming the role of Sub-Recipient, including the federal oversight, or withdrawing from project.

The Commission thanks Dr. Ort for identifying these issues. The resolution was edited to address Items 1 through 4. In the case of Item 4, staff received an email from the NTIA representing that the initial archaeological report indicated that one of the three cultural sites may have been adversely affected by the trenching. The section was revised to reflect this information.

The Commission finds the comments in Item 5 to be a distinction without any difference, and thus no edits in this regard will be made to the resolution.

FINDINGS

1. On April 8, 2013, Communications Division staff (CD) met with representatives of the California Broadband Cooperative (CBC) to discuss project cost overruns on the Digital 395 Project and to request additional California Advance Services Fund (CASF) monies to cover the additional costs. On June 17, 2013, CBC submitted its formal request for $10,866,961 in additional CASF funding. On July 18, 2013 it submitted a follow-up memorandum. In the interim, CD staff and CBC representatives have held numerous discussions by phone and email.
2. The Project has incurred $25,076,816 in cost increases, with roughly $14.2 million in cost decreases.
3. Cost increases resulted from exogenous factors and from factors unforeseen by the applicant when it applied.
4. Although some of the cost overruns may be attributed to factors under the CBC's control, the extraordinary environmental, cultural, historic preservation and other agency requirements the Project faced contributed to the cost overruns. According to the NTIA, these requirements were "[f]ar beyond those that the typical BTOP construction project must satisfy."

5. The location of the Project resulted in an unusually high level of review. The Project traverses three U.S. Bureau of Land Management (BLM) areas, four U.S. National Forests, two Department of Defense installations, seven Native American tribal reservations and an endangered species habitat. The CBC estimates that it interacted with 47 agencies during the life of the Project.
6. The CBC did not obtain a FONSI until 17 months into the Project, more than double the standard time most BTOP project took. BTOP recipients typically are cleared to begin construction when the NTIA issues the FONSI.
7. The CBC's FONSI also incorporated a Programmatic Agreement (PA) allowing CBC to complete the required consultations and obtain the required permits from federal agencies under Section 106 of the National Historic Preservation Act on a segment-by-segment basis. Most BTOP recipients did not need a PA; the few that did required only a few signatories; the CBC's PA has 21 signatories, "far more than any other PA created for BTOP," according to the NTIA.
8. As part of the PA process, the Project incurred significant unanticipated expenses, most prominently, an additional $10,074,817.27 in costs to avoid cultural sites by boring around them.
9. The unforeseen cost overruns exhausted funds intended for other items in the budget.
10. The Digital 395 Project will be unable to operate as a complete, unified network without funding this request, jeopardizing local emergency management efforts, in addition to economic development.
11. The tasks CBC needs to complete appear allowable under CASF reimbursement guidelines.
12. The majority of the project modifications proposed by CBC represent only minor technical changes or additions to the previously prepared MND and the existing mitigation measures are sufficient. With respect to all but three of the proposed modifications, none of the conditions described in CCR Section 15162 of the State CEQA Guidelines calling for preparation of a subsequent MND are anticipated to result. Thus, a subsequent MND is not required for the approval of the majority of the funding request.
13. The Commission does not currently have adequate information to determine whether the approval of the following modifications would trigger the need for a subsequent MND: Segment I104 in Inyo County, connecting Round Valley; Segment I108 in Inyo County, connecting several anchor institutions and cell tower sites along Poverty Rd.; and Segment I113 in Inyo County, connecting the Lone Pine Reservation. Thus, funding for these tasks, totaling $938,246, cannot be awarded in this resolution.
14. CBC may then request funding for Segment I104 in Inyo County, connecting Round Valley; Segment I108 in Inyo County, connecting several anchor institutions and cell tower sites along Poverty Rd.; and Segment I113 in Inyo County, connecting the Lone

Pine Reservation after the Commission has sufficient information to determine whether conditions contained in CEQA Guidelines Section 15162 are present.

15. In approving Resolution T-17352, the Commission found it reasonable to approve CASF grantee requests for additional CASF funding to cover cost increases in CASF-funded projects, so long as those cost increases result from factors beyond the recipient's control.

16. CBC should continue to comply with all guidelines, requirements, and conditions associated with the granting of CASF funds as specified in Resolutions T-17143 and T-17232, the submission of FCC Form 477, among others.

17. The Commission agrees with CD's findings and recommendation to fund the Project on a conditional basis.

THERFORE, IT IS ORDERED that:

1. The Commission shall conditionally award additional funding of up to $9,928,715 from the California Advanced Services Fund to the California Broadband Cooperative (CBC) to complete the Digital 395 Project, as approved by the Commission with the passage of Resolution T-17232.

2. The funding awarded in this resolution may not be used to construct: Segment I104 in Inyo County, connecting Round Valley; Segment I108 in Inyo County, connecting several anchor institutions and cell tower sites along Poverty Rd.; and Segment I113 in Inyo County, connecting the Lone Pine Reservation. CBC may request funding for these segments after the Commission has sufficient information to determine whether conditions contained in the California Environmental Quality Act Guidelines Section 15162 are present.

3. The Commission shall reimburse CBC in accordance with the payment guidelines adopted in Resolutions T-17143 and T-17232. Additionally, the CBC shall provide CD with invoices documenting the cost overruns outlined in its request.

4. CD staff shall reserve $3,678,625 of this conditional funding specifically to pay the CDFW mitigation fee. If CDFW reduces the fee, the payment authority granted in Ordering Paragraph 1, above, is reduced accordingly.

5. CBC shall complete the Project, within the scope and budget specifications provided in this Resolution. Should it need further funding to do this, the CBC and Praxis Associates, its sub-recipient, will be responsible for providing it. Furthermore, CBC is responsible for ensuring this completed, unified Digital 395 network project. Should it fail to do so, the Commission reserves the right to seek recompense equal to the amount of the grant from CBC, Praxis and Associates, and its partners.

6. CBC shall inform the Commission immediately if it learns of any cost increases, and before it constructs any segment that costs beyond the estimate it submitted to CD on July 23, 2013.

7. CBC shall update CD staff on the Project's progress on a bi-weekly basis.

8. CBC shall comply with all guidelines, requirements and conditions associated with the CASF funds award as specified in Resolution T-17143.

This resolution is effective today.

I certify that the foregoing resolution was duly introduced, passed, and adopted at a conference of the Public Utilities Commission of the State of California held on September 5, 2013, the following Commissioners voting favorable thereon:

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PAUL CLANON
Executive Director