PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Communications Division
Carrier Oversight & Programs Branch
and Broadband, Video, and Market
Branch

RESOLUTION T-17633
January 10, 2019

R E S O L U T I O N

Resolution T-17633 Approves the Transfer of Control via Stock Purchase Agreement of Bright Fiber Network, Inc. (U-7287-C) to Race Telecommunications, Inc. (U-7060-C) Submitted by Race Telecommunications, Inc. in Advice Letter No. 6 and modifications to the CASF Grant for the Bright Fiber Project Approved by Resolution T-17495.

SUMMARY

This Resolution approves the transfer of control via a stock purchase agreement of Bright Fiber Network, Inc. (U-7287-C) to Race Telecommunications, Inc. (U-7060-C) submitted by Race Telecommunications, Inc. in Advice Letter No. 6. Additionally, in response to project revisions submitted by Race Telecommunications, Inc., the Resolution approves modifications to Bright Fiber Network Inc.'s CASF Infrastructure Account grant approved in Resolution T-17495, including revising the project's alignment from "primarily underground" to a 75 percent aerial on existing utility poles. Bright Fiber, under its parent company, Race Telecommunications, Inc., will remain the grantee. The revised Bright Fiber Project grant, comprising 60 percent of the total project costs, will amount to no more than $16,086,789, a $69,534 reduction from the approved grant. The 1,941 households near Grass Valley in Nevada County will be served at a cost of $8,288 per household.

BACKGROUND

Race Telecommunications, Inc. ("Race") and Bright Fiber Network, Inc. ("Bright Fiber") each hold a Certificate of Public Convenience and Necessity (CPCN) to offer telecommunications services. In Decision 08-01-009, rendered on January 10, 2008, the Commission granted Race Telecommunications a CPCN to provide limited facilities

based and resold local exchange and interexchange services. Subsequently, in Decision 15-05-028, rendered on May 7, 2015, the Commission granted Bright Fiber a CPCN to provide limited facilities based local exchange, access, and interexchange services.

On February 1, 2013, Bright Fiber submitted an application for California Advanced Services Fund Infrastructure Account (CASF) funding (both grant and loan) for underserved areas in Nevada County to the southeast of Grass Valley. On December 3, 2015 the Commission approved Resolution T-17495, providing the Bright Fiber Project with a $16,156,323 grant and loan funding of $500,000. Under terms of the grant, Bright Fiber is responsible for the remaining $10,576,095, or 40 percent of estimated project costs., Bright Fiber was not able to secure investors for the project but eventually reached an agreement with Race Telecommunications, Inc. to take over the project and provide the required 40 percent funding.

On June 21, 2018, Race filed Advice Letter No. 6 in accordance with Commission rules[1] seeking approval of a transfer of control via stock purchase agreement of Bright Fiber to Race. On July 5, 2018, Race filed a supplement to the Advice Letter which included a copy of Race and Bright Fiber's pre and post transaction organizational charts. On August 31, 2018, Race filed Advice Letter No. 6B which provided additional information regarding Bright Fiber's California Advanced Service Fund (CASF) project. The Advice Letter was sent to the "Any Advice Letter Not Fitting Within the Preceding Categories" service list. Advice Letter Nos. 6, 6A, and 6B were noticed on the Commission's Daily Calendar on June 27, 2018, July 11, 2018, and September 7, 2018 respectively.

Presently, all Bright Fiber stock is owned by Mr. John Paul. Under the terms of the transfer, Race will purchase and operate Bright Fiber as an Internet service provider, while Mr. Paul will continue to own Spiral Internet, which offers web hosting and email services and operate separately from Bright Fiber in the future.[2] Race will purchase all the issued and outstanding equity interests of Bright Fiber for the agreed upon purchase price after Commission approval of Advice Letter No. 6. Bright Fiber would then become a directly-owned subsidiary of Race, would continue to operate under its existing CPCN, and would retain both the Bright Fiber name and the CASF grant. However, Race has indicated that it will need to revise the approved CASF project in order to meet the approved project budget. As these revisions, discussed later in greater detail, modify Resolution T-17495 they require Commission approval.

[1] D.94-05-051; General Order (G.O) 96-B Telecommunications Industry Rule 7.2 (4) and 8.6.2
[2] Bright Fiber's ISP business resells Internet from wireline providers and provides web hosting and email services to residences and businesses in Nevada County, California.

The Communications Division (Staff) received sixteen protest/comments on the Advice Letter, of which nine protested or opposed the proposed transaction.[3] Staff also received three letters of support.[4] On July 19, 2018, Race filed a reply to the protests, comments, and letters of support. On August 22, 2018, Smarter Broadband filed a response to Race's July 19, 2018 reply in which it addressed the Bright Fiber CASF project. On September 27, 2018, Smarter Broadband filed a response to Race's Advice Letter 6-B filed August 31, 2018. On October 9, 2018 Colfax.NET, LLC also filed a response to Race's Advice Letter 6-B.

The comments/protests and Race's responses are summarized below:

1. Opposition to the Transaction as it Relates to the Bright Fiber CASF Project

Comments/Protests centered on Race's proposed changes to the Bright Fiber CASF project if the transfer is approved.[5] Race intends to build out the project using above-ground delivery instead of underground fiber, as had been approved by the Commission. In its response, Race indicated that changes to the CASF project build are necessary and that these changes would be reviewed by the Commission's CASF staff consistent with the CASF grant transfer rules. Race also provided additional details regarding the proposed Bright Fiber CASF project construction.

Commenters in the project area also pointed out that some residents of Nevada County already paid a $119 deposit for Bright Fiber's broadband service, and it is unclear how the deposits will be handled or what will happen to those deposits in the future.[6] In its response, Race clarified that the $119 payment is how households show interest in signing up for future broadband services and will be applied to the first month's bill. The payment is refundable upon request.

2. Support for the Transaction

The letters of support primarily discussed the demand for broadband in

[3] Sage Associates, Richard Cristdahl, David Adams, Ph.D. - Center for Architectural & Design Research, Johanna Finney, Barbara and Don Rivenes, Lynele Juchau - ColfaxNet Support Group, Smarter Broadband Inc. and ColfaxNet, LLC, Paul N. Anderson, Cindy Russell, MD, Pamela D. Hall, Paula Orloff, Michael P. Anderson- Clientworks, Inc., Andrew Collins-Anderson, , Reinette Senum - Nevada City Council Member, David C. White - Independent Network/Systems Consultant., Jeff Barton, Smarter Broadband

[4] Kristin York –Sierra Business Council , the Nevada County Executive Office, Nevada County District I Supervisor Heidi Hall

[5] Sage Associates, Richard Cristdahl, David Adams, Ph.D. - Center for Architectural & Design Research, Johanna Finney, Barbara and Don Rivenes, Jeff Barton, Cindy Russell, MD, Smarter Broadband Inc. and ColfaxNet, LLC, Smarter Broadband, Lynele Juchau - ColfaxNet Support Group, Reinette Senum - Nevada City Council Member, Michael P. Anderson- Clientworks, Inc., Paula Orloff, Pamela D. Hall, Johanna Finney

[6] Johanna Finney, Lynele Juchau - ColfaxNet Support Group, Smarter Broadband Inc. and ColfaxNet, LLC, Michael P. Anderson- Clientworks, Inc., Pamela D. Hall

the Bright Fiber CASF project area, the need for better internet access, and the positive economic impact that the CASF project construction would bring to the area. Race's background and expertise were also discussed. In its reply comments Race asserted that it is qualified to purchase Bright Fiber and that transfer approval is in the public's best interest.

3. Request for Additional Time to File Protests and Inadequate Public Notice

Members of the public were concerned they were not given adequate notice of the proposed stock purchase agreement and therefore requested an extension of the protest period[7]. In its reply Race asserted that it gave the required notice to the appropriate service list and that Advice Letter No. 6 complies with all Commission decisions, orders, and rules, including General Order 96-B. Race also asserted that Advice Letter 6 complied with the CASF transfer notification requirements as outlined in the CASF rules.

DISCUSSION

A. PROPOSED TRANSFER OF CONTROL

In determining whether to approve this transfer, Staff reviewed Race's Advice Letter filing and determined whether the proposed transaction can be processed using the Advice Letter process. Further, Staff reviewed the protests, comments, and letters of support received, and Race's response.

1. Use of the Advice Letter for the Proposed Transaction

   Under Commission Decision 94-05-051 and General Order 96-B, Telecommunications Industry Rules 7.2. (4) and 8.6.2., certificated non-dominant carriers who wish to transfer their CPCN to another certificated company of the same class (i.e. IEC or CLC) may do so via Advice Letter. In such instances, the buyer must file an Advice Letter seeking approval of the transfer. Race and Bright Fiber meet the eligibility requirements to use the Advice Letter process to seek approval of a transfer of control of Bright Fiber to Race.

2. Comments and Protests Received

   a. Opposition to the Transaction as it Relates to the Bright Fiber CASF Project

[7] Lynele Juchau - ColfaxNet Support Group, David C. White - Independent Network/Systems Consultant, Andrew Collins-Anderson, Michael P. Anderson- Clientworks, Inc, Paul N. Anderson

The proposed changes to the CASF project require more than an Advice Letter seeking a transfer of control. Project evaluation and project approval were done under the Commission's CASF program and funding was approved via Commission Resolution. Therefore, changes to the CASF grant are subject to separate review by the Commission's CASF staff and do not fall within the scope of Race's Advice Letter seeking approval of the transfer of control of Bright Fiber to Race. We also note that the $119 deposit for service is a payment to Spiral Internet, which is an unregulated internet service provider of Bright Fiber and is not part of the transfer of regulated CPCN operations in this transaction.

b. Regarding Inadequate Public Notice

With respect to comments asserting there was inadequate public notice, Staff notes that Race served a copy of the Advice Letter to the Advice Letter Service List and that the Advice Letter and all supplements appeared on the Commission's Daily Calendar as required. Therefore, adequate public notice was provided.

3. Race and Bright Fiber's Compliance with Licensing Requirements

As part of the advice letter review process, Staff reviewed Race and Bright Fiber's compliance history and determined Race is compliant with the Commission's licensing requirements. Staff has confirmed that Race has reported and remitted user fees through June 2018 and surcharges through July 2018 and submitted the Initial and 2018 Annual Performance Bond, 2017 Annual and Affiliate Transaction report, and the 2018 Annual Tariff Filings.

Staff determined Bright Fiber is also compliant with the Commission's licensing requirements. Staff has confirmed that Bright Fiber has reported and remitted user fees through June 2018 and surcharges through July 2018 and submitted the Initial and 2018 Annual Performance Bond, 2017 Annual and Affiliate Transaction reports, and the 2018 Annual Tariff Filings.

Upon review of the Advice Letter, comments and protests, Race's reply, and Race and Bright Fiber's compliance with licensing requirements, Staff recommends that the Advice Letter seeking a transfer of control via stock purchase agreement of Bright Fiber to Race be approved.

B. MODIFICATIONS TO CASF GRANT

As noted previously, approving the acquisition of Bright Fiber by Race will require the Commission's approval, not only of the transaction, but also of revisions to Resolution T-17495, approved by the Commission on December 3, 2015. In the advice letters

discussed above, Race indicated that Bright Fiber will remain the grantee, though Race seeks revisions to the project that would allow it to complete the project without requesting additional grant funding.

First, Race has indicated that if it receives permission to acquire Bright Fiber, the company will not require the $500,000 CASF Infrastructure loan authorized in Resolution T-17495. Thus, Staff recommends modifying Resolution T-17495 to rescind the loan.

Second, Race indicated in its advice letters that the project design as currently approved in Resolution T-17495 is – "primarily" an underground deployment – and will cost significantly more than compared to when the grantee submitted its application in 2013. The cost increase is due to factors such as inflation, increases in the cost of supplies and the legislative mandate, instituted after the Commission approved the Bright Fiber grant, that all CASF Infrastructure projects must pay prevailing wages. Race requested an updated construction estimate from the vendor Bright Fiber planned to use in 2013. That contractor chose to not submit a revised bid. The bid Race received from another contractor is roughly 78 percent more than the estimate provided in 2013. Relying on that estimate and the need to now pay prevailing wage, Race estimates a primarily underground installation would require a $32 million grant. To contain costs, Race proposes to revise the project so that it is a 75 percent aerial installation, relying on attaching the fiber to existing utility poles. Staff recommends the Commission approve revising the project description in Resolution T-17495.

Third, Race requests that the Commission revise Resolution T-17945 so that the grantee is no longer required to post a performance bond. Consistent with CASF Guidelines, Race certifies that it has all the necessary funds for the 40 percent match of the grant. The revised project will cost $26,811,315, of which the CASF Infrastructure Account would fund 60 percent, or $16,086,789, a reduction of $69,534 from the original grant. Bright Fiber will provide the remaining $10,724,526. Given that the project would be in compliance with existing CASF rules, Staff recommends revising Resolution T-17495 to remove this requirement.

Fourth, the project schedule will need to be revised. Under CASF rules, grantees are required to complete CASF Infrastructure projects within 24 months. In Resolution T-17565, issued May 16, 2017, the Commission: reviewed the Proponent's Environmental assessment prepared by Bright Fiber; found the project to be categorically exempt from review pursuant to the California Environmental Quality Act (CEQA) - California Public Resources Code Sections 21000 et seq.; and approved release of funds for construction of the project. Staff typically begins the 24-month timeline once the Commission completes its required CEQA review. The Commission approved a categorical exemption under CEQA for the Bright Fiber project on May 11, 2017, meaning Bright Fiber would need to complete the project by May 11, 2019. Staff

recommends extending this timeframe by one year to ensure sufficient time to complete the project.

Fifth, as indicated above, the grant approved by the Commission did not require prevailing wages requirements. However, Section 1720 of the California Labor Code was amended in 2014 to define CASF-subsidized projects as "public works," subjecting them to prevailing wage requirements. Race has committed to follow the State prevailing wage requirement for this project.

Based on Race's commitment to complete the project and build without increasing the grant amount, CD recommends approval of the transfer of control via stock purchase agreement of Bright Fiber Network, Inc to Race Telecommunications.

Attached as Appendix A are all edits Staff proposes to make to the modified Resolution T-17495. Staff recommends the Commission approve these changes to ensure the Bright Fiber project is built and because Race asserts it can do so without increasing the grant amount.

Staff recommends the Commission approve the modifications discussed above for several reasons. The existing project has stalled as the required supplemental investment the grantee hoped would materialize did not. CASF rules require grantees to provide a portion of project funding to demonstrate commitment and avoid the risk of defaulting on project completion. Since the Commission approved the Project's CEQA exemption in May 2017, the grantee has not submitted permit applications to the appropriate State and local agencies and performed almost no additional engineering work. Staff has no reason to believe the existing project will be completed without the involvement of Race, unless another interested investor that thus far has not materialized comes forward. Race has a proven track record of completing CASF Infrastructure projects, finishing seven projects out of the ten total CASF projects the Commission awarded the company, with the other three in progress. Race also has informed Staff that it already conducted its own engineering work on the project and that the company expects to submit permit applications shortly after the transaction's approval. Equally important, the proposed budget submitted by Race means the project will not require additional grant funding to be completed. Finally, the lack of wireline broadband Internet service noted in Resolution T-17495 remains the case today, with no wireline broadband providers serving the project area.

While the fixed wireless broadband providers in the area may have added customers, fixed wireless service will continue to encounter the same line-of-sight constraints noted

by the Commission when it approved the grant.[8] In any case, as the project footprint has not changed, there is no new opportunity to challenge the served status of the project area. Finally, if the Commission does not approve Race acquiring and continuing to operate Bright Fiber, it risks the project not being completed.

C. CEQA

In Resolution T-17565 the Commission found the Bright Fiber project categorically exempt from CEQA, consistent with CEQA Guidelines Section 15303 – New Construction or Conversion of Small Structures, involving construction, installation, and/or conversion of limited numbers of new and/or existing facilities/structures, and CEQA Guidelines Section 15304 – Minor Alterations to Land, involving minor trenching and backfilling where the surface is restored. Race proposes to revise the primarily underground project previously authorized by the Commission in Resolution T-17565

[8] See Resolution T-17495 at pp. 9-10 "While fixed wireless carriers claim to serve, or claim they shortly will serve, much of the proposed Bright Fiber Project area, line-of-site considerations in this area and staff's inability to independently verify service levels leave these claims unsupported. Because staff cannot verify the claims from fixed wireless as required under PU code 281(b)(2), staff has concluded that the majority of territory in the region is underserved for the reasons outlined below.

A key limitation of fixed wireless technology is that the antenna at the consumer's premises and the provider's ground station must have a direct line of sight. Staff's site visits in 2013 and analysis in 2015 revealed that the terrain and foliage in the proposed project area makes full fixed wireless coverage of the area unlikely, making the area, at best, only "partially" served.

The terrain in the proposed project area is both irregular, with many hills and valleys as is typical in the Sierra foothills, and heavily forested. Wireless propagation in such areas is negatively affected by the scattering effects of randomly distributed leaves, branches and tree trunks, which can cause attenuation, scattering, diffractions and absorption of fixed wireless radio signals. In fact, SmarterBroadband's own website states, "Sometimes areas within the coverage area will not be able to receive service directly from an existing Access Point due to obstructions, mainly hills and/or trees. In these circumstances we can always get you service, by installing additional equipment to provide coverage." The website notes that such "additional equipment" would generally be at the customer's expense.

Staff received propagation models from fixed wireless providers in the project area. Those models showed very limited coverage areas for line-of-sight transmission towers in the 2 GHz and up ranges needed for fast bandwidth. Propagation models for bands at and below 900 MHz showed much better coverage, but bandwidth in those ranges is generally at lower than served speeds, per CASF experiences. Fiber-to-the-premises, on the other hand, is not subject to terrain variability and Bright Fiber has committed to serve every household in the project area. This includes households where the distance from the drop to the household may be of an extended length.

After examining the issues related to fixed wireless coverage in the proposed project area and removing census blocks served by wired providers, staff determined the areas that remain should be considered underserved and therefore eligible for CASF funding."

to a project with 75 percent aerial installation, relying on attaching the fiber to existing utility poles.

The categorical exemptions cited above and previously relied on by the Commission still apply to the 25 percent of the project that will be constructed underground. This work involves trenching along road shoulders, the placement of conduit within the trench, and restoring the roadway to its previous condition. The 75 percent of the project that will be constructed aerially is exempt from CEQA review because it meets the criteria of CEQA Guidelines Section 15301 – Existing Facilities – involving minor alterations of existing public or private structures, including utility facilities. The aerial installations consist of attaching telecommunications cables onto existing utility poles, a minor alteration of the pole.

Thus, the entire project as proposed by Race is categorically exempt from CEQA review.

D. SAFETY CONSIDERATIONS

By approving the transfer of control via stock purchase agreement of Bright Fiber to Race we have determined that Race complies with all applicable Commission Resolutions, Decisions, Orders, and Public Utilities Code sections, including all safety related requirements that may be contained therein.

NOTICE AND PROTESTS

In compliance with Public Utilities Code § 311 (g), the Commission on October 30, 2018 provided notice to all parties on the Advice Letter No. 6 service list as well as all parties who filed protests, comments, or letters of support that this draft Resolution is available at the Commission's website http://www.cpuc.ca.gov/ and is available for public comment. Additionally, the Communications Division informed these parties of the availability of the conformed Resolution at the same website.

Notice of Draft Resolution T-17633 was published in the Commission Daily Calendar on December 13, 2018. The Commission received timely submission of comments from SmarterBroadband, Inc., Colfax.net, LLC and Race Telecommunications. SmarterBroadband and Race also attempted to submit reply comments, however we are not accepting them, as Commission rules related to the disposition of Advice Letters do not require reply comments and the Notice did not request them.

SmarterBroadband, Inc.'s comments, received December 27, 2018, asserts that the Commission should reject or significantly modify the Staff recommendation for the

following reasons:

- The Staff recommendation "relies on staff analysis conducted in 2015 to support the conclusion in 2018 that fixed wireless technology is inadequate to provide service to the area that Race intends to serve."[9]
- The Resolution accepts without discussion Race's assertion that cost imperatives now require a change from 100 percent underground fiber to 75 percent aerial fiber even though BFN initially stated that underground deployment was "essential" due to weather factors and infrastructure issues."[10]
- "[T]o the extent that the Draft Resolution cites the adoption in 2014 of prevailing wage requirements for public works projects as a changed circumstance, this assertion is clearly erroneous, as the Commission cited this specific requirement in the 2015 BFN grant."[11]

The Commission is not persuaded by the arguments SmarterBroadband raises in its comments. Regarding the question of existing broadband Internet service in the project area, SmarterBroadband essentially is attempting to challenge the Bright Fiber application one more time, despite the Commission rejecting its challenge when it approved the grant in 2015 and again rejecting its arguments again in D.16-05-052, after Bright Fiber filed an application for rehearing.[12] BFN continues as the grantee and the project area has not increased, which would have created an additional opportunity for challenge.

The Commission also is not persuaded by SmarterBroadband's assertions that this Resolution lacks sufficient explanation for approving the modifications to the project, now allowing for a 75 percent aerial installation. Staff provided several reasons why the primarily aerial approach is appropriate under the current circumstances, especially due to increased costs. A primarily underground project in 2019 (note the approved project was "primarily" underground, not 100 percent underground) will now cost $32 million, double the current grant amount. The cost increases are due to inflation, increases in the cost of supplies, and a legislative mandate for prevailing wages instituted after the initial 2015 approval of the project. As previously stated, approving this modification enables the Bright Fiber project to go forward.

In its comments ColfaxNet, LLC states that "the Draft Resolution does not establish the basis for amending Resolution T-17495 under the Advice Letter process."[13] ColfaxNet, LLC also asserts that "the Draft Resolution accepts Race's proposed amendments to the

[9] Comments of SmarterBroadband, Inc. on Draft Resolution T-17633, December 27, 2018 at 1
[10] *Ibid* at 2
[11] *Ibid*
[12] See D. 16-05-052 at 3-56.
[13] Comments of ColfaxNet, LLC on Draft Resolution T-17633, December 28, 2018 at 2

original Bright Fiber Network Deployment proposal seemingly verbatim, without apparent independent corroboration of critical changes that jeopardize network reliability."[14] ColfaxNet, LLC goes on to say that theirs and others' network deployment in the proposed area were not considered and that "while the fixed wireless broadband providers in the area may have added customers, fixed wireless service will continue to encounter the same line-of-sight constraints noted by the Commission when it approved the grant."[15] But, they've "committed hundreds of hours to performing extensive testing, all documented using the Commission's GIS and GPS mapping systems as requested by the Commission that proved the exact opposite"[16] and that it "submitted a confidential map of the GPS coordinates and broadband Internet speed readings for 35 of the test locations."[17] Therefore, ColfaxNet, LLC asserts, "the evidence provided by ColfaxNet and others – and therefore the requirements of PU code 281(b)(2) – has on its face been ignored."[18]

The Commission is not persuaded by ColfaxNet's arguments. The CASF grant is not being transferred by Advice Letter. Resolution T-17633 makes clear that Race is purchasing BFN via a Stock Purchase Agreement, which transfers the Certificate of Public Convenience and Necessity (CPCN) as a competitive telephone provider. BFN remains the grantee, though it will operate as a subsidiary or Race. Further, the project area is not expanded, which would be grounds for a new challenge from existing Internet service providers. ColfaxNet essentially wants the Commission to allow it to challenge the BFN project yet again. CASF rules do not provide for challenges of approved projects and doing so would set a precedent whereby every single CASF grant would be open to unlimited challenges. That simply is not reasonable.

Race Telecommunications submitted comments requesting non-substantive changes to the Resolution that were incorporated.

CONCLUSION

The Commission finds that it is reasonable to approve Race Advice Letter No. 6 seeking a transfer of control via stock purchase agreement of Bright Fiber to Race. The Commission also concurs with the proposed CASF grant modifications as indicated in Appendix A.

FINDINGS

[14] *Ibid* at 3
[15] *Ibid* at 4
[16] *Ibid* at 5
[17] *Ibid*
[18] *Ibid*

1. Both Race Telecommunications, Inc. (U-7060-C) and Bright Fiber Network, Inc. (U-7287-C) hold a Certificate of Public Convenience and Necessity (CPCN). Decision 08-01-009 granted Race a CPCN to provide limited facilities based and resold local and long-distance telephone service and Decision 15-05-028 granted Bright Fiber a CPCN to provide limited facilities based local exchange, access, and interexchange services.
2. The Advice Letter process may be used by certificated non-dominant carriers who wish to transfer their CPCN to another certificated company of the same class.
3. Race and Bright Fiber are eligible to use the Advice Letter process to seek approval of the transfer of control of Bright Fiber to Race.
4. Race submitted Advice Letter No. 6 on June 21, 2018 seeking approval of a transfer of control via stock purchase agreement of Bright Fiber to Race and later filed Advice Letter supplements on July 5, 2018 and on August 31, 2018.
5. Race gave public notice of the transfer of control of Bright Fiber to Race via email to the Service List. Notice also appeared on the Commission's Daily Calendar.
6. All Bright Fiber's issued and outstanding stock is currently owned by Mr. John Paul.
7. If the Commission approves the transfer, Race will purchase and operate Bright Fiber as an Internet service provider. After Commission approval of Advice Letter No. 6 and the Internet Service Provider spin off, Race would purchase all equity interest of Bright Fiber. Bright Fiber would then become Race's directly owned subsidiary. Race will operate its subsidiary using the Bright Fiber name, retaining Bright Fiber's CPCN and CASF grant.
8. The Communications Division received sixteen protests/comments on the Advice Letter, of which nine protested or opposed the transaction, and three letters of support.
9. Race filed a reply to the protests, comments and letters of support on July 19, 2018. On August 22, 2018, Smarter Broadband sent the Commission a response to Race's reply. The response addressed Bright Fiber's CASF project.
10. Comments protesting or opposing the transaction primarily focused on Bright Fiber's CASF project and concerns that the public was not given adequate notice of the transaction. Letters of support mainly asserted that approval of the transfer would be in the public's best interest and asserted Race was qualified to purchase Bright Fiber.
11. Staff reviewed Race's Advice Letter filing, the protests, comments, and letters of support received, and Race's response in order to determine whether to recommend approving the transfer of control.

12. General Order (G.O.) 96-B does not contain a provision for extending the protest period. The Communications Division nonetheless considered late filed comments.
13. Race and Bright Fiber have complied with the Commission's licensing requirements.
14. On December 3, 2015, the Commission adopted Resolution T-17495, which approved CASF grant and loan funding the Bright Fiber project.
15. If the Commission approves this transaction, Bright Fiber will remain the CASF Infrastructure Account grantee.
16. In acquiring Bright Fiber, Race has proposed revisions to the project that require modifications to Resolution T-17495.
17. Staff recommends approval of Race Advice Letter No. 6.
18. Staff recommends approving the modifications to Resolution T-17495 noted in Appendix A.
19. The project as proposed by Race is categorically exempt from CEQA review pursuant to the following exemptions: CEQA Guidelines Section 15303 – New Construction or Conversion of Small Structures, involving construction, installation, and/or conversion of limited numbers of new and/or existing facilities/structures; CEQA Guidelines Section 15304 – Minor Alterations to Land, involving minor trenching and backfilling where the surface is restored; and CEQA Guidelines Section 15301 – Existing Facilities – involving minor alterations of existing public or private structures, including utility facilities.

THEREFORE, IT IS ORDERED that**:**

1. The transfer of control via stock purchase agreement of Bright Fiber Network, Inc. (U-7287-C) to Race Telecommunications, Inc. (U-7060-C) submitted by Race Telecommunications, Inc. in Advice Letter No. 6 is approved.
2. Resolution T-17495 is modified as indicated in Appendix A herewith.

This Resolution is effective today.

I hereby certify that the California Public Utilities Commission adopted this Resolution at its regular meeting on January 10, 2019. The following Commissioners approved it:

/s/ALICE STEBBINS
Alice Stebbins
Executive Director

MICHAEL PICKER
President
LIANE M. RANDOLPH
MARTHA GUZMAN ACEVES
CLIFFORD RECHTSCHAFFEN
Commissioners

APPENDIX

APPENDIX A

APPENDIX A
Resolution T-17495
CD/JBJ

Date of Issuance: December 7, 2015

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Communications Division
Broadband, Policy and Analysis Branch

RESOLUTION T-17495
December 3, 2015

RESOLUTION

Resolution T-17495: Approval of funding for the grant ~~and loan~~ application of Bright Fiber Network, Inc. (U-7287C) from the California Advanced Services Fund (CASF) in the amount of ~~$16,156,223~~ $16,086,789 from the Broadband Infrastructure Grant Account for a fiber-to-the-premise project in rural Nevada County.

I. Summary

This Resolution approves grant funding in the amount of ~~$16,156,223~~ $16,086,789 ~~and loan funding of $500,000~~ from the California Advanced Service Fund (CASF) in response to the grant application from Bright Fiber Network, Inc. (Bright Fiber), which proposes to install a fiber-to-the-premises (FTTP) system in rural Nevada County (Bright Fiber Project[1]). The Bright Fiber Project will extend gigabit high-speed internet service to an estimated 1,941 households spread amongst about 21 square miles in underserved Nevada County communities, generally between the outskirts of Grass Valley and Colfax, and would also provide redundant broadband infrastructure in the area that would benefit educational, medical, and public safety entities.[2]

II. Background

On December 20, 2007, the California Public Utilities Commission (Commission), in Decision (D.) 07-12-054, established the CASF program as a two-year program to

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[1] The initial application and promotional materials refer to this proposal as the "Nevada County Connected" project, but because that name was also used in a 2009 CASF grant (Resolution T-17242), Communications Division (CD) staff elects to identify this application as the "Bright Fiber Project" in order to avoid any potential confusion between the two grant applications.

[2] CD adjusted downward the eligible grant funding (from $16,339,451) and household count (from 1,963 households) from the totals in the draft resolution after receiving comments. See Section VIII for details.)

provide funds for the deployment of broadband infrastructure in unserved and underserved areas in California.

On September 25, 2010, Governor Schwarzenegger signed Senate Bill (SB) 1040,[3] which codified the CASF program and expanded it to include three accounts: (1) the Infrastructure Grant Account, (2) the Consortia Grant Account, and (3) the Revolving Loan Account. The latter two accounts are intended to address the needs that were unmet under the original CASF program. SB 1040 also expanded the CASF fund from $100 million to $225 million, adding $100 million to the Infrastructure Grant Account and allocating $10 million and $15 million to the Consortia Grant Account and the Revolving Loan Account, respectively.[4]

On February 1, 2012, the Commission approved D.12-02-015 to implement new guidelines for the Infrastructure Grant and Revolving Loan Accounts. Key provisions of the decision include:

- A maximum CASF grant award of 70 percent of project costs for unserved areas and 60 percent for underserved areas; and,
- A definition of an underserved area, "where broadband is available, but no wireline or wireless facilities-based provider offers service at advertised speeds of at least 6 megabits per second (Mbps) downstream and 1.5 Mbps upstream (6 Mbps /1.5 Mbps)."

On February 1, 2013, Bright Fiber Network, LLC[5], submitted an application for CASF funding (both grant and loan) for underserved areas in Nevada County to the southeast of Grass Valley.

III. Notice/Protests

On February 11, 2013, Communications Division (CD) posted the proposed project area map, census block groups (CBGs) and zip codes for the Bright Fiber Project on the Commission's webpage under "CASF Application Project Summaries" and also sent notice regarding the project to its electronic service list. CD received four timely

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[3] Stats. 2010, c. 317, codified at Public Utilities (P.U.) Code § 281

[4] P.U. Code § 281(b)(1).

[5] The application was transferred to the parent entity, Bright Fiber, Inc., in August 2015. See section IV-A for details.

challenges to the proposed project area, as described in section IV-B below. As part of CD's due diligence efforts, its staff also investigated the late-submitted claim of another fixed wireless internet service provider (ISP) which claimed to serve the area but learned of this project and submitted data only after the formal challenge window had closed.

In the case of the Comcast challenge, CD's investigation showed that Comcast provided cable broadband service at speeds of 6 Mbps download and 1.5 Mbps upload or higher (the Commission's definition of "served") in some parts of the project area. Comcast provided CD with the number of households passed with broadband availability at served speeds by census block. While in some census blocks, Comcast facilities passed 100 percent of the households, in other census blocks Comcast's facilities did not serve all households. CD staff engaged with Comcast from the posting of this application through August 2015, at points going down to the address level to determine the exact Comcast footprint in the project area. As a result of the Comcast challenge and numerous follow-up correspondence, CD removed a net total of about 919 Comcast-served households from the Bright Fiber Project boundaries.

In the case of the Suddenlink Communications (Suddenlink) challenge, Suddenlink provided cable broadband service at speeds of 6 Mbps download and 1.5 Mbps upload, or higher, in some parts of the western section of the project area. Suddenlink provides a number of homes passed in the project area with broadband availability at served speeds. CD staff found, however, that the majority of the homes Suddenlink passed were outside the boundaries of the project. Accordingly, CD removed about 200 homes passed by Suddenlink within the project area from the proposed project boundaries.[6]

As for the Verizon Wireless challenge, Verizon Wireless claimed to offer mobile broadband at served speeds in some parts of the project area. However, CD was unable to validate the maximum advertised mobile broadband speeds in the majority of the project area. CD validates advertised speeds by conducting drive tests at 2,000 points within the State. There were 10 Commission-sponsored test points within the project area[7] where the majority of results showed speeds below served levels and only four test points showed Verizon Wireless's speeds at served levels. In addition, there were more

[6] Some of the homes Suddenlink passed were also passed by Comcast, so the net number of homes CD removed from the project area is actually lower than the approximately 1,119 combined number of Suddenlink and Comcast removals.

[7] The mobile field tests used in this analysis were conducted during the Commission's fourth round of testing, which took place towards the end of 2013.

than 40 public mobile tests[8] conducted within the project area using the Commission's mobile app, CalSPEED. Twenty-two of those tests showed either no effective broadband service or speeds below the Commission's definition of broadband service (6 Mbps download and 1.5 Mbps upload). Given that the majority of test points showed speeds below the served threshold, CD staff considered the Verizon Wireless challenge to be unsubstantiated within the project area.

In the case of the SmarterBroadband challenge, SmarterBroadband, a fixed-wireless provider, challenged the majority of the project area claiming coverage at speeds of 6 Mbps download and 1.5 Mbps upload, or higher. Due to fixed wireless technology requiring a direct line of sight to any given access point, and taking into account the terrain of the project area, CD requested additional information from SmarterBroadband to ensure households did, in fact, have broadband availability at served levels. SmarterBroadband cooperated in providing additional information to CD staff, including data about the number of existing customers in the project area that have signed up for plans that meet the served speed levels. Staff verified that 193 existing SmarterBroadband customers in the proposed project area were receiving "served" speeds or higher.[9] As a result, CD staff directed Bright Fiber remove from its budget the costs of providing service to 193 households; that deduction is included in the number of eligible households in the project area.

In a related development, the United States Department of Agriculture (USDA) awarded SmarterBroadband a Rural Utilities Service (RUS) Broadband Initiatives Program (BIP) grant in September 2010. The $1.87 million grant (along with a loan of nearly $625,000) partially funded an effort to provide high-speed broadband access via fixed wireless technology to more than 435 square miles in western Nevada County, with download speeds of 6 Mbps or higher throughout the entire area.[10] The Bright Fiber Project application area encompasses an estimated six percent of the total SmarterBroadband RUS BIP project area. SmarterBroadband recently informed the USDA that construction on the project has been completed,[11] but has not submitted a

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[8] CalSPEED tests were conducted in April and August 2013.

[9] SmarterBroadband also provided speed tests from customers who are currently signed up for plans below 6 Mbps download or 1.5 Mbps upload that indicated broadband should be available at served speeds should the customer choose to subscribe to a higher-speed plan.

[10] http://www.rd.usda.gov/files/reports/RBBreportV5ForWeb.pdf, page 17. Accessed November 30, 2015.

[11] E-mail from Peter Aimable, Deputy Assistant Administrator, Portfolio Management and Risk Assessment Division, Rural Utilities Service, USDA, on Sept. 9, 2015

final completion report. Therefore, there is no evidence of additional subscribers receiving broadband at served levels.[12]

Late in 2014, another wireless ISP named ColfaxNet also informed CD staff that it offered service in the proposed Bright Fiber Project area and wished to challenge the application although the formal window had passed. In the course of exercising due diligence, CD staff investigated the claim. ColfaxNet provided coverage maps and speed tests that suggested it did offer served speeds in part of the southern part of the proposed Bright Fiber Project area. Staff initially verified 116 existing ColfaxNet customers in the proposed project area as receiving "served" speeds or higher, then discovered an additional 22 households had been served subsequent to the draft release of this resolution. As a result, CD staff asked Bright Fiber to remove from its proposed budget the costs of providing service to 138 households; that deduction is included in the number of eligible households in the project area.

After reviewing the challenges and removing households where service from the challengers could be confirmed, CD determined that the remainder of Bright Fiber's proposed project area meets the requirements of D.12-02-015 and qualifies for funding as an underserved area.

IV. Discussion

This Resolution affirms that the Bright Fiber Project meets the rules for applicants to the CASF program and adopts CD's recommended award of ~~$16,156,223~~ $16,086,789 in a CASF grant ~~and a loan for $500,000~~. The grant amount represents ~~59.3~~ 60 percent of the applicant's estimated total project cost of ~~$27,232,418~~$26,811,315~~, while the loan amount represents about two percent.~~ Key project information and maps are shown in Appendix A.

A. Project Overview

The Bright Fiber Project will extend gigabit high-speed internet service to an estimated 1,941 households spread amongst about 21 square miles in underserved Nevada County communities, generally between the outskirts of Grass Valley and Colfax, including the communities of Chicago Park and Peardale, which are CASF "priority areas" as

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[12] Following the submission of the completion report, USDA plans to send field staff into the area to confirm SmarterBroadband's assertions.

declared in Resolution T-17443.[13] The proposed project would also provide redundant broadband infrastructure in the area that would potentially provide additional benefits to educational, medical, and public safety entities.

Bright Fiber was established as Spiral Studios, Inc. in 2006 and, under the name "Spiral Internet," currently resells DSL and dial-up Internet access over the AT&T copper network in western Nevada County, Sacramento, Woodland, and Davis. The company was officially rebranded as Bright Fiber, Inc. (dba Spiral Internet, Inc.) in July 2015. The company is headquartered in Nevada City and also offers e-mail and web hosting services.

This project's original applicant was an entity known as Bright Fiber, LLC, a subsidiary company from Spiral Internet Inc. (now known as Bright Fiber, Inc.) that was established solely to build and manage this project. In fact, the CPUC awarded Bright Fiber, LLC a Certificate of Public Convenience and Necessity (CPCN) for that purpose in May 2015 (D.15-05-028). Subsequent to awarding the CPCN, however, the applicant changed its business model and now plans to maintain management of this project and its network with the parent company. Bright Fiber, *Inc.* has dissolved Bright Fiber, *LLC* and filed an advice letter[14] to transfer the CPCN (U-7287C) to the parent entity. CD approved the transfer of the CASF application to Bright Fiber, Inc. on August 5, 2015, and the CPCN transfer was effective as of August 31, 2015.

If this project is approved, Bright Fiber would connect into the CASF-subsidized Central Valley Independent Network, LLC middle-mile project (approved in Resolution T-17295) for backhaul[15] and then distribute fiber capable of symmetrical 1 Gbps download/upload throughout the community via an active Ethernet network over single-mode fiber.[16] ~~primarily underground for resiliency. Bright Fiber contends~~

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[13] Approved June 27, 2014. Per Resolution T-17443, the regional consortia identified priority areas based on several considerations, including: social and economic impact, feasibility, anchor institutions, income levels, opportunities for resource management, and number of households without broadband access at served speed.

[14] Bright Fiber Network Advice Letter No. 2, Aug. 19, 2015.

[15] Bright Fiber also plans to connect with Inyo Networks' planned Trans-Sierra middle-mile project, for which a CASF grant was applied on June 3, 2015, for extra backhaul if and when that network is constructed. This would be a supplementary connection and is not necessary for Bright Fiber's operations.

[16] Single-mode fiber is more expensive than "multimodal" fiber, but is better at retaining fidelity of each light pulse over longer distances, resulting in better speeds for end users. Moreover, an active Ethernet

~~underground deployment is essential because of weather factors, tree density, the obsolescence of existing poles and unorthodox pole attachments (e.g., wires attached to trees) for existing wireline networks in the area.~~

This proposed project is part of a larger plan with a footprint of about 49 square miles. Bright Fiber is *not* seeking a CASF grant for the majority of that footprint because those areas are "served" by other providers. The figures in this resolution refer *only* to the areas of the greater Bright Fiber Project that have been determined to be underserved or unserved by existing broadband service and are thus eligible for a CASF grant.

As originally proposed in 2013, the subsidized portion of the project would have served an estimated 3,200 households and businesses spread out over 26.2 square miles, using about 150 miles of fiber. At the time, the applicant was requesting a $16,566,311 grant. Validated challenges and other staff analysis through September 2015 dropped the subsidized area of the proposed project to its current dimensions of an estimated 1,963 households spread out over about 21 square miles.

Bright Fiber is now seeking a CASF grant in the amount of ~~$16,156,323~~ $16,086,789 which is ~~59.3~~ 60 percent of the total estimated project costs, to match investor and in-house funding of ~~$10,576,095~~ $10,724,526. ~~In addition, Bright Fiber requested and has been pre-qualified for a CASF Infrastructure loan of $500,000~~. The current funding request reflects the new boundaries and household count of the project as well as the results of approximately 32 months of inflation, updated labor costs,[17] and the fact that a large share of the budget is devoted to extending fiber lines to serve neighborhoods rather than the costs of providing service to individual households.

When completed, the project will provide all customers within the project area with broadband infrastructure capable of achieving speeds of 1 Gbps on both downloads and uploads – well above the Commission-defined "served" threshold of 6 Mbps download/1.5 Mbps upload. The CASF per-household grant subsidy would be about $8,288 ~~$8,324~~ per household – roughly 2.35 times the mean grant-per-household of all

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network ensures each customer has a dedicated connection to the distribution point, meaning neighbors subscribing to Bright Fiber's service are not sharing a connection and slowing each other down.

[17] Labor costs for CASF projects have tended to rise over time because of various factors, including Section 1720 of the California Labor Code, which was amended in 2014 to define CASF-subsidized projects as "public works," subjecting them to prevailing wage requirements.

previously approved projects.[18] When considering only fiber projects, however, the per-household cost is 14 percent less than the approximately $9,500 mean of the 10 fiber-to-the-premises projects approved by the Commission since the 60-percent CASF grant threshold was established in 2012.

Bright Fiber has committed to a single-tier broadband pricing plan under the terms shown in Table 1 for two years, starting from the beginning date of service. There is no long-term commitment required from subscribers.

Table 1

Service Type	Broadband speed	Monthly charge: Standalone BB
Residential Broadband	Up to 1 Gbps down / 1 Gbps up	$119
Low-income customers*		$25
Activation and installation (all service levels): Waived.		
Modem charge: No monthly residential equipment fee.		
Small business plan: $169 a month for one 1Gbps connection, $239 for two connections.		

* Low-income households referred by County human services agencies and non-profits.

B. Project Qualification

To qualify for the CASF program, an applicant is required to submit proof that the area is unserved or underserved by submitting shapefiles of the proposed project. CD reviews the submitted shapefiles and compares them with United States Census data and the California Interactive Broadband Availability map.[19] Once CD determines that the area is eligible either as an unserved or underserved area, CD evaluates all other information the applicant has submitted to determine if the project meets the requirements outlined in D.12-02-015. CD reviews other information including: proof that the applicant has a CPCN (if applicable); descriptions of current and proposed broadband infrastructure; number of potential subscriber households and average

[18] The mean grant-per-household of all previously approved last-mile applications was $3,531 per household. It should be noted that a majority of prior projects used less expensive fixed wireless or DSL technologies using existing infrastructure, rather than fiber, which is more expensive but provides much faster speeds to the end user, and CASF grants were limited to 40 percent (rather than the current 60 to 70 percent) of project costs prior to the Feb. 1, 2012, approval of D. 12-02-015.

[19] In this case, an older version of the California Broadband Availability Map, with data current as of Jan. 1, 2014, was consulted because that was the most-current map available at the time the challenges were analyzed. A re-examination of current Map data shows only non-substantial changes in the coverage levels.

income; project construction schedule; project budget; proposed pricing and commitment period for new subscribers; and financial viability of the applicant.

CD also analyzes applications in light of any challenges the CPUC receives. The Bright Fiber Project area was challenged by Comcast, SmarterBroadband, Suddenlink, Verizon Wireless and ColfaxNet. After reviewing the application, data included in the California Interactive Broadband Map and information the challengers submitted, CD concluded that some areas are served by the providers listed above and therefore ineligible for funding consideration, while other areas should be considered underserved and eligible for funding consideration as discussed in Section III above.

While fixed wireless carriers claim to serve, or claim they shortly will serve, much of the proposed Bright Fiber Project area, line-of-site considerations in this area and staff's inability to independently verify service levels leave these claims unsupported.[20] Because staff cannot verify the claims from fixed wireless as required under PU code 281(b)(2), staff has concluded that the majority of territory in the region is underserved for the reasons outlined below.

A key limitation of fixed wireless technology is that the antenna at the consumer's premises and the provider's ground station must have a direct line of sight. CD staff's site visits and analysis revealed that the terrain and foliage in the proposed project area makes full fixed wireless coverage of the area unlikely, making the area, at best, only "partially" served.

The terrain in the proposed project area is both irregular, with many hills and valleys as is typical in the Sierra foothills, and heavily forested. Wireless propagation in such areas is negatively affected by the scattering effects of randomly distributed leaves, branches and tree trunks, which can cause attenuation, scattering, diffractions and absorption of fixed wireless radio signals.[21] In fact, SmarterBroadband's own website states, "Sometimes areas within the coverage area will not be able to receive service directly from an existing Access Point due to obstructions, mainly hills and/or trees. In these circumstances we can always get you service, by installing additional equipment to

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[20] Testing requires establishing a line-of-sight antenna link from the premise to another antenna or tower for each location. CD does not have the persons, proprietary equipment or expertise to engage in such testing.

[21] Meng, Y.S. & Lee, Y.H. (2010). Investigations of Foliage Effect on Modern Wireless Communications Systems: A Review. *Progress in Electromagnetics Research, 101*, 313-332.

provide coverage."[22] The website notes that such "additional equipment" would generally be at the customers' own costs.

Staff received propagation models from fixed wireless providers in the project area. Those models showed very limited coverage areas for line-of-sight transmission towers in the 2 GHz and up ranges needed for fast bandwidth. Propagation models for bands at and below 900 MHz showed much better coverage, but bandwidth in those ranges is generally at lower than served speeds, per CASF experiences. Fiber-to-the-premises, on the other hand, is not subject to terrain variability and Bright Fiber has committed to serve every household in the project area. This includes households where the distance from the drop to the household may be of an extended length.

After examining the issues related to fixed wireless coverage in the proposed project area and removing census blocks served by wired providers, staff determined the areas that remain should be considered underserved and therefore eligible for CASF funding.

The California Interactive Broadband Availability map shows broadband availability at served speeds in the proposed project area by several satellite providers. However, as adopted in D.12-02-015, the Commission does not generally consider satellite broadband service in CASF project evaluation, unless the satellite service was established via a CASF grant.[23]

C. Project Evaluation and Recommendation for Funding

The area proposed for this project is in southwest Nevada County, just southeast of Grass Valley and including the rural, unincorporated communities of Peardale, Chicago Park, Cedar Ridge and La Barr Meadows as well as the underserved outskirts of Grass Valley itself. Much of the project is oriented along State Highway 174, which continues south to Colfax. The topography is very hilly, with altitudes generally between 2,500 to 2,800 feet above sea level. Land use in the project area includes small residential and agricultural clusters, as well as second-growth coniferous forested areas.

The project crosses and bisects several census block groups, so compiling the exact economic and demographic makeup of the project area is difficult. The area, however, is

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[22] http://www.smarterbroadband.com/Availability.htm, accessed November 30, 2015.

[23] This determination was based on the known limited-speed capabilities of satellite services, the cost to the consumer, high latency, and unreliability at the time of the decision, D. 12-02-015 at 13-15.

typical of rural Nevada County, where the median annual household income is $57,353 (slightly below that of California as a whole) and 12 percent of the population lives below the poverty level.[24]

After removing areas and individual households with upheld challenges an estimated 1,941 households (with a population of around 4,000 persons) are eligible for the CASF grant/loan combination. Bright Fiber estimates about 90 percent of those households (1,747 homes) will eventually sign up for service.

Staff believes such a 90-percent "take rate" would be atypically high; hence, staff requested CD's loan servicing and administrative contractor, the State Assistance Fund for Enterprise, Business, and Industrial Development Corporation (SAFE-BIDCO) examine the financial data with smaller, more-realistic, take rates. With a 65-percent take rate (about 1,275 residential customers [25] in the area) in the fifth year of service, Bright Fiber is projected to run a small deficit. With a 70-percent take rate (1,374 customers), SAFE-BIDCO projected the project would be profitable in year five, but on a downward trend for year six. If Bright Fiber hits a 72-percent take rate, SAFE-BIDCO projected a sustainable profit into the future for the endeavor.[26] It should be noted that there are several hundred small-to-medium-sized businesses in the area that could also be customers and add to the profitability of the project, especially because they would be paying higher rates than residential customers.

Bright Fiber says it forecasts a very high take rate based on the conclusions of a 2012 feasibility analysis commissioned by the company. Bright Fiber's researchers recommended that the project serve the proposed area because of several factors, including: that roughly half of the area had landline telephone service from Verizon, which never deployed DSL; the other half was served by AT&T, but is far from central offices, resulting in low speed via DSL[27]; the area's geographic diversity and high

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[24] US Census Bureau: http://quickfacts.census.gov/qfd/states/06/06057.html, accessed November 30, 2015.

[25] The customer counts used here were calculated by SAFE-BIDCO prior to the removal of an additional 22 households from eligible funding in November 2015. The small additional number of households removed do not significantly affect the projections.

[26] These projections do not include any repayments or dividends to the private investors who will provide the project's matching funds. Per the applicant, these are long-term investments with no short-term payouts.

[27] The applicant also reports that AT&T is not accepting new DSL customers in the area. A check of several sample addresses in the area on the AT&T website seems to confirm both that assessment and that U-verse service is not widely available in the area.

forestation, which makes it extremely difficult for fixed wireless to reach the majority of households; and, there was no cable provider serving most of the area (either for TV or Internet).

Comparison of this project vs. fixed wireless: While staff considers the proposed project area underserved as a unit because of the limitations in fixed wireless coverage described in the previous section, the fact that at least some households can receive some level of service from fixed wireless providers cannot be discounted. Therefore, staff believes a direct comparison of the service proposed by this project and that provided by fixed wireless providers is warranted.

Staff's has concluded that Bright Fiber's proposal offers potential customers a system that would provide superior reliability, availability, speed, capacity, and value than possible through fixed wireless broadband providers, particularly given a topography that limits the availability of fixed wireless service to certain households in the project area. The availability and reliability limitations of fixed wireless as compared to this project were discussed in the previous section; the speed and value advantages of this proposed fiber project are described below.

Speed and capacity: Fiber-to-the-premise systems have significant speed and capacity advantages over fixed wireless systems. Most residential fixed wireless plans nationwide do not exceed 20 Mbps download speeds, as is the case from both major providers here. The Bright Fiber project will offer speeds up to 50 times faster than the fastest offered fixed wireless plans in the area, at a lower monthly cost per megabit (see table below).

A fiber network also has a significant advantage in terms of capacity over fixed wireless in any given area. Fixed wireless may be able to burst high speeds to a customer, but the more other customers are being served by the same antenna at the same time, the more wireless spectrum is required, and spectrum is in limited supply across the industry. Fiber networks are less susceptible to such congestion, with dedicated links available to each customer. Fiber networks have a capacity advantage over wireless networks because of the significantly greater frequency range that wired infrastructure is capable of carrying. Notably, the entire wireless radio frequency spectrum can fit into a single fiber with room to spare.[28]

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[28] Lehr, W. & Chapin, J. (2010). On the convergence of wired and wireless network architectures. *Information Economics and Policy, 22*, 33-41.

Furthermore, while the Commission has not adapted the FCC definition of "advanced telecommunications services" as being speeds of 25+ Mbps download/3+ Mbps upload as the CASF benchmarks, there have been legislative efforts to raise the CASF threshold[29] and more may arise. No service in the area currently advertises speeds of more than 20 Mbps down. See the *Value* section and Table 2 for further details on this topic.

As will be noted in the field visits section below, staff spoke with members of the area business community who stated their belief that a lack of true high-speed Internet service negatively affects their ability to compete with urban businesses.

Value: As Table 2, which lists both the minimum tier that meets CASF "served" requirements and the fastest residential tier available from fixed wireless providers in the area, shows, Bright Fiber offers a better value over the fixed wireless offerings in the project area, in terms of price per megabit (Mb), especially for low-income customers. Price per megabit is a commonly accepted metric for determining the value of broadband service and has been part of the CASF scoring metric since 2012.[30]

Table 2			
Provider (Tier)	**Down/Up (Mbps)**	**Monthly charge**	**Price per Mb**
Smarter Broadband (Basic Ultimate)	6/1.5	$49	$6.53
Smarter Broadband (15 Ultimate)	15/4	$199	$10.47
ColfaxNet (6)	6/6	$64.95	$5.41
ColfaxNet (20)	20/20	$150	$3.75
Bright Fiber (Basic)	**1,000/1,000**	**$119**	**$0.06**
Bright Fiber (Low Income)	**1,000/1,000**	**$25**	**$0.01**

As noted in the table, SmarterBroadband's speed offerings top out at 15 Mbps down/4 Mbps up at a cost of $199 per month ($10.47 per megabit[31]), with a 200 GB data allowance before additional usage charges apply. That speed is only available, however, as part of SmarterBroadband's "15 Ultimate" package, which necessitates a clear line of

[29] Such as Assembly Bill 238 (Stone), now a two-year bill set to be examined during the 2016 legislative session.

[30] D.12-02-015, Appendix 1 – *Revised Application Requirements and Guidelines*, page 23.

[31] Price per megabit speeds are determined by dividing the advertised price for that tier by the sum of the combined download and upload speeds (in megabits) and then rounding to the nearest cent.

sight to the customer. In certain rural areas, where special "restricted line of sight" equipment is necessary, SmarterBroadband's speeds top out at 1 Mbps down/384 Kbps up for $99 ($71.53 per megabit), with a smaller 30 GB data transfer allowance.[32]

ColfaxNet, which also serves part of the proposed area, also charges rates which are not competitive with the Bright Fiber Project offerings. For example, the minimum tier which meets CASF standards is a symmetrical 6 Mbps down/up plan that costs $64.95 per month ($5.41 per megabit). To reach a 20 Mbps download/upload speed, consumers are charged $150 per month ($3.75 per megabit). Both plans charge overage fees after 100 GB of data transfer.[33]

By contrast, Bright Fiber's symmetrical offering of 1 Gbps for $119 per month (6 cents per megabit) is about 67 times faster on downloads than SmarterBroadband's best residential offering, but only 60 percent of the cost. Bright Fiber's plan is also 50 times faster than ColfaxNet's best speed offering, but only 80 percent of the cost and with no set data usage cap.[34]

A further consideration regarding customer value is the fact that the definition of "served" speeds for the CASF program has been revised upward once before and efforts currently exist to raise it again. When the "served" threshold was changed from 3 Mbps down/1 Mbps up to 6/1.5, it had the effect of rendering some areas previously defined as "served" to now be "underserved." In at least two cases (Swall Meadows in Mono County and Sea Ranch in Sonoma County), areas that previously were awarded CASF grants were recently included in new grant applications because the updated definition of "served" has changed their prior "served" status to "underserved." If the Commission were to award this grant, the project area could essentially be "future-proofed" against such duplicative funding because the Commission would have to raise minimum download speeds to more than 166 times their current level before the area would be again considered underserved.

Site Visits: Staff twice made field visits to the proposed project area in summer 2013. Both independently and accompanied by Bright Fiber representatives, staff visited local

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[32] http://www.smarterbroadband.com/Pricing.htm, accessed November 30, 2015.

[33] http://www.colfaxnet.com/band/, accessed November 30, 2015.

[34] Bright Fiber has reserved the right to charge a business plan rate if it is determined that a particular location is using the connection for website hosting, data delivery applications, or operating high-bandwidth services (e.g. 24/7 video streaming), although there still is no cap. This is common procedure for many ISPs in CD's experience.

business parks, residential areas and public safety facilities. After leaving the municipalities of Grass Valley and Nevada City (which are in the larger project footprint, but not the area for which CASF funds are requested), staff members visited industrial parks, the Grass Valley Interagency (Fire) Command Center, and rural forested areas that transitioned to small agricultural areas as staff approached the southeast area of the proposed project. Staff made some general observations about the project area: The terrain was varied, generally heavily wooded and very hilly. There were cleared areas in the valleys through which major roads traversed, but generally homes in the area proposed for the CASF grant were up long side roads, invisible from the main highway because of foliage and terrain.

Staff spoke with representatives of the local business community, including denizens of small industrial parks, "mom-and-pop"-type business owners, and members of the local public safety and political sectors. All expressed a desire for better interconnectivity in the area, with multiple members of the local business community saying they believed a lack of fast broadband had cost them business.

Community Support: Multiple support letters from community members expressed similar sentiments. One resident's letter stated that, "Many residents still have dial-up access because of our high forestation and geographic diversity. These are areas that fixed wireless, cellular and satellite providers cannot reach."

The Commission received more than 20 letters and uncounted e-mails from local residents, businesses, community organizations and local government expressing support for the project. Among those providing support letters were:

- Nevada County Board of Supervisors (two letters, 2013 and 2015)
- Grass Valley City Council
- Nevada City City Council
- Nevada County CIO
- Sierra Business Council
- Sierra Economic Development Corporation
- Nevada County Economic Resource Council
- Nevada County Contractors' Association
- Nevada County Association of Realtors
- Sierra Nevada Memorial Hospital
- Sierra Nevada Memorial Hospital Foundation
- Nevada County Superintendent of Schools
- Sierra Community College
- California State Assemblyman Rich Gordon

- MAC Labs, local business
- Fiber to the Home Council
- Several private citizens

~~*Loan Approval:* In making its determination to fund the loan portion of Bright Fiber's funding request, CD utilized the services of its loan servicing and administrative contractor, SAFE-BIDCO, to conduct the underwriting phase of the review. Based on its thorough review of Bright Fiber's application, including forecasted economic returns, SAFE-BIDCO recommended funding the loan – with the caution that the project's profitability after five years is largely dependent upon the 72-percent take rate outlined in section IV-C.~~

~~Per standard lending rules applied by SAFE-BIDCO in the underwriting review of loan applicants, a personal guarantee is generally required from the owners and/or principals of privately-held corporations who have 20 percent or more ownership to properly underwrite the loan request. CD recommends waiving the requirement for personal guarantee from the principles of the company in this instance based on the following:~~

~~1. SAFE-BIDCO's underwriting results show that Bright Fiber, as a company, is able to service debt.~~
~~2. The loan will be 100-percent secured by a performance bond.[35]~~

~~The loan is subject to the conditions listed in D.12-02-015, D.14-02-018, Resolution T-17369, Resolution T-17443 and the loan agreement documents required to be signed by the borrower. As adopted in item No. 6 (Loan Closing), section E, Appendix 2 of D.12-02-015, once the Commission approves the loan via a resolution, the borrower must sign a loan agreement document that contains all the terms and conditions of the loan. If the borrower does not sign the loan agreement document, the Commission will not execute the loan and will revoke the loan offer. Bright Fiber cannot withdraw loan funds without a signed loan agreement in place. The loan will be a five-year term loan, fully amortized. The interest rate will be fixed at the U.S Prime Rate at loan closing. The borrower will have up to four disbursements to draw down funds, based on meeting Commission-approved project key milestones. The funds must be drawn down within two years of loan approval.~~

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[35] Resolution T-17431 for Surfnet Communications' Monterey Dunes project established a precedent of not requiring a personal guarantee if the project is 100-percent secured by a performance bond.

Priority Areas: The Gold Country Broadband Consortium has designated two communities in the proposed project area as "priority areas" – Chicago Park and Peardale. These priority areas were named at the March 2014 CASF Consortia Summit in Sacramento and confirmed by the Commission as part of Resolution T-17443 on June 27, 2014.

Scoring: CD evaluated the application with respect to the scoring criteria defined in D.12-02-015, Appendix 1, Section VIII (Scoring Criteria). The scoring criteria include: (i) Funds Requested per Potential Customer, (ii) Speed, (iii) Financial Viability, (iv) Pricing, (v) Total Number of Households in the Proposed Area, (vi) Timeliness of Completion of Project, (vii) Guaranteed Pricing Period, and (viii) Low-Income Areas.

The Bright Fiber Project scored particularly well as compared to previously approved CASF projects because it proposes to offer very high speeds at a low-cost-per-megabit. In terms of costs per household, the Project comes in significantly higher than most, with a projected subsidy of $8,324 per household, as compared to the median of just over $3,521 for all previously approved projects. The project is, however, slightly less expensive on a subsidy-per-household basis than the 10 fiber-to-the-premise projects approved since February 2012.

CD found that the Bright Fiber Project meets CASF funding requirements with respect to the following factors:

- Speed – the proposed speed offering of 1 Gbps download and 1 Gbps upload significantly exceeds the benchmark set by the Commission;
- Service area – is determined to be underserved and covers approximately 21 square miles;
- Matching Funds of 40 percent of project cost – the applicant has certified that it has access to sufficient matching funds to complete the project; the submitted balance sheet, income and cash flow statements show that the applicant is financially viable and has the financial capability to match the funds;
- Price commitment period – the applicant has committed to a pricing plan of two years as required;
- Deployment schedule – the applicant has confirmed with its construction manager that the project will be finished within the 24-month construction timeline required.

CD staff finds that funding the Bright Fiber Project aligns with CASF's goal to encourage the deployment of high-quality, advanced information and communications

technologies to all Californians in order to promote economic growth, job creation, and substantial social benefits.

D. Safety considerations

While no public safety anchor institutions are located within the adjusted boundaries of the project, several private medical facilities stand to benefit from the increased bandwidth of the Bright Fiber Project.

Moreover, the infrastructure Bright Fiber would install could potentially facilitate the community's interaction with first responders and health care professionals by supplying ubiquitous broadband service and providing supplemental telecommunications infrastructure in a largely rural area. In fact, the Grass Valley Interagency Command Center, which serves as a Public Safety Answering Point (PSAP) and dispatch center for Cal Fire and US Forest Service ground and aviation firefighting units in the region, is located directly across the street from the subsidized boundaries of this project.[36] During a field visit, staff spoke with the on-duty watch commander, a battalion chief who related a mid-2013 outage of the Center's primary Internet provider and indicated that the Center might benefit from the redundancy Bright Fiber could provide.

Any voice service that Bright Fiber might eventually provide (see section V-G, below) would be required to meet all applicable safety standards, including battery backup, E911 data and access to local PSAPs.

V. Compliance Requirements

Bright Fiber is required to comply with all the guidelines, requirements, and conditions associated with the grant of CASF funds as specified in D.12-02-015. Such compliance includes, but is not limited to the following:

A. California Environmental Quality Act (CEQA)

All CASF grants are subject to CEQA requirements unless the project is statutorily or categorically exempt pursuant to the CEQA Guidelines.

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[36] While the Center, located at the Grass Valley Airport, is not within the area of the project for which Bright Fiber is seeking a CASF grant, it is within the larger planned footprint of the overall project.

In Resolution T-17565 issued May 16, 2017, the Commission: reviewed the Proponent's Environmental assessment prepared by Bright Fiber; found the project to be categorically exempt from review pursuant to the California Environmental Quality Act (CEQA) - California Public Resources Code Sections 21000 et seq.; and approved release of funds for construction of the project.

~~Bright Fiber has provided the Commission with basic construction plans for the proposed project area. All fiber placements would be within Nevada County and Caltrans rights-of-way previously disturbed by multiple underground placements and would result only in minor trenching and backfilling where the surface is restored. As a result, the company believes the project should qualify for the following categorical exemption from CEQA: CEQA Guidelines Section 15304 – Minor Alterations to land.~~

~~Commission Energy Division staff will make the ultimate ruling on whether the project needs a full CEQA analysis after submission of a Proponent's Environmental Assessment (PEA), but before construction begins. Should ED recommend that a full CEQA analysis is required, the applicant may either pay for the analysis itself or seek a supplemental CASF grant to cover 60 percent of the cost.~~

B. Deployment Schedule

The Commission expects Bright Fiber to complete the project within 24 months from start date (as determined by the procedure in the next paragraph). If the applicant is unable to complete the proposed project within the 24-month timeframe requirement, Bright Fiber must notify the CD Director as soon as it becomes aware of this possibility. If such notice is not provided, the Commission may reduce payment failure to satisfy this requirement.

C. Execution and Performance

CD and Bright Fiber shall determine a project start date after Bright Fiber has obtained all environmental and permitting approvals. Should Bright Fiber, or any contractor it retains, fail to commence work by the designated date, upon five days written notice to the Bright Fiber, the Commission may terminate the grant. In the event that Bright Fiber fails to complete the project in accordance with the terms of CPUC approval as set forth

in this resolution, Bright Fiber shall reimburse some or all of the CASF funds that it has received.[37]

Bright Fiber must complete all construction covered by the grant on or before the grant's termination date.

D. Performance Bond

Consistent with CASF Guidelines, Race Telecommunications, the parent of Bright Fiber, certifies that it has all the necessary funds for the 40% match of the grant. The revised project will cost $26,811,315 of which CASF Infrastructure Grant funding is $16,086,789; the Bright Fiber match is $10,724,526. Therefore, the performance bond requirement will be waived.

~~Because the matching funds for this project do not come from an existing capital budget, the applicant must send an executed bond, equal to the total amount payable under the CASF award,[38] to the CPUC's Executive Director and to the Communications Division Director within five business days after submission of the PEA. The performance bond must be callable for failure to complete the CASF-funded broadband project.~~

~~Should the applicants complete the project and front-end all the project costs before requesting reimbursement, the performance bond requirement will be waived.~~

E. Price Commitment Period

The minimum required price commitment period for broadband service to all households within the project area is two years, under program rules. Bright Fiber guarantees the price of service offered in the project area for two years.

F. Project Audit

The Commission has the right to conduct any necessary audit, verification, and discovery during project implementation/construction to ensure that CASF funds are spent in accordance with Commission approval.[39]

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[37] The Commission has the authority to enforce the terms and conditions of the grant award and to impose penalties under §§ 2111 and 2108. (See D.14-02-018, p. 36.)

[38] A CASF award includes both the grant and loan amounts.
[39] Pub. Util. Code 270

The recipient's invoices will be subject to a financial audit by the Commission at any time within three years of completion of the work.

G. Providing Voice Service

While Bright Fiber will not initially offer VoIP services as part of the Bright Fiber Project, the company wrote in its application for a CPCN that it intends to offer its customers local exchange voice, access, and other voice services once it reaches a "certain critical mass" of subscribers. In the meantime, customers will be able to use Internet-based third-party services that connect to traditional voice services (*e.g.*, Google Voice, Skype, Vonage, *etc.*) over this infrastructure.

Should Bright Fiber begin to offer voice service, Bright Fiber will be required to adhere to all FCC requirements in regards to E911 service and must provide equipment with battery backup.

H. Reporting

All grantees must submit quarterly progress reports on the status of the project irrespective of whether grantees request reimbursement or payment. Before full payment of the project, Bright Fiber must submit a project completion report. Progress reports shall use the schedule for deployment, major construction milestones and costs submitted in the proposal; indicate the actual date of completion of each task/milestone as well as problems and issues encountered, and the actions taken to resolve these problems and issues during project implementation and construction; and identify future risks to the project.

Recipients shall also include test results on the download and upload speeds on a CBG and zip code basis in the final completion report. Bright Fiber must certify that each progress report is true and correct under penalty of perjury.

I. Submission of Form 477

The FCC currently requires broadband providers to biannually submit Form 477, which includes speed data. While there is an imperfect match between the data that is reported in Form 477 and to the CASF, the Form 477 data will be useful in documenting CASF deployment for the service provider's new service. Pursuant to General Order 66-C, service providers in California must submit a copy of their Form 477 data directly to the CPUC, concurrent with their submission of the same data to the FCC. CASF recipients

must continue to submit their Form 477 data for a five-year period after completion of the project.[40]

VI. Payments to CASF Recipients

Submission of invoices from and payments to Bright Fiber shall be made at 25-percent completion intervals, in accordance with Section XI of Appendix 1 of D.12-02-015 and according to the guidelines and supporting documentation required in D.12-02-015.

Payment to Bright Fiber shall follow the process adopted for funds created under P. U. Code §270. The Commission generally processes payments within 20-25 business days, including CD and Administrative Services review time. The State Controller's Office (SCO) requires an additional 14- 21 days to issue payment from the day that requests are received by SCO from Administrative Services.

VII. Areas of Concern

Note this resolution was revised by Resolution T-17633. These concerns may not be relevant to the revised project.

CD has identified certain aspects of this project that raise concerns unique to this project and which prompt its staff to make additional cautions pertaining to this particular project.

CD is concerned that the required five-years of financial projections from the applicant show no repayment of investors. Bright Fiber's application states that the investors would be buying equity stakes rather than loaning the company money, yet there is no provision in the financials for dividends or any other shareholder benefit in the short term. Given that there is no debt repayment consideration, staff is concerned that the grantee may respond to investor pressure for returns by selling the network in order to repay shareholder investment, with no guarantee that the buyer would continue to use the network as intended in this grant.

Specifically, the total budget for this project is $27.2 million (more than $16.3 million of which would be granted by the Commission), with about $10.9 million to be financed by outside investment, including the CASF loan. Upon completion, if the grantee sold the network at just half price ($13.6 million), the grantee could still repay the private

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[40] *Approval of the California Advanced Services Fund (CASF) Application Requirements and Scoring Criteria for Awarding CASF Funds* (2008) Cal. P.U.C. Res. No. T-17143 at 4.

investors the face value of their investments plus a 15-percent return, repay the CASF loan with interest, and retain $1.25 million in profit.[41]

CD is equally concerned that Bright Fiber's financial projections rely on a high take rate of 90 percent, and SAFE-BIDCO's projections show the project needs at least a 72-percent take rate to maintain profitability. Typical project take rates have tended to be lower, with a recent FTTP CASF project in a comparable demographic area reaching only 33 percent after more than a year in operation.[42] Accordingly, staff sees a reasonable possibility that Bright Fiber will miss financial targets if it does not achieve a high take rate, putting the financial viability of the project into question.

Additionally, the project's CEQA status is uncertain. Generally, CASF projects are either declared exempt from CEQA or declared subject to CEQA prior to Commission approval of the application. Bright Fiber has stated that it expects this project to be categorically exempt from CEQA requirements because it only involves "minor alterations" to land. The Energy Division (ED) has studied the information Bright Fiber provided, but is not ready to grant an exemption, citing the uncertainties involved with the laying of 140 miles worth of fiber. Instead, Bright Fiber will be required to conduct a detailed PEA prior to ED's determining the project's CEQA status. While ED might grant the categorical exemption after review of the PEA, it is also possible that the ED may instead deny the exemption and require a full environmental impact report (EIR). Both the PEA and an EIR, as well as any required mitigation measures in those documents, would add extra costs to the total project budget. The ability of Bright Fiber to contribute further to the project's environmental costs, either by borrowing or requesting additional CASF funds, is uncertain.

Further, SmarterBroadband recently informed the USDA that it had completed construction on its RUS BIP project, which includes in its boundaries the proposed Bright Fiber Project area. While SmarterBroadband has not yet submitted its completion report, it is clear given its requirement for customers to incur the cost of extending availability of service that it has the same limitations as other fixed wireless services.

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[41] Because it holds a Certification of Public Convenience and Necessity (CPCN) from the CPUC to provide telecommunications services, Bright Fiber is required to fulfil all relevant obligations of a public utility, such as those under Public Utilities code Section § 851. That provision prohibits a public utility from selling, leasing, assigning, mortgaging, or otherwise disposing any part of its plant, system, or other property necessary or useful in the performance of its duties to the public without having secured an order from the Commission authorizing it to do so. Accordingly, if Bright Fiber pursues a sale of assets funded in part by CASF dollars, it must seek CPUC approval before any deal for those assets can close.

[42] Subscriber numbers for particular projects are proprietary, so the example must remain unnamed here.

Nevertheless, should that report declare ubiquitous availability within the project area it would result in an impression that this Bright Fiber grant resolution would result in double funding, albeit by different state and federal government agencies.

Finally, because no fixed wireless provider applied for a CASF grant in the Bright Fiber project area, it is unknown precisely how much less it would cost to incrementally provide ubiquitous fixed-wireless broadband availability in the project area. However, a fixed wireless solution could be a magnitude of 10 times less expensive than that proposed in the instant project.[43]

VIII. Comments on Draft Resolution

In compliance with Public Utilities Code § 311(g), a notice letter was e-mailed on November 2, 2015, informing all parties on the CASF Distribution List of the availability of the draft of this resolution for public comments at the Commission's 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 one opening comment, from ColfaxNet, on November 12, 2015. The Commission also received one reply comment, from Bright Fiber, Inc., on November 18. The points raised in the comments are summarized below.

ColfaxNet wrote that this resolution should not be approved because its approval would have a "significant detrimental impact" on the company and would "effectively destroy a family-owned, privately financed business with an unregulated, State-funded monopoly."[44] The comment also claimed the draft resolution lacked "full and complete" information as to how the Bright Fiber Project would affect ColfaxNet.

Bright Fiber's reply comments requested the Commission approve the resolution as drafted and called ColfaxNet's comments "a thinly veiled protest against a new competitor with superior and innovative technology."[45] Bright Fiber claimed that ColfaxNet's comments failed to find a factual, legal, or technical error in the draft

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[43] On May 31, 2015, Cal.Net filed four CASF fixed-wireless project applications seeking grant funding ranging from $421 to $727 per household. These projects are in Alpine, El Dorado, Mariposa, and Tuolumne counties.

[44] Comment from ColfaxNet, November 12, 2015.

[45] Reply Comment from Bright Fiber, November 18, 2015.

resolution. Bright Fiber also identified what it says are errors of fact in ColfaxNet's comments, which will be addressed below.

Specifically, ColfaxNet's comment listed the following concerns:

- *Project boundary map incorrectly identifies "unserved" areas* – ColfaxNet claims that the map attached as Appendix B in the draft resolution does not reflect its existing service and specifically does not reflect the 32 speed tests it provided to CD.

  CD dismisses this claim because the map is clearly labeled "Existing *Wireline* Served Level," indicating it only reflects "wired" service (*e.g.*, cable, DSL and fiber connections). Staff chose to include the wired map, as opposed to an overall service level map, because, as noted in section IV of this resolution, wireless providers claim to serve virtually all the proposed project area. Given the general limitations of fixed wireless service and the technology's inability to serve 100 percent of households within fixed-wireless service territories, as noted in this resolution, CD believes the "Wireline" map more accurately reflects service availability.

- *More than 238 ColfaxNet customers will be affected by the project* – ColfaxNet claims it now has 138 customers (22 more than in the original draft) at served speeds within the proposed Bright Fiber Project area and that about 100 customers outside the areas are served by customer-hosted transmitters within the proposed project area. ColfaxNet has concerns that should those customers currently hosting transmitters (often in exchange for free or reduced-cost Internet service) choose to sign up with Bright Fiber, the customer may no longer wish to host a transmission site, causing other customers outside the area to lose service.

  Bright Fiber's reply comments said that customers added in 2015 should not be removed from the project, particularly because this application has been pending since early 2013. Bright Fiber said it is unreasonable for CD to remove customers from its application every few months as it winds its way through the application process and that projects have a "cut-off date" after which the analysis is frozen.

  CD acknowledges the 22 additional customers picked up by ColfaxNet and as a result has reduced the number of eligible households from 1,963 to 1,942 and, accordingly, has reduced the grant amount from $16,339,451 to

$16,156,323.[46] While CD sympathizes with the customers who could potentially lose service if a former customer no longer wishes to host a transmitter, it is outside Staff's charge to address this issue. Moreover, CD notes ColfaxNet has the option of compensating current transmission site owners with means other than free Internet, such as monetary payment.

- *Wireless limitations mentioned in draft resolution are not significant* – ColfaxNet claims that the draft resolution overstated the limitations of fixed wireless service. ColfaxNet mentions it has no problems with factors such as weather and power (which were not even mentioned in the draft resolution), and that in terms of foliage, "the taller the better" because tall trees can act as sites for transmitting and receiving towers.

  CD dismisses this interpretation and stands by its original assessment. The draft resolution was put together after studying scientific, peer-reviewed papers on the topic, speaking with engineers, and simulating radio wave propagation in the proposed project area. While a tree-to-tree solution may benefit some customers, it is improbable that all customers would have the ability and desire to string wires from their homes to trees. Moreover, the placement of radio towers in trees carries with it uncertain safety and local permitting issues, nor would the presence of tall trees negate the fact that irregular terrain predominates in the Sierra foothills.

- *The project does not protect ColfaxNet's existing footprint* – ColfaxNet notes that the "footprints" of wired providers such as Comcast and Suddenlink were removed by CD from the proposed area and seemingly the only difference between it and those companies seems to be that they use physical wires. ColfaxNet says it "faces a potential loss of a substantial amount of its client base, while larger providers get the protection of exclusion from potential customer predation."

  CD counters that the nature of fixed wireless networks is very different from that of wired networks, as described in Section IV-B. Comcast and Suddenlink have satisfactorily proven to the Commission that they can serve 100 percent of households in the area, whereas the nature of the

[46] CD multiplied the estimated per-household subsidy of $8,324 by 22 to arrive at a deduction of $183,128 from the original request.

terrain makes ubiquitous fixed wireless coverage in the proposed project area unlikely. Therefore the methodology used is appropriate.

- *The Draft Resolution comparison of price per Mbps is inaccurate* – ColfaxNet claims that: 1.) No existing hardware or software can use the full 1 Gbps capacity of fiber optic lines; 2.) ISPs tend to price services differently based on different bandwidth levels; and that, 3.) The maximum throughput of Bright Fiber assumes direct connection of the fiber to the computer. Therefore, ColfaxNet says, Bright Fiber's maximum bandwidth is "theoretical, undefined, and presently unusable."

  Bright Fiber wrote in response that it is building an active Ethernet network that will provide 1 Gbps speeds to all customers at all times.

  CD disagrees with ColfaxNet's assessment thusly: Bright Fiber has committed to provide a single service tier, that of symmetrical 1 Gbps, both down and up. Content and consumer hardware issues are not within the scope of Bright Fiber or the Commission. Moreover, even should Bright Fiber offer a lower-speed tier in the future, all previous CASF projects have used the maximum available speed as the project's benchmark. Finally, as with all CASF projects, the bandwidth is measured at the point of interconnection to the premise.

- *The estimated "take" rate of the project is unreasonably high* – ColfaxNet claims that the take rate is unrealistic and that methodology used by CD would allow homes excluded for fixed wireless claims to also be included as counting toward the 72/90 percent thresholds used in the financial estimates.

  CD concurs with this assessment and specifically highlighted the issue in Section VII of this resolution. CD does note, however, that this application has received an unusually high number of support letters from residents in the affected community, as well as significant local government and business support.

- *Use of a CPCN is inappropriate for this project* – ColfaxNet claims that because Bright Fiber is an ISP, it does not fall within the definition of a "public utility," nor is it regulated as such. Therefore, Bright Fiber's ability to gain access to easements using its CPCN is an inappropriate "grant of public use for private gain."

Bright Fiber says it applied for a CPCN because it was a requirement of the program at the time of application. Although a CPCN is no longer necessary, Bright Fiber says it is appropriate for the company because it intends to operate as a competitive local exchange carrier once it has an adequate customer base.

Seeing as these general issues were debated and dealt with by the Commission in Application 13-03-010,[47] which granted Bright Fiber its CPCN, CD dismisses the CPCN issue. Moreover, a CPCN is not required to apply for or receive CASF funds, nor is the utilization of its CPCN a major aspect of Bright Fiber's short-term plans.

- *Project lacks regulation and oversight* – ColfaxNet notes that Internet service providers are not currently subject to regulation as public utilities. Specifically, it notes that while Bright Fiber is required to commit to its prices for two years, it is not expected to be profitable for five, raising the possibility that Bright Fiber may raise its prices significantly after the two-year price commitment is up.

  CD agrees that Bright Fiber is allowed to change its prices and service offerings after the two-year commitment required under CASF rules.

- *The effect of the project is a State-sponsored monopoly* – ColfaxNet contends it will not be able to compete with Bright Fiber's project because: 1.) "The difference between service speeds eliminates ColfaxNet as a competitor (despite meeting current minimum service levels)," and 2.) "There is no provision in the draft resolution to allow ColfaxNet competitive access to this publicly funded program."

  Bright Fiber's reply comments called ColfaxNet's comments in this regard a legal error and cited several FCC rulings that ensured broadband service is competitive in the United States.

  CD agrees that ColfaxNet and other wireless providers would be at a competitive disadvantage to Bright Fiber's network. It disagrees that fixed wireless providers could not compete at all. For example, to a family needing only modest bandwidth at a low price point, ColfaxNet and/or SmarterBroadband's current offerings would be very competitive. CD also

[47] Approved May 7, 2015.

disagrees that ColfaxNet does not have "competitive access to this publicly funded program." Fixed wireless providers have previously applied for and been granted CASF funds,[48] and there are, in fact, a number of fixed wireless applications currently under analysis.

In short, while the Commission believes that some of ColfaxNet's comments have merit, none change the Commission's opinion that fixed wireless service is insufficient to serve the area. This opinion is centered on the limitations of fixed wireless technology as described in Section IV-B and corroborated by the high level of community support for Bright Fiber's project. Therefore, while CD has adjusted the number of eligible households (and thus the grant) downward as a result of these comments, the Commission otherwise declines to further modify the resolution.

IX. Findings

1. On May 10, 2012, the Commission approved Resolution T-17362 which established the application deadlines for the CASF Broadband Infrastructure Grant Account and the Revolving Loan Account as follows: October 1, 2012, for unserved areas; February 1, 2013, for underserved areas not previously funded by the CASF and hybrid projects that cover both unserved and underserved areas.

2. In October 2017, AB 1665 became law. In compliance with that statute, the remaining CASF loan funds were moved to the CASF Infrastructure Grant account and the program has been eliminated.

3. Bright Fiber filed an application for CASF funding for its Bright Fiber Project on February 1, 2013. The proposed project will improve speeds by installing a fiber-to-the-premise system capable of symmetrical 1 gigabit-per-second download/upload service to 1,941 households in rural Nevada County. This system would provide broadband Internet service to an area that is currently underserved by landlines and has a mix of underserved and unserved coverage from wireless providers. The 18 CBGs impacted by the project are outlined in Appendix A.

[48] Most recently to Shasta County Telecom, in Resolution T-17439 on June 26, 2014.

4. CD posted the proposed project area map, CBGs and zip codes by county for the Bright Fiber Project on the Commission's CASF webpage under "CASF Application Project Summaries" on February 22, 2013. CD received multiple challenges to this project, as outlined in Section III of this resolution.

5. CD reviewed and analyzed data submitted for the Bright Fiber Project's CASF grant application to determine the project's eligibility for CASF funding. This data included, but was not limited to: proof of a CPCN from the Commission; descriptions of current and proposed broadband infrastructure; geographic information system (GIS) formatted shapefiles mapping the project areas; assertion that the area is underserved; number of potential subscriber households and average incomes; project construction schedule; project budget; proposed pricing and commitment period for new subscribers; and financial viability of the applicant.

6. CD reviewed the submitted shapefiles, which mapped the proposed broadband deployment using United States 2010 Census data and the most-current California Broadband Availability Maps at the time of application. These maps helped to verify the availability and speed of any broadband service, where available. After removing areas deemed served by other wireline providers, the remaining project area was determined to be underserved by mobile and wired service, and served insufficiently by fixed wireless service.

7. Based on its review, CD determined that the project qualifies for funding under D. 12-02-015 and recommends Commission approval of CASF funding for the Bright Fiber Project.

8. The original applicant was an entity known as Bright Fiber LLC, a subsidiary company from Spiral Internet Inc. (now known as Bright Fiber, Inc.) established solely to build and manage this project. Following the submission of the application, however, the applicant decided to change its business model and now plans to maintain management of this project and its network with the parent company. CD approved the transfer of the CASF application to Bright Fiber, Inc. on August 5, 2015.

9. Bright Fiber is required to post a performance bond, as its share of total costs is not coming from a dedicated capital budget.

10. Bright Fiber is required to comply with all guidelines, requirements, and conditions associated with the granting of CASF funds as specified in D.12-02-015 and must submit the FCC Form 477, as specified in Resolution T-17143.

11. The Commission finds CD's recommendation to fund Bright Fiber's project, as summarized in Appendix A, to be reasonable and consistent with Commission orders and, therefore, adopts such recommendation.

~~12.~~ In Resolution T-17565, this project received approval of a categorial exemption in compliance with the California Environmental Quality Act[49] ~~The ultimate determination as to whether the project needs a full CEQA analysis will be made by Commission staff from the Energy Division after submission of a PEA, but before construction begins. Should the Energy Division determine a full CEQA analysis is necessary, the applicant may either pay for the analysis itself or seek a supplemental CASF grant, the approval of which is not guaranteed, to cover 60 percent of the cost. The Commission must complete CEQA review prior to disbursing CASF funds for construction activities.~~

13. A notice letter was e-mailed on October 29, 2015, informing all parties on the CASF Distribution List of the availability of this draft Resolution for public comments at the Commission's website http://www.cpuc.ca.gov/PUC/documents/. This letter also informed parties that the final confirmed Resolution adopted by the Commission will be posted and available at this same website. One comment and one reply comment were received and were addressed in Section VIII of this resolution.

14. As a result of these comments, a further 22 households were declared ineligible for funding and the cost of providing service to them was deducted from the originally requested grant amount.

THEREFORE, IT IS ORDERED that:

1. The Commission shall award a ~~combined~~ grant~~/loan~~ of ~~$16,656,223~~ $16,086,789 to Bright Fiber, Inc., for its Bright Fiber Project in Nevada County as described herein and summarized in Appendix A of this Resolution.
2. Grant payments of up to ~~$16,156,223~~ $16,086,789 for this project serving underserved areas shall be paid out of the CASF Infrastructure Grant Account in accordance with the guidelines adopted in D.12-02-015, including compliance with CEQA.

[49] Resolution T-17565, May 11, 2017

~~3. Loan payments of up to $500,000 for these project areas shall be paid out of the CASF Infrastructure Loan Account in accordance with the guidelines adopted in D.12-02-015, including compliance with CEQA~~

4. Bright Fiber will submit a full Proponent's Environmental Assessment (PEA) to the Energy Division prior to beginning construction. If, after reviewing the PEA, ED determines a full Environmental Impact Report is required, the EIR must be funded, completed, and approved by the Commission before any construction begins. In Resolution T-17565, this project received approval of a categorial exemption in compliance with the California Environmental Quality Act. Bright Fiber is granted an additional year until May 11, 2020 to complete construction of the project.

5. ~~Within five days after submission of the PEA, Bright Fiber shall post a performance bond equal to the total CASF grant award because the matching funds for this project will be obtained through outside investment and not from Bright Fiber Inc.'s existing capital budget.~~ Consistent with CASF Guidelines, Race Telecommunications certifies that it has all the necessary funds for the 40% match of the grant. The revised project will cost $26,811,315 of which CASF Infrastructure Grant funding is $16,086,789; the Bright Fiber match is $10,724,526. Therefore, the performance bond requirement will be waived.

6. Bright Fiber shall provide service to all residential properties within the project area, as defined in Appendix B and GIS files submitted to the Communications Division as part of the application process.

7. Payments to the CASF recipient shall be in accordance with Section XI of Appendix 1 of D.12-02-015 and in accordance with the process defined in the "Payments to CASF Recipients" section of this Resolution.

8. The CASF fund recipient, Bright Fiber, shall comply with all guidelines, requirements and conditions associated with the CASF funds award as specified in D.12-02-015 and must submit the FCC Form 477 to the Commission, as specified in Resolution T-17143.

This Resolution is effective today.

I hereby certify that this Resolution was adopted by the Public Utilities Commission at its regular meeting on December 3, 2015. The following Commissioners approved it:

TIMOTHY J. SULLIVAN
Executive Director

APPENDIX A
Resolution T-17495 Bright Fiber
Key Information

Project Name	**Bright Fiber Project**
Project Size (in square miles)	21
Download/Upload speed	Up to 1 Gbps / 1 Gbps
Location	Nevada County
Community Names	Cedar Ridge, Chicago Park, greater Grass Valley, La Barr Meadows, and Peardale
Census Block Groups	060570001022, 060570001024, 060570001031, 060570001032, 060570001041, 060570001042, 060570001051, 060570006001, 060570006002, 060570006003, 060570007013, 060570007014, 060570007015, 060570007016, 060570007021, 060570007022, 060611022021, 060610220133
Median Household Income (Nevada County)	$57,353
Zip Codes	95945 and 95949
Estimated potential subscriber size	1,941 households
Applicant expectations	1,747 customers (90-percent take rate)
Deployment Schedule (from permit approval date)	24 Months
Proposed Project Budget (Total)	$27,232,418
Amount of CASF grant funds requested (59.3%)	$16,156,323
CASF loan requested (1.8%)	$500,000
Applicant funded (38.8%)	$10,576,095
Grant per household passed	$8,324

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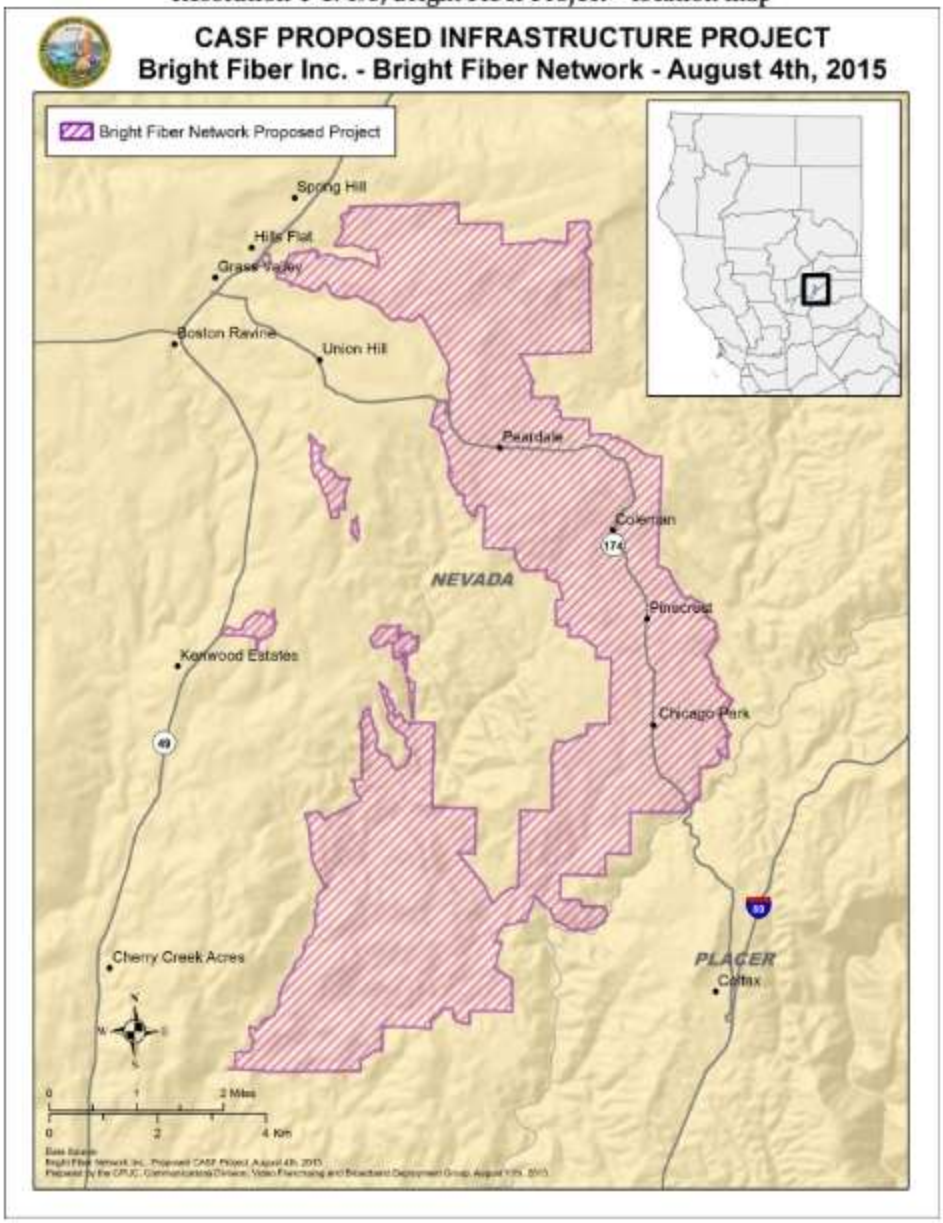
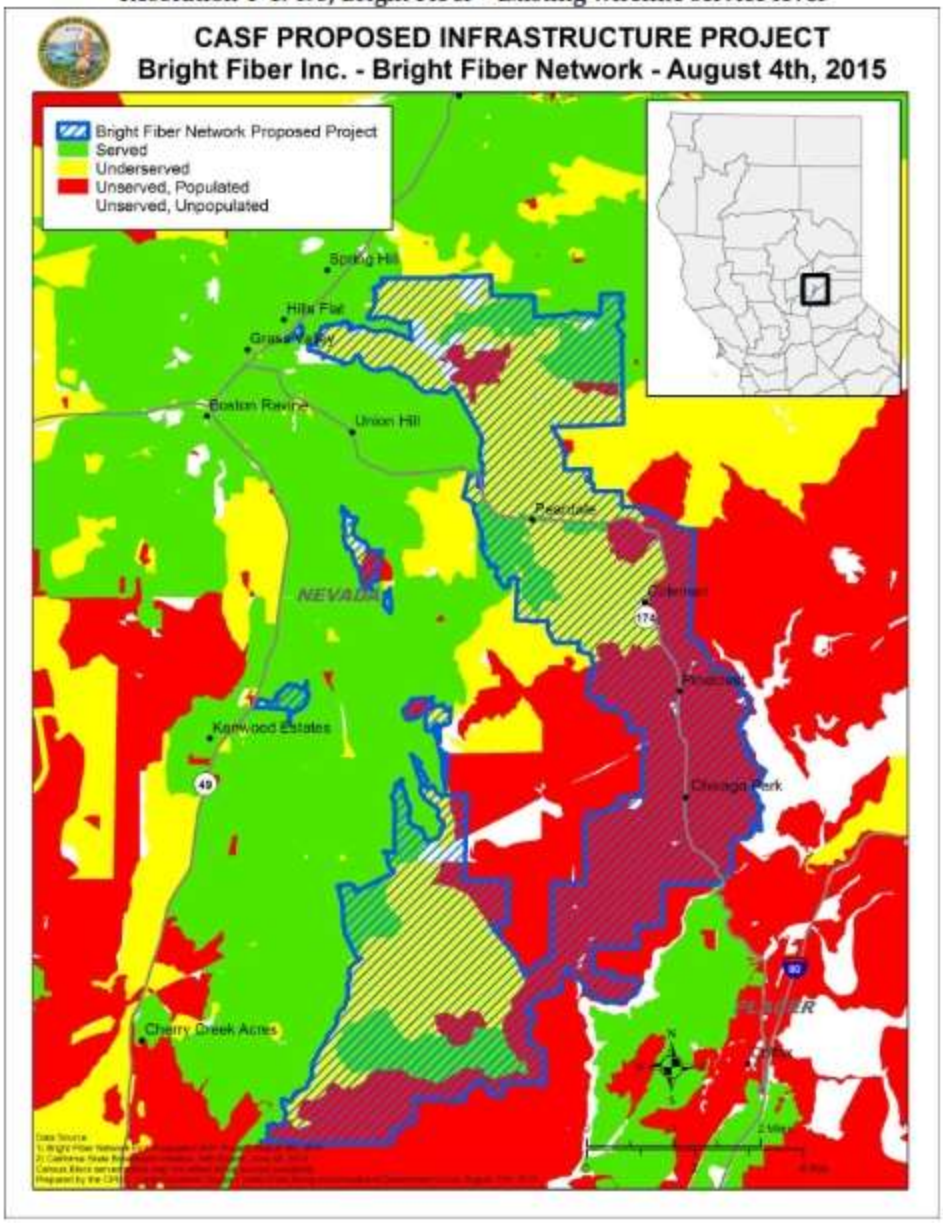
Appendix B
Resolution T-17495, Bright Fiber Project – location map



Appendix C
Resolution T-17495, Bright Fiber – Existing wireline service level



End of Appendix A