California Public Utilities Commission (CPUC)

Application for the Broadband, Equity, Access, and Deployment (BEAD) Grant Program

# 5.6 Alternative Technology Design Submission Template

This section should only be filled out by Applicants submitting projects using LEO satellite service. Satellite is not considered Reliable Broadband or Non-Priority Broadband, it is considered an Alternative Technology. The Applicant must complete this section for each satellite project it is submitting.

## Section E1: Network Performance Requirements

**E1.1 Applicant certifies it will meet the network performance requirements set forth by the CPUC in the table below:**

|  |  |
| --- | --- |
| **Network Performance Criterion** | **Requirement** |
| Minimum speed available to subscriber | 100/20 Mbps |
| Latency | ≤ 100 ms |
| Average outage time per subscriber | Less than 48 hours over any 365-day period |
| Network availability | 99.5% of the time over a one-month period |
| Other criteria | No data caps or usage-based throttling |
| Area Take Rate at Minimum Design Performance | 40% |

Applicant certifies it will meet the network performance requirements set forth by the CPUC.

If applicant can check the box to certify, proceed to question E2. If unable to certify, proceed to question E1.1a.

**If Applicant’s network will not meet the performance requirements set forth in Table 1, please indicate the proposed network’s performance capabilities.**

**E1.1a Indicate minimum speed (download/upload) available to each proposed location.**

A response to this question is required from Applicants that answered “No” to E1.1. Use the textbox to provide the information.

Insert response here.

**E1.1b Indicate the maximum latency for each proposed location.**

A response to this question is required from Applicants that answered “No” to E1.1. Use the textbox to provide the information.

Insert response here.

**E1.1c Provide the average outage time per subscriber (hours) over any given 365-day period. Include any assumptions about obstructions.**

A response to this question is required from Applicants that answered “No” to E1.1. Use the textbox to provide the information.

Insert response here.

**E1.1d Provide the network availability (percent) of the proposed service over a one-month period**

A response to this question is required from Applicants that answered “No” to E1.1. Use the textbox to provide the information.

Insert response here.

**E1.1e Indicate if the service will include any data caps or usage-based throttling.**

A response to this question is required from Applicants that answered “No” to E1.1. Answer “Yes” or “No” using the checkboxes.

Yes No

**E1.1f Provide the assumed take rate within a project area for the network to achieve minimum design performance**

A response to this question is required from Applicants that answered “No” to E1.1. Use the textbox to provide the information.

Insert response here.

## Section E2: Customer Premises Equipment

**Respond to the requirements below and, where applicable, confirm that the proposed solution complies and explain how.**

**E2.1 Describe the proposed CPE configuration(s).**

* **Describe the antenna, the indoor equipment, and the connection between them.**
* **Provide specifications for wind loading, temperature, ice and moisture.**
* **Describe typical home router features available in the CPE such as supported 802.11 bands, Wi-Fi security, number of ethernet ports, supported 802.3 network types, maximum number of clients supported, number of SSIDs, MAC address filtering, security, Network Address Translation (NAT), VPN client support, bandwidth management, availability of static IP address, and event logging.**
* **Describe RF link reporting provided to the customer such as satellites serving the CPE, signal intensity/quality, information about obstructions and uptime, and RF frequency bands in use by CPE. How can these diagnostics be accessed by the customer?**
* **Can the customer obtain a static IP?**
* **Describe any location-based services provided by the network.**

A response to this question is required from all Applicants.

Insert response here.

## Section E3: Provisioning, Installation and Operations

**E3.1 Detail the provisioning and installation processes. Describe how the proposed solution handles the following:**

* **Safe and stable physical installation of the antenna and any other necessary equipment,**
* **Connecting the antenna to an indoor router and other steps in premises installation, and**
* **Activating service to the customer**

A response to this question is required from all Applicants. Upload the requested documentation to the portal.

Insert response here.

**E3.2 Describe your proposed average and maximum time to install—the time from receiving a customer installation request to completing installation.**

A response to this question is required from all Applicants. Use the textbox to provide the information.

Insert response here.

**E3.3 Describe the conditions, if any, in which to the proposed solution may be unable to provide internet service of the proposed performance level to an eligible location. Discuss if there is any possibility of capacity limitations that may limit new installations.**

A response to this question is required from all Applicants. Use the textbox to provide the information.

Insert response here.

**E3.4 Describe the impact to performance and reliability of the antenna having a partial view of the sky due to building and foliage obstructions. Does having a partial view of the sky limit the performance or availability, and if so, to what degree? What options are available to address limitations caused by obstructions?**

A response to this question is required from all Applicants. Use the textbox to provide the information.

Insert response here.

**E3.5 Describe how you propose to provide customer service. Describe how you propose to repair or replace customer premises equipment, including equipment installed on rooftops.**

A response to this question is required from all Applicants. Use the textbox to provide the information.

Insert response here.