

STAFF MEMORANDUM

TO: COMMISSIONERS AND ADVISORS
FROM: LORENA REICHERT AND KRISTEN EDWARDS
SUBJECT: TC17-044 – REQUEST OF CLARITY TELECOM, LLC DBA VAST BROADBAND STUDY AREA:
ILEC-391652 AND CLEC-399006 FOR CERTIFICATION REGARDING ITS USE OF FEDERAL
UNIVERSAL SERVICE SUPPORT
DATE: SEPTEMBER 8, 2017

Staff submits this second memorandum in light of the discussion that took place at the August 29, 2017 Commission meeting regarding the above-captioned docket.

ADDITIONAL INFORMATION ON FIXED WIRELESS

Following the August 29 Commission Meeting, Staff sent a third data request to Clarity Telecom, LLC dba Vast Broadband (Clarity or Company). Clarity's responses were filed in the docket. Those responses, along with information gathered from Staff's own investigation help form the basis for the additional information provided in this memorandum.

Fixed wireless can be provided through either licensed or unlicensed spectrum. Clarity stated in a response to data request 1-2(c.) that it will utilize [REDACTED] spectrum. According to the Federal Communications Commission (FCC),

[i]n spectrum that is designated as "unlicensed" or "licensed-exempt," users can operate without an FCC license but must use certified radio equipment and must comply with the technical requirements, including power limits, of the FCC's Part 15 Rules. Users of the license-exempt bands do not have exclusive use of the spectrum and are subject to interference.¹

Licensed spectrum, on the other hand, allows for exclusive use of particular frequencies or channels in particular locations.² Licensees can have exclusive use of the specified spectrum bands in a particular point location with a radius around that location.

According to response to data request 3-1, voice traffic would remain on copper plant. It is staff's understanding that this is desirable over transferring voice traffic also to fixed wireless. Towers are designed to have a maximum between 120-160 customers depending on how many sectors are on a tower, along with the option of adding radios to increase capacity.³ The LTE systems that the company

¹ <https://www.fcc.gov/general/accessing-spectrum>

² <https://www.fcc.gov/general/accessing-spectrum>

³ Response to Data Request 3-8.

will use are non-line-of-sight (NLOS)⁴, therefore it is staff's understanding that there should be less line of sight issues than with earlier fixed wireless products. In addition, according to the Company, the signal should not be affected by weather.⁵

EXPERIENCE IN OTHER STATES

Staff reached out to other staff members throughout the country following the last meeting. The concept of publicly sharing the information was not addressed with those responding to Staff's inquiry, nor has the confidentiality of information regarding any individual company referenced by another state been verified. Therefore, some of the following information gathered by Staff has been redacted.

According to a staff member with the [REDACTED] [REDACTED] utilizes fixed wireless for its CAF deployment obligations in many states. That staff member contacted the FCC and was told that fixed wireless is acceptable, as the requirements are technology neutral. Staff interprets "technology neutral" to mean that the company can utilize any available technology, so long as the Commission feels that the form of technology meets the service requirements. Thus, merely having an acceptable form of technology is not dispositive of the ultimate question of certification. Rather one must investigate further to determine if service obligations are met.

Staff from the [REDACTED] provided the following response [REDACTED]

[REDACTED]

Through further discussions, Staff learned that [REDACTED] [REDACTED] utilizes fixed wireless for both broadband and voice service. The company reports speeds of 10/1 mbps.

Other states either did not respond at the time this memorandum was filed or responded that fixed wireless has not been utilized in this manner in the state.

⁴ Response to Data Request 3-11.

⁵ Response to Data Request 3-10.

A-CAM Locations by Census Block

Staff has mapped the locations of all of the blocks that are funded by A-CAM Version 2.3.1 for Clarity.⁶ Of the 1820 locations receiving model-based funding, 1306 are fully funded locations.⁷ As you can see from the map and by comparing to the staff map entitled Vast June 2016 Deployment Data – All Speeds and filed into the docket on August 25, many of the census blocks in the model are areas that are currently unserved.

Extension of October 1 Deadline by the Wireline Competition Bureau

Staff notes that the deadline for states to file certification has been extended to November 17, 2017 from its usual October 1 deadline by order from the Wireline Competition Bureau of the FCC on September 6, 2017.⁸ Therefore, if the Commission desires Staff to undertake any further investigation, Staff stands willing to do so.

⁶ https://transition.fcc.gov/wcb/ACAM231_CB_funded_Yes_list_081516.zip

⁷ https://transition.fcc.gov/wcb/ACAM_232_second_offer_report_10_1_2_122016_FINAL.xlsx

⁸ <https://ecfsapi.fcc.gov/file/09063021905206/DA-17-848A1.pdf>