

August 27, 2019

**VIA IBFS** 

International Bureau Federal Communications Commission 445 12th Street, NW Washington, DC 20554

Re: Hawaii Pacific Teleport, L.P., Call Signs E190102 and E190068

Supplement to Pending License and STA Applications

File Nos. SES-LIC-20190305-00258, SES-STA-20190305-00259 and SES-LIC-20190222-00179, SES-

STA-20190222-00180

Dear Sir or Madam:

In response to questions raised by the Commission staff, Hawaii Pacific Teleport, L.P. ("HPT") provides additional information regarding its requests for waiver of the Commission's C-band filing freeze in connection with the above-referenced applications ("Applications") for earth station licenses and Special Temporary Authority to provide satellite services to Saipan and Guam as back up to the communications for remote island communities.

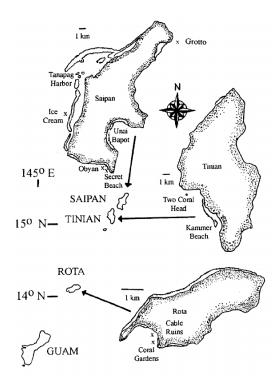
HPT offers satellite and fiber-based communications transport and connectivity around the Pacific Rim. Among other things, HPT's satellite services act as a vital communications link for a number of isolated pacific islands. HPT's services support a variety of communications services, including telephony, IP connectivity, and television broadcasting services. Among the most critical aspects of HPT's satellite service is the redundancy it provides to remote island communities for telephone, internet access and other IP connectivity. The requirement is to provide access to communications when there is no fiber connectivity available anywhere in the area. These instances occur as a result of multiple scenarios, including but not limited to, a) lack of proximity to fiber landing points, where fiber is nonexistent; and b) weather related outages for areas that otherwise do have access to fiber. Communication services in these remote island communities generally depend on satellite transport links to major points of presence in Guam, where they can interconnect with the communications networks and undersea cables connecting Guam to Asia, Hawaii and the Continental United States. Initial deployments include Saipan, connecting back to Guam. These services are particularly critical for first responders and the 911 services.

The capital of Northern Mariana Islands is Saipan. Saipan is the largest island and is home to most Marianas, based on the last census taken in the U.S. in 2010, the population of Northern Mariana Islands is 53,883. The latest estimates taken in 2017 show that the population has grown to over 55,000 inhabitants.<sup>1</sup> Guam is the largest southernmost Mariana Island but is an organized, unincorporated

<sup>&</sup>lt;sup>1</sup> Northern Mariana Islands Population. (2019-07-11). Retrieved 2019-08-26, from <a href="http://worldpopulationreview.com/countries/northern-mariana-islands/">http://worldpopulationreview.com/countries/northern-mariana-islands/</a>



territory of the United States and one of 5 US territories with an established civilian government. In 2019, Guam is estimated to have a population of about 167,294, up from 165,000 in 2013, which ranks 191<sup>st</sup> in the world.<sup>2</sup>



As indicated by a previously provided email from HPT's customer, there is only one route to connect the Commonwealth of the Northern Marianas via its subsea ATISA cable. While a second fiber other than the ATISA cable does exist, the capacity provides insufficient coverage. Fiber does **not** extend to all required areas, and areas with access to fiber does not have adequate capacity for current needs, therefore, it is not usable redundancy. The closest cable landing station to the proposed antenna site is approximately 5 miles away. There are no plans at this time to run additional undersea interisland cables due to the planning and costs of deployment. However, it is important to note that laying additional undersea cable would not provide the same kind of backup resiliency as satellite service because multiple undersea cables are similarly susceptible to damage (such as from super typhoons like the one Saipan experienced last year).

The ATISA cable segments connect the following locations

<sup>&</sup>lt;sup>2</sup> Guam Population, Last UN Estimate as of July 1, 2019. Retrieved 2019-08-27, from <a href="http://worldpopulationreview.com/countries/guam">http://worldpopulationreview.com/countries/guam</a>



- 1 Segment 1 connects the existing cable station at Piti, Guam to the Rota branching unit located off the coast of Rota
- 2 Segment 2 connects the Rota branching unit to a newly constructed cable landing station (by DOCOMO Pacific) located at Songsong Village, Sasanlagu, Rota
- 3 Segment 3 connects the Rota branching unit to the Tinian branching unit, located off the coast of Tinian
- 4 Segment 4 connects the Tinian branching unit to a newly constructed cable landing station (by DOCOMO Pacific) located at Tachognya Beach, Tinian; and
- 5 Segment 5 connects the Tinian branching unit to a preexisting structure owned by DOCOMO Pacific and located at Sugar Dock South, Saipan. Segment 5, with segments 1 and 3, form the trunk between Guam and Saipan (Guam-Saipan express route).

HPT's services provide the additional connectivity between the landing station and remote site. More importantly, the services is a necessary lifeline to these islands during a disaster.

C-band satellite coverage provides a much larger footprint ensuring all sites can operate under one satellite. Ku-band and Ka-band satellites often employ spot beams that are targeted and, as a result, some of the areas may be located on the edge of the beam or not at all. In addition, the cost of C-band capacity is a fraction of the cost of more expensive Ku-band/Ka-band, which is too expensive for some of these underserved areas. Above all, for all potential solutions C-band frequencies suffer far less attenuation from poor weather conditions. For example, Ku- and Ka- are not effective during periods of heavy rainfall ("rain fade"), as we saw during the last typhoon, only C Band is capable of sustaining connectivity during conditions of heavy rain. Weather conditions for the pacific islands makes Ku- and Ka- band unfeasible for the applications in question.

The Northern Mariana Islands and Guam are remote islands with unique conditions and challenges relating to communications. For example, there are difficulties in transporting fuel and other necessary infrastructure to the islands and there is lack of road access, limited scalability per community/island, limited satellite and backhaul availability, and susceptibility to extreme weather conditions. These challenges make the provision of service to Guam and Saipan both challenging and vital. Reliable communications is of paramount importance in these remote island communities. While HPT's primary customer is Docomo Pacific, through Docomo we are servicing additional first responders, like FirstNet, build by AT&T. Due to communications challenges during the response to the 9/11 terrorist attacks, the 9/11 Commission recommended the establishment of a single, interoperable network for public safety. For years, public safety organizations lobbied Congress to make this recommendation a reality. Therefore, when Congress established the First Responder Network Authority (FirstNet) in 2012, it based its mission on public safety's express concerns and desires. FirstNet coverage extends beyond just the 50 states, we are thrilled that FirstNet will provide the same services, support, and capabilities that are provided on the mainland to public safety responders in on all five of the U.S. island territories.

Over the past several years, FirstNet has collaborated with public safety stakeholders and leadership from each state and territory. Never before has the public safety community had the



opportunity to provide input towards the creation of a nationwide broadband network tailored specifically to meet their needs as they save lives and protect communities across the nation. Without satellite back-up these communities would be without communications during the very times we are attempting to provide protection and increase communication. Ensuring such backup is in place and regularly tested, will provide public safety users with a reliable network, even in the middle of a storm.

Given the critical services to be provided, and in light of the special circumstances and importance to the public interest surrounding the delivery of services to Guam and Saipan, including the lack of viable alternative methods of serving the island communities, HPT renews its requests that the Bureau expeditiously grant its requests for waiver and the Applications.

Respectfully submitted,

Hawaii Pacific Teleport, L.P.