Essay Questions

Q08 –Executive Summary

The Gulf of Mexico region is not only a vital strategic energy resource for the United States, but important in terms of job creation, investments in technology and infrastructure, and providing long-term economic benefits. It is home to roughly 750 manned platforms and 2200 unmanned platforms on the continental shelf, 225 to 250 offshore drilling rigs depending on scheduled activity, and another estimated 1700 support vessels ranging from lift boats, seismic vessels, diving vessels, to workboats and crew boats. The Gulf of Mexico is also trafficked commercial tankers and lightering vessels, cruise ships, cargo ships, and numerous public and private recreational and fishing vessels.

While there are no governmental agencies or private industry concerns that track the number of people in the area, the U.S. Department of Interior’s Mineral Management Service (MMS) estimates that over 55,000 petroleum-related workers are employed in the Gulf of Mexico’s offshore energy industry.

Approximately 40,000 of these workers actively transit the Gulf every day with very limited access to the internet. Many are employees working fourteen to twenty-eight consecutive days away from home and their families. The lack of broadband access is not only an inconvenience but often a detriment to their safety, morale, and welfare.

Today the only means of communications in the Gulf are private satellite, limited digital microwave, and a GSM voice / narrowband data cellular system. Of the available systems, only the existing GSM network offers widespread coverage to individual mobile users in the area, yet the existing network is limited in terms of data access to approximately 80-100 Kbp/s. While a number of operators in the region rely on satellite communications for connectivity, it is typically only served with data rates of 64Kpb/s-128Kpb/s for uplink and 128-256Kpb/s for downlink.

Broadpoint owns, operates, and maintains the GSM cellular network providing voice and narrowband data services in the Gulf of Mexico and supporting teleport facilities that connect users with private satellite systems from this remote offshore environment.

As part of the American Recovery and Reinvestment Act of 2009, Broadpoint proposes to provide broadband services covering over 100,000 square miles of this underserved rural area of the Gulf of Mexico. This system will be overlaid onto its existing GSM network leveraging existing facilities and lease agreements with platform operators.

The network will be installed with **repeater sites** that utilize UMTS/HSPA wireless technology deployed in Broadpoint’s 850 MHz spectrum. Broadpoint is currently licensed by the Federal Communications Commission (FCC) in CMA306 (Gulf of Mexico) for 25 MHz of paired spectrum (total of 50 MHz) in the 850 MHz band, with a portion of this spectrum currently being used by its GSM network. The backhaul portion of the network connecting each remote location will be by VSAT linked to Broadpoint’s 12 Meter C-Band Earth Station at its New Orleans Teleport.
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With a UMTS (Universal Mobile Telecommunications System) Network Broadpoint will be able to provide high speed data to both fixed and mobile users. One of the most significant advantages of using this technology is that it is International Standards based, providing readily available Customer Premises Equipment (CPE) equipment in a wide variety of formats including fixed wireless, USB modems, and handsets.

Any potential customers located within the proposed coverage area should be able to achieve rates exceeding the definition of broadband given by the NOFA (DL: 768 kb/s, UL: 200 kb/s). The maximum achievable throughput at each location will vary based on distance from the base station and the actual link quality at that particular location. The initial products that we plan to offer will provide (a) up to [_____] downlink, [_____] uplink and (b) up to [_____] downlink, [_____] uplink.

Broadpoint will have an open network regarding access to the Internet. Users will not be restricted in the manner by which they access the Internet. In addition, Broadpoint will offer private line, VPN, and MPLS connectivity from its on-shore central facility to any customer that desires direct connectivity to their corporate office.

Broadpoint will adhere to all principles contained in the FCC’s Internet Policy statement. The network will be fully managed and Broadpoint will be capable of providing statistics to any customer regarding their usage, availability of the network, trouble tickets, mean time to repair and fix, and real-time conditions on the network. All non-discriminating interconnections will be accomplished through Broadpoint’s “meet me point” at its central on-shore interconnection facility. Broadpoint intends to comply with the nondiscrimination and interconnection obligations as outlined in the NOFA.

Depending on whether the customer served is on a fixed offshore platform or a moving or floating vessel, the price for satellite services could easily be as high as $7,500 per month for a data connection with an uplink speed at 512 Kbp/s. Each of these systems requires proprietary and expensive satellite equipment requiring skilled technicians for its installation and operation.

In contrast, Broadpoint proposes to offer high-speed data access to end-users using non-proprietary UMTS equipment that is readily available in the marketplace, offers a high degree of portability and is much more affordable. Broadpoint’s entry level service offering of 512 Kbp/s Uplink and 1 Mb/s Downlink will be priced at [_____] per month, providing not only significant savings, but available to far more users due to its wireless mobility capability. This represents over [_____] cost reduction to users over today’s service plans. Marine vessels that were generally too small to house the type of stabilized satellite system needed for even narrowband access will now be able to enjoy broadband connectivity.

Today thousands of applications are created each year for use on the terrestrial broadband infrastructure. Access to an offshore broadband network would create significant
opportunities as new applications are developed and create exponential jobs and economic value.

These applications would not only support public safety entities such as Homeland Security but also serve other important community needs such as Telemedicine and Distance Learning for those isolated in the offshore waters of the Gulf. The Recreation, Fishing, Cruise, and Shipping industries would also benefit from the ability to implement advanced applications that require broadband connectivity.

Broadpoint currently provides services to and works with the United States Coast Guard on its AIS program, the United States Navy, Mineral Management Services, United States Army Corp. of Engineers, Department of Drug Enforcement and the Federal Aviation Administration.

Broadpoint is not only prepared to implement, manage, and operate a new broadband services network today, but points to its existing operations as proof of its capabilities for assurances of success. While new staff will be added for the proposed broadband services creating additional jobs, all necessary policies, procedures, billing systems, network management, customer care, and supporting operations are already in place providing these functions today.

As part of providing its existing services, Broadpoint maintains a full sales, marketing, engineering, network operations, system provisioning, billing, and customer care staff. The proposed wireless broadband system is expected to be fully integrated into the existing support structure that Broadpoint operates today.

The total cost for Broadpoint's project submitted is $ ▓ ▓▓ ▓▓ . While we conservatively estimated a take rate of ▓ ▓ customers providing broadband access to approximately ▓ ▓ people (avg. ▓ ▓ people per customer site) for the business plan, Broadpoint expects to easily exceed that amount. With the approval of the requested funding, Broadpoint is ready to begin the project immediately and expects to be fully operational in ▓ months. Simply put, the build out of an offshore broadband network will do exactly what the BIP and BTOP directives are intended do, create jobs and stimulate the economy.