

activities, API acts on behalf of its members before federal and state regulatory agencies. The API Telecommunications Subcommittee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the oil and gas industries. API is supported and sustained by companies that make use of a wide variety of wireline, wireless and satellite communications services on both a private and commercial basis. API member companies are authorized by the Commission to operate facilities in the Private Land Mobile Radio (“PLMR”) service and Private Operational-Fixed Microwave Services (“POFS”), among other telecommunications systems. Spectrum is used for communications with remote oil and gas exploration and production sites for voice and data applications, communications with refineries, the extension of circuits to remote pipeline pump and compressor stations, and supervisory control and data acquisition systems (“SCADA”) that remotely monitor and control oil and gas wells, pipeline operations and other facilities.

II. The T-Band Is Used Heavily By the Oil and Natural Gas Industry.

In its comments in this proceeding, the Land Mobile Communications Commission (“LMCC”) correctly states that Channel Industries Mutual Aid (“CIMA”) holds more than 80 business/industrial T-Band licenses to operate a centralized trunked voice radio system used by the refining and petrochemical industry facilities along the Houston Ship Channel for fire-fighting, rescue, hazardous material handling, and emergency medical capabilities.² While the importance of the communications capability CIMA provides cannot be overstated, it is only one example of T-Band facilities relied on by the oil and gas industry to meet mission critical communications requirements. Other examples of oil and natural gas industry T-Band use include the following:

² LMCC Comments at 3.

Dow Chemical Company operates a trunked T-Band system at its Pittsburg, California plant to provide crew members with access to effective voice communications throughout the facility. Located east of San Francisco, Dow's Pittsburg plant has both manufacturing and research facilities supporting Dow's AgroSciences and Performance Chemicals businesses. The Pittsburg plant has been in service for over 70 years and provides its own fire brigade, security team, and medical facilities.

Dow Chemical Company operates a T-Band mobile system at its plant in Freeport, Texas outside of Houston. The Freeport site is used for manufacturing, research, and development to extract magnesium from seawater.

Marathon Petroleum Company LP operates a trunked T-Band system at its Texas City, Texas sweet crude refinery on Galveston Bay. The refinery has an operating capacity of 80,000 barrels of crude oil per day. It produces gasoline, distillate, naphtha, propane, chemical-grade propylene, aromatics, raffinate, sulfur and various other chemicals that are distributed via pipeline, barge and rail. Marathon employs approximately 280 employees and nearly 200 contract workers at the facility and effective and reliable voice communications systems are vital to the safety and efficiency of day to day operations.

Shell Chemical Company operates a trunked T-Band system at its Deer Park Refinery in Deer Park, Texas. The Deer Park Refinery is the sixth largest refinery in the United States with a crude oil capacity of 340,000 barrels, or 1,428,000 million gallons, a day. Shell's employees rely on T-Band voice communication to allow workers to coordinate activities throughout the facility. These systems are vital for workers to respond in cases of emergencies and to monitor daily operations.

Shell Oil operates a multi-channel convention T-Band system at its Martinez Refinery 30 miles northeast of San Francisco, California. The refinery covers approximately 1,000 acres of land and provides a capacity of 165,000 barrels of crude oil daily. The refinery produces products such as automotive gasoline, jet fuel, diesel, petroleum coke, industrial fuel oils, liquefied petroleum gas, asphalt and sulfur. Shell currently employs more than 700 employees to cover day to day operations.

Several companies use T-Band systems for internal land mobile communications at corporate offices. These include Chevron USA Inc.'s office in Bellaire, Texas, that coordinates the company's petroleum operations, and ExxonMobil's in Irving, Texas.

In addition to terrestrial uses of the T-Band, API members hold approximately two dozen licenses for operations in the Gulf of Mexico, as authorized under Section 90.315 of the FCC's rules. These facilities support energy production and exploration in the remote and hostile offshore environment.

III. The Commission Must Allow Business/Industrial Users to Remain in the T-Band.

API agrees with the overwhelming majority of the comments in this proceeding that urge the Commission to refrain from relocating Business/Industrial users from the T-Band.

Although the Middle Class Tax Relief and Job Creation Act of 2012 ("Act") requires the Commission to reallocate and auction T-Band spectrum "currently used by public safety eligibles," it is notably silent with respect to non-public safety users. As a legal matter, there is no requirement in the Act for the Commission to reallocate Business/Industrial users from the T-Band.

Nonetheless, the Commission asks whether it should consider relocating non-public safety as well as public safety licensees out of T-Band in order to clear larger contiguous blocks

of T-Band spectrum for auction that would be likely to generate higher bids.³ Alternatively, the Commission asks whether it should consolidate non-public safety licensees within a single segment of contiguous T-Band spectrum (*e.g.*, TV Channel 14 at the bottom of the band) in order to clear the remaining T-Band spectrum for auction in contiguous blocks.⁴

API believes that the first of these options, relocating Business/Industrial users from the T-Band, should under no circumstances be considered as a practicable option.

As described above, T-Band systems support effective operations at facilities that function around the clock to produce materials relied on by the nation's economy. In many instances, these materials are hazardous, and reliable voice communications systems are vital to ensuring plant safety as well as safety of the surrounding communities.

As several commenters have described in this proceeding, T-Band is allocated in 11 of the most severely congested markets in the U.S.⁵ There is no fallback spectrum available outside of T-Band to which to relocate displaced Business/Industrial T-Band systems.

In addition, common carrier systems are not suited to meet the needs of chemical plants and refineries. In fact, commercial mobile handsets are largely prohibited on refinery property because they are not designed to be "intrinsically safe" (*i.e.*, to ensure that their operation will not ignite hazardous gases that may be present in the environment). If access to the T-Band is lost, unless replacement spectrum is made available, many critical infrastructure facilities may be unable to satisfy their voice communications requirements. This obviously is a serious concern.

API recognizes, however, that because narrowband and wideband public safety and Business/Industrial licensees are interleaved in the T-Band, the presence of Business/Industrial

³ Public Notice at 3-4.

⁴ *Id.*

⁵ LMCC Comments at 2.

T-Band users may reduce revenue from the Congressionally-mandated auction of the public safety portion of the band. If other comparable replacement cannot be made available, and the auction requirements of the Act are not repealed, repacking existing Business/Industrial licensees into a portion of the 470-512 MHz band – although far from ideal – would be preferable to requiring them to vacate the band entirely.

The LMCC's comments include a table depicting the amount of Business/Industrial T-Band users in each market.⁶ If repacking moves forward, additional T-Band spectrum beyond the amount currently encumbered as reflected in the LMCC's table should be made available to accomplish relocations. For example, although the LMCC shows that a total of 7.68 MHz of spectrum is encumbered in San Francisco, users are currently spread among and between two 6 MHz blocks. Many users may be located near one another geographically, but do not experience interference because of spectral separation. That spectral separation not be preserved in repacking. In order to ensure that adequate distance separations are maintained to prevent interference, API believes it is likely that some amount of spectrum above the currently encumbered amount must be made available.

Even in markets such as Houston, where all licensees occupy a single 6 MHz block, the Commission should make some amount of additional spectrum available to provide for future facility expansions. The availability of additional unencumbered spectrum may also allow current users to obtain exclusive status for existing shared systems, which would serve as an incentive to encourage voluntary relocation.

⁶ LMCC Comments at 7.

