



AMERICAN PETROLEUM INSTITUTE

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Via Electronic Filing

Marlene H. Dortch
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Ex Parte Letter: Promoting Investment in the 3550-3700 MHz Band –
GN Docket No. 17-258

Dear Ms. Dortch:

The American Petroleum Institute (“API”) is the only national trade association representing all facets of the natural gas and oil industry, which represents nearly eight percent of U.S. GDP, nearly triple that of the cellular industry at 2.6 percent. API member companies employ highly skilled and knowledgeable technical experts (“experts”) to succeed not only in core business areas like drilling, refining, and exploration, but also in critical support functions in the information technology and telecommunications space. This includes wireless voice and data transmission. These telecommunications professionals in the oil and natural gas industry have also worked in other industries, such as the cellular and land-mobile industries. The experts have naturally learned how to apply critical data and voice transmission systems, both private and “cellular-like” to meet the continued needs of the oil and natural gas industry.

Events such as the California wildfires reinforce the lesson that cellular communication is predominantly a consumer grade undertaking, which often is either uneconomic or unreliable for large critical data users, or of insufficient quality to meet tightening needs of digital application and/or data throughput. Consequently, the experts have voiced strong concerns over a potential proposal for the top 316 Metropolitan Statistical Areas (MSAs) which eliminates the economic viability of CBRS priority access by private firms within those areas. This change may have been prompted by the Commission’s belief that smaller license areas within these populous areas, such as licensing by census tract, will somehow hurt the advent of 5G speeds by the major carriers or threaten the U.S. leadership position in broadband data.

It is certainly understood that RF link data capacity is directly related to spectrum bandwidth. The 5G specification has set minimum downloads speeds at 100 MB and uploads at 50 MB. While this can already be achieved for a single user in LTE by a 15 MHz channel using 2 x 2 MIMO, bringing this to the masses will require 100’s of MHz. If we assume that 800 MHz is enough for the sake of this argument, does talking away 40 MHz of priority access spectrum in a small area license from this pool really make

sense? Put in another light, if the oil and natural gas industry was given the 40 MHz to use, wouldn't the investment of five percent into an industry driving three times the GDP annually as the cellular industry be a more prudent investment?

In terms of global leadership, enabling private broadband has many advantages and should be regarded as a demonstration of spectrum leadership in the world, not viewed as non-conformity. The U.S. was founded on innovation and competition, which require enablement. That enablement comes from a balanced resource allocation that builds business models for the cellular environment as well as smaller footprint systems that benefit industries like oil and natural gas. As the Commission may realize, prioritizing or crafting by impracticality nearly all broadband spectrum offerings to large carriers allows them to effectively block private 4G speed systems created by an enterprise or other niche users, at the expense of competition. With no other alternative, enterprises such as the oil and natural gas industries more and more have to either sublease the spectrum from the carrier or their partners, or are forced to work with the carrier or their partners to subscribe to a pseudo-private system placed within their facility. In effect, CBRS rules that no longer enable economical attainment of small area licenses within larger metropolitan areas directly by the users trade innovation and competition for protectionism and mediocracy.

Finally, the irony of the situation is that the oil and natural gas industry, as well as the electrical utility industry, provide the energy infrastructure to power cellular equipment that is used to operate on RF spectrum resources. Consequently, there is a high degree of reliance on the energy industry. Cellular operators recognize that power can be interrupted, especially in disasters, and use generators due to their need for high reliability. Their recognition of the importance of their service is admirable. No efforts to take away the rights legally or economically for those who wish to generate private energy, or demand that the supply of this resource be made as a sub-lease from the local energy company have been made. Certainly, whether our service or fuel supply is considered reliable or not, cellular providers certainly have a right to generate their own power using natural gas, oil, or other means. So why should it be that our needs for an analogous communications "generator" – that priority access broadband spectrum under CBRS that fills a gap for priority access by future private systems - be seen as a threat by the cellular industry and indirectly by the Commission as a threat to 5G?

Accordingly, API urges the Commission to see the correctness of enabling private systems and adopt rules that enable a wide variety of non-traditional spectrum users including API's O&G members to make full use of the 3.5 GHz CBRS, including priority access by census tract or some smaller aggregation of tracts within the major metropolitan areas for at least half of the available PAL's, rather than to impose a licensing scheme that leaves this spectrum under the control of a small number of large wireless carriers.

Respectfully submitted,

American Petroleum Institute

/s/ James Crandall

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