BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Wireless Telecommunications Bureau Seeks Comment on Spectrum Networks Group, LLC Applications and Waiver Request to Allow it to Provide Private, Internal Machine-To-Machine Communications to Businesses on 900 MHz Business/Industrial/Land Transportation Channels	)	WT Docket No. 14-100

To: The Wireless Telecommunications Bureau

REPLY COMMENTS OF
THE AMERICAN PETROLEUM INSTITUTE

The Telecommunications Subcommittee of the American Petroleum Institute ("API") hereby submits Reply Comments in response to the Commission's Public Notice regarding the applications and request for waiver submitted by Spectrum Networks Group, LLC ("SNG") to provide commercial Machine to Machine ("M2M") service on certain Part 90 896-901/935-940 MHz band ("900 MHz band") channels.[1] API shares the concerns of several commenters in this proceeding and respectfully requests that the FCC deny SNG's waiver request and dismiss its applications.

I. BACKGROUND

API is a national trade association representing more than 600 companies involved in all phases of the petroleum and natural gas industries, including exploration, production, refining, marketing and transportation of petroleum, petroleum products and natural gas. Among its many

[1] *See* Wireless Telecommunications Bureau Seeks Comment on Spectrum Networks Group, LLC Applications and Waiver Request to Allow it to Provide Private, Internal Machine-To-Machine Communications to Businesses on 900 MHz Business/Industrial/Land Transportation Channels, *Public Notice*, WT Docket No. 14-100 ("Public Notice").

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 rely on 900 MHz systems principally in refineries and chemical manufacturing plants. These two-way communication systems support critical operational, security, maintenance and safety-related functions. A typical large refinery operates 365 days-a-year, 24 hours-a-day, and employs between 1,000 and 2,000 workers. Refinery-based mobile radio facilities, including these 900 MHz systems, are used to communicate critical operational instructions from unit control rooms to personnel responsible for task execution.[2] In large refineries, there may be dozens of these production units, each responsible for one or more steps in the complex process of refining and producing multiple products, including jet fuel, gasoline and home heating oil. The secure and reliable transmission of these instructions ordinarily ensures incident-free operations. There can be "upsets" from time to time, however; and, when there is a mishap, reliable two-way communications are essential to immediately respond to potentially dangerous situations and return the process to normal operation.

These 900 MHz systems are also used extensively in the transportation of refined products. This includes communications with railroad crews operating inside refineries, personnel at truck racks, and those employees responsible for operating multiple pipelines that transport various products from every refinery.

[2] As older refineries and plants modernize their infrastructure, many will look to replace mobile radio communications systems. The continued availability of 900 MHz assignments for site-by-site licensing will become increasingly important.

There are clearly significant safety functions associated with 900 MHz refinery systems. Due to a typical refinery's large size and often close proximity to hundreds of thousands of neighboring citizens, operators are acutely aware of their duty to protect the public's safety. Prompt emergency response to any incident that may occur limits the extent of injuries to workers and the surrounding communities, and it keeps facility damages to a minimum. Effective communications are essential for rescue and emergency response teams to provide immediate assistance in the event of a serious incident. For example, workers may need to relay a message to "close the valve" in a section of the refinery. If two workers hear the same command, or if there is a communications failure and the message is not properly relayed, there can be significant and dangerous consequences. To ensure safe refinery operations, employees *must* have the clear and reliable radio communications capabilities that are only provided by secure private two-way radio systems. If an explosion does occur, the ability to quickly initiate and communicate the facility's emergency response plan can reduce or eliminate injuries. Most refinery 900 MHz systems have a dedicated "emergency response" channel that allows messages to be quickly disseminated plant-wide.

II. SNG HAS NOT SATISFIED THE COMMISSION'S WAIVER STANDARD

In the past year, SNG has filed 111 applications seeking authority for 1,234 channels in the 900 MHz band Business/Industrial/Land Transportation ("B/I/LT") pool at 130 sites across the country.[3] SNG will not use the channels for private, internal service as a B/I/LT eligible entity, but instead proposes to provide a commercial M2M service. According to press reports, SNG plans to cover 95 percent of the U.S. population by the end of 2016.[4]

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[3] *See* Motorola Comments at 2.

[4] *See* FierceWireless, M2M Spectrum Networks – M2M – Wireless Startups – Fierce 15 2014 (available online at http://www.fiercewireless.com/special-reports/m2m-spectrum-networks-m2m-wireless-startups-fierce-15-2014).

Section 90.617 of the Commission's rules currently allocates 200 channels in the 900 MHz band to Specialized Mobile Radio ("SMR") licensees for commercial service.[5] At the same time, Section 90.617(c) of the rules restricts SMR licensees from operating on another 199 channels designated for B/I/LT use.[6] SNG initially asserts that it believes it does not require any waiver of the Commission's rules to operate on B/I/LT spectrum because it considers itself a Private Mobile Radio service ("PMRS") provider – a classification it distinguishes from an SMR provider. SNG states that its service differs from that of an SMR provider because it will not offer service to individuals or government agencies, does not intend to compete with Commercial Mobile Radio Service ("CMRS") providers, and will use its licenses only for the private, internal communications needs of business customers.

This analysis is not supported by the FCC's rules. The distinctions SNG provides are merely self-imposed restrictions that do not change the essential nature of the service it seeks to provide. Based on the limited information SNG provided, it will use its licenses to provide a commercial service, thus it is properly considered an SMR provider. Further, Section 90.179(f) of the rules provides that for-profit private carrier service in the 900 MHz band can only be offered by SMR providers.[7] As a result, even if SNG is correct that it is not an SMR provider, it would then follow that a waiver of 90.179(f) would be required for it to offer service. Clearly SNG requires a waiver to receive authority in the 900 MHz band.

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[5] 47 C.F.R. § 90.617.

[6] *Id.*

[7] 47 C.F.R. § 90.179(f).

The Commission may grant a request for waiver if it is shown that:

(i) The underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; ***or***

(ii) In view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.[8]

SNG has not satisfied its burden under the Commission's waiver standard.

API agrees with Motorola that "SNG has provided precious little information in its applications and waiver request to demonstrate bona fide qualifications and competency to operate a network that would meet the needs of the industrial and business communications community."[9] Other than assertions that SNG intends to provide M2M services, there is almost no information available regarding the equipment or technology to be used, service terms and conditions, SNG's staff, affiliates or partner companies, the design of the M2M network or even that a network will exist. API appreciates that SNG may wish keep certain information close to the vest for competitive reasons. But SNG is requesting waiver for a very large number of channels. Given the extraordinary relief SNG seeks, significant detail regarding the proposed service is required to adequately evaluate whether grant of waiver will serve the public interest.[10]

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[8] 47 C.F.R. § 1.925(b)(3) (emphasis added). *See also WAIT Radio v. FCC*, 418 F.2d 1153, 1157 (D.C. Cir. 1969); *Thomas Radio v. FCC*, 716 F.2d 921 (D.C. Cir. 1983).

[9] *See* Motorola Comments at 5.

[10] SNG compares itself to licensees that have received authorization for a handful of B/I/LT channels for commercial purposes. This compares apples to oranges. API understands that the waiver process may be a useful tool to allow, for example, an SMR to access a channel or two from the B/I/LT pool to expand network capacity in specific, limited circumstances. SNG, however, is proposing a nationwide network comprised of hundreds, if not thousands, of B/I/LT channels. This type of relief should require a high bar.

What little background is available regarding SNG raises further questions. For example, the Enterprise Wireless Alliance ("EWA"), in its Comments, raises disconcerting information that SNG has apparently prepared applications for several different entities requesting SMR use of 900 MHz band B/I/LT channels.[11] SNG has not done enough to explain this practice, particularly in light of the conditions it proposes for service, which appear to apply solely to SNG, not to any parties with which it partners. In addition, SNG has not provided sufficient assurance that it actually intends to use its 900 MHz band licenses to offer telecommunications and not merely lease or sell spectrum back to B/I/LT users that would have otherwise been eligible to apply for the licenses directly. Without more information it is impossible to tell that grant of the applications is in the public interest.

Further, SNG states that its services will include "security and alarm monitoring; electric power, water, gas, and waste utilities, including Smart Grid systems; fleet vehicle dispatch; location and route optimization; vending and other machine monitoring systems; gas, oil, and mining operations, including pipelines and tankers; connected car and smart road solutions."[12] Many of these applications are operational fixed, yet Section 90.637 of the rules states that fixed transmitters will not be counted toward meeting a station's loading requirements.[13] The 900 MHz band is principally allocated for land mobile service, yet it appears that SNG may intend to use its licenses to provide operational fixed services. If that is correct, SNG may not be able to accurately make the certification required under Section 90.631(b) of the rules that a minimum of 70 mobiles for each channel authorized will be placed into operation within five years of

[11] *See* EWA Comments at 3.

[12] *See* Letter from Pantelis Michalopoulos to Marlene Dortch, June 24, 2014.

[13] 47 C.F.R. § 90.637.

license grant without an additional waiver of the Commission's loading restrictions. SNG also does not appear to have requested authority for fixed units in its applications.

SNG also has not shown that underlying purpose of the rules would not be served by application to the instant case. SNG's proposal would remove hundreds, possibly thousands, of channels from the B/I/LT pool. It is irrelevant that SNG would, in return, provide service to business users. The spectrum that SNG acquires would no longer be available for use by B/I/LT applicants for private, internal two-way land mobile communications, the primary use of the band. This means that a refinery or chemical plant would be unable to expand an existing voice system or a facility would be unable to upgrade use of the 900 MHz band. This is exacerbated by the fact that SNG is seeking authority for up to all available channels in certain areas. Its stated plans are to cover 194 cities by the end of 2014. SNG's proposal would effectively repurpose the remaining 900 MHz band B/I/LT spectrum in many areas. Reassignment of such a large portion of the 900 MHz band B/I/LT channels to an entity for SMR use does not serve the underlying purpose of the rule.

SNG also has not shown that application of the rules would be inequitable, unduly burdensome or contrary to the public interest, or that it has no reasonable alternative. SNG has not explained why it cannot use other spectrum bands already allocated for commercial use or why it cannot meet its spectrum needs on the secondary markets.

API's members are increasingly interested in M2M services. However, the 900 MHz band is not "fallow" spectrum as SNG asserts but widely used and heavily encumbered by B/I/LT users in many areas for land mobile communications. Even though more than half of the 900 MHz band is already allocated to SMRs, SNG proposes to effectively reallocate up to 100%

of remaining B/I/LT channels in certain areas for SMR purposes. API does not believe SNG has met its burden based on the limited information it has provided to date.

III. CONCLUSION

API urges the Commission to deny SNG's waiver request and dismiss its applications consistent with these Reply Comments and other Comments in this proceeding.

Respectfully submitted,

By: **/s/ _____**

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