

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Promoting Spectrum Access for Wireless Microphone Operations)	GN Docket No. 14-166
)	
Amendment of Part 15 of the Commission’s Rules for Unlicensed Operations in the Television Bands, Repurposed 600 MHz Band, 600 MHz Guard Bands and Duplex Gap, and Channel 37, and)	ET Docket No. 14-165
)	
Amendment of Part 74 of the Commission’s Rules for Low Power Auxiliary Stations in the Repurposed 600 MHz Band and 600 MHz Duplex Gap)	
)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions)	GN Docket No. 12-268
)	

October 2, 2017

**COMMENTS OF
THE PERFORMING ARTS
WIRELESS MICROPHONE WORKING GROUP**

The Performing Arts Wireless Microphone Working Group files these comments in response to the Further Notice of Proposed Rulemaking in the above-cited dockets.¹ We strongly support the Commission’s proposal to expand Part 74 license eligibility to include persons and organizations that can demonstrate the need for professional, high-quality audio and have the capability of providing it through conscientious use of wireless microphones.

The Performing Arts Group

The Performing Arts Wireless Microphone Working Group (the “Performing Arts Group”) is a coalition of national performing arts service organizations serving the professional not-for-

¹ Wireless Microphones Order on Reconsideration and Further Notice of Proposed Rulemaking, FCC 17-95 (released July 14, 2017) (the “FNPRM”).

profit performing arts and presenting fields, including educational theatre. Member organizations of the Performing Arts Group and the respective members of those organizations would benefit directly from the Commission's proposal. The current Performing Arts Group participants are:

- **Alliance of Resident Theatres / New York**, the service and advocacy organization for New York City's nonprofit theatre community, including over 360 member theatres;
- **Association of Performing Arts Professionals**, with more than 1,600 organizational and individual members involved in the management of performing arts including regional, state, and local arts agencies, service organizations, producing companies, artist managers, booking agencies, and individual artists;
- **Dance/USA**, sustaining and advancing professional dance by addressing the needs, concerns, and interests of nearly 500 artists, administrators, and organizations and providing national leadership and services; Dance/USA enhances the infrastructure for dance creation and education;
- **Educational Theatre Association**, an international association with approximately 125,000 members, shapes lives through theatre education: honoring student achievement in theatre and enriching the theatre education experience; supporting teachers by providing professional development, resources, and recognition; and influencing public opinion that theatre education is essential and builds life skills; EdTA is the home of the International Thespian Society, an honorary organization active at more than 4,700 schools, that has inducted more than 2.3 million theatre students since its founding in 1929;
- **League of American Orchestras**, the organization for the more than 1,600 orchestras nationwide, advances the experience of orchestral music, supports the people and organizations that create it, and champions the contributions orchestras make to the health

and vibrancy of communities;

- **The National Alliance for Musical Theatre**, a not-for-profit organization serving the musical theatre community since 1985, with 160 organization and 40 individual members, it advances musical theatre by nurturing the creation, development, production, and presentation of new and classical musicals and providing a forum for musical theatre resources and information;
- **OPERA America**, providing nearly 150 professional company members, 300 associate and business members, and 2,000 individual members with services that increase the creativity and excellence of opera productions and all forms of opera appreciation and address the specific needs of opera companies;
- **Performing Arts Alliance**, the national policy advocate, leadership forum, and learning network for America's nonprofit performing arts organizations, artists, and allies;
- **The Recording Academy**, representing the voices of performers, songwriters, producers, engineers, and all music professionals and dedicated to ensuring the recording arts remain a thriving part of our shared cultural heritage, advocates on behalf of music creators and celebrates artistic excellence through the GRAMMY Awards®—music's only peer-recognized accolade and highest achievement; as the world's leading society of music professionals, the Recording Academy works year-round to foster a more inspiring world for creators;
- **Theatre Communications Group**, with more than 700 member theatres and affiliate organizations and more than 12,000 individual members, seeks to increase the organizational efficiency of theatres, cultivate artistic talent and achievement, and promote public understanding of and appreciation for the theatre.

In previous rulemaking opportunities, members of the Performing Arts Group have individually and collectively advocated before the Commission on behalf of the protected use of wireless microphones, cue and control devices, and wireless intercoms (collectively, “wireless microphones”),² including letters from over 60 theatres, symphony orchestras, and educational institutions. Many of these organizations spent considerable funds in vacating the 700 MHz band in 2010 and will now be required to leave the 600 MHz band.

Wireless Microphones Are Vital to the Performing Arts

Wireless microphones are most commonly recognized for the amplification of on-stage performers’ voices for the enjoyment of audiences. Audiences pay for and expect high-quality professional audio, free from interference that can ruin the performance experience. Additionally, wireless devices are used for intercoms and cue and control devices, often involving the movement of scenery and large set pieces. Compromised backstage communication could cause safety issues for performers, stagehands, and even audience members. Theatres offering audio assist devices to hearing-impaired audience members, in compliance with the Americans with Disabilities Act, rely on wireless microphones to feed high quality sound from performers into their audio assist distribution systems.

Expanding the Fifty-Unit Proxy

The Commission attempted to balance the need of professional performances that would qualify for Part 74 licenses with other potential users of TV-band frequencies by establishing a license eligibility threshold of regular use of fifty or more wireless microphones in performances.³

² All of these devices may be classified as Low Power Auxiliary Stations (“LPAS”) and licensed to qualified organizations under Part 74 of the Commission’s rules.

³ *Revisions to Rules Authorizing the Operation of Low Power Auxiliary Stations in the 698-806 MHz Band*, 29 FCC Rcd 6103, ¶ 16 (2014).

No members of the Performing Arts Group objected to this decision because when that rule was adopted use of their unlicensed Part 15 wireless microphones was protected from interference through registration in the TV-Band White Spaces database. When the Commission eliminated the possibility of this registration, members of the Performing Arts Group and others supported the petition of Shure Incorporated seeking to reinstate protection of wireless microphones for performing arts professionals.⁴ Although the Commission has denied Shure’s request, the FNPRM proposes an ideal solution to the problem that would expand eligibility to organizations that do not meet the fifty-unit-per-performance threshold.

The Performing Arts Group supports the Commission’s finding that the regular use of fifty-units in performances is an imperfect proxy for the actual need for professional audio quality and reliable backstage support regularly required in performances presented by its constituents. A single-person performance involving movement, scenery, an orchestra, and ADA-compliant hearing assistance systems would be severely endangered by interference from other users of the same frequencies, yet the performance might use far fewer than fifty wireless units. Accordingly, the Commission’s proposal to allow theatre, music, and performing arts organizations to demonstrate their professional audio needs and capabilities to operate under Part 74 rules is a significant and welcome advancement for the performing arts in the United States.

Clarifying the New Rules

The Commission seeks comment on several questions about how an expansion of Part 74 LPAS licensing should be regulated to provide needed relief without unnecessarily interfering with

⁴ See, “Reply to Opposition of Actors’ Equity, Alliance of Resident Theatres / New York, Association of Performing Arts Presenters, The Broadway League, Inc., Dance/USA, Educational Theatre Association, League of American Orchestras, OPERA America, Performing Arts Alliance, The Recording Academy, SAG-AFTRA, Theatre Communications Group” in ET Docket No. 14-165 and GN Docket No. 12-268, (filed March 10, 2016).

other potential users of the spectrum designated for licensed wireless microphones. The Performing Arts Group provides its positions on these issues.

Are there other types of organizations (besides theatre, music, and performing arts organizations) that use wireless microphones and require professional-level high-quality audio?

Surely certain educational institutions with theatrical programs could qualify, as might some churches and religious institutions. But if the Commission were to develop a finite list, another type of organization would soon appear with equivalent needs and credentials. We believe that the Commission should focus its inquiry not on the type of organization, but on its needs, qualifications and the criteria that an individual organization can meet in its Part 74 application. Venues that host or present professional productions and performing organizations that employ multiple venues for their productions should be allowed to demonstrate their qualifications for a Part 74 license.

What would a demonstration of need and ability to comply with a Part 74 licensee's obligations look like?

The need for wireless microphone units will be based on the type of performances. While readers standing at lecterns may be adequately served by wired microphones, plays with actors moving around a stage necessitate wireless units. Musicals, where singers compete with orchestras, will always need more high-quality devices than plays. Productions with complex scenery movements will require more intercom devices to protect personal safety.

An application for a Part 74 LPAS license could illustrate the applicant's needs by including a description of the applicant's mission, and cultural contributions to its community, its previous productions and planned future productions, with details on the number of performers in each, the average number of performances of a production, the use of intercoms by back-stage personnel and of wireless microphones to feed hearing assistance systems.

An applicant could demonstrate its ability to comply with the licensee's responsibilities by having, either on staff or through contract, someone active in audio engineering who has an

academic degree or equivalent professional experience and who is familiar with radio-frequency coordination. An applicant could add to this demonstration by certifying that it has access to an attorney able to advise it on FCC rules and regulations affecting operation of Part 74 LPAS.

How can the Commission determine that spectrum will be used in a spectrally efficient manner?

The fifty-unit proxy currently assumes that a licensee will have audio professionals experienced in frequency coordination who know the necessity of making the best use possible of scarce radio spectrum. Newly qualified performing arts organizations will have equivalent professionals with the same goal. Applicants could be required to certify, as part of their applications, that they will utilize qualified professionals who will register for protection only the frequencies needed in the locations and at the times of actual use. Additionally, Part 74 Rules, including those governing co-channel use, will permit licensed performing arts professionals to use frequencies that are unavailable to unlicensed users, thus making better use of spectrum.

What about “mixed-use” venues that may be used at times for professional-level stage productions, but at other times for events that would not merit license protection?

Theatres and other venues of any size may occasionally allow their facilities to be used for wedding receptions, “amateur nights,” or other events that do not qualify for Part 74 license protection. Applicants could be required to certify, as part of their applications, that they will not register for protection in the database system any spectrum use where there is not a demonstrable need for high-quality *wireless* audio, intercom, or cue-and-control devices. Because database registrations are available for review by other potential spectrum users, inappropriate uses can be identified and brought to the Commission’s attention. Many performing arts organizations regularly keep logs of devices used for productions, including frequency, power level, and coordination efforts with other users. These records would also provide evidence that a LPAS licensee is adhering to the requirements of its license.

Is there any reason to deny newly licensed Part 74 wireless microphone licensees to spectrum outside the TV Band that has recently been made available for wireless microphones?

Assuming that new Part 74 wireless microphone licensees meet the qualifications of adequate technical guidance and frequency coordination, there are many reasons why they *should* be eligible for use of these new frequencies. Professional-quality audio on these frequencies will require the development of new equipment by manufacturers. The addition of large numbers of potential users will increase the likelihood of research and development of devices. New devices are likely to be spectrally efficient. Ultimately, movement of licensed users to other frequency bands would leave more TV Band spectrum available for unlicensed users. There should, however, be no requirement for newly eligible Part 74 LPAS licensees to move from the remaining TV Band. After vacating the 600 and 700 MHz bands, non-profit performing arts organizations would experience additional financial hardships if they were required to replace their existing equipment.

Is the proposed case-by-case licensing approach the best method of administering Part 74 license applications or is there a reasonable and appropriate alternative metric?

The Commission has identified the significant criteria for new licensees: need and technical expertise. There are no other metrics that would adequately substitute for an examination of these factors. As discussed above, changing the number of wireless microphones in the fifty-unit proxy would not be effective, nor would adding a specific list of organization types.

If the Commission needs to streamline the licensing process, it could consider developing a “safe harbor” for applicants. If an applicant can provide certification of (a) a mission statement of providing performing arts to the public, (b) a history of professional-quality wireless audio presentations to audiences without interference, (c) technical guidance and frequency coordination by qualified professionals, (d) a commitment to register for protection only the frequencies, times and locations actually needed, and (e) a practice of keeping logs of all wireless microphone uses, including frequencies, for all performances, then the Commission should be able to grant

applications swiftly. Applicants that cannot certify to these safe harbor provisions should still be able to demonstrate their need and technical expertise on a case-by-case basis.

It is our expectation that organizations will evaluate the advantages and responsibilities of Part 74 licenses judiciously, and only those who need to ensure interference-free high quality audio – in situations where wired devices are not practical – and who are well versed in the coordination and operation of wireless microphones will choose to apply.

Conclusion

Thousands of performances are held by professional performing arts organizations each year, and the use of wireless microphones is essential to producing high-quality performances while mitigating significant public safety concerns. Professional wireless capability, with successful interference protection, is essential to our sector in order to produce and present performances of the highest caliber, which our audiences have come to expect. Therefore, Part 74 licenses, with continued access to the White Spaces database, for all types of professional and educational wireless microphone users in the performing arts is extremely important—both for the performing arts entities and to potential new white space devices.

We appreciate the proposal in the FNPRM and the Commission’s request for public comment on these very important issues. Professional performing arts organizations and educational institutions with performing arts programs should all have some sort of interference protection. Performing arts organizations provide demonstrable service to the public in improving quality of life; preserving our cultural heritage; and providing education, enlightenment, and entertainment. They also contribute to local economies in every community across this country. We applaud the Commission’s thoughtful and considerate approach to increasing eligibility for Part

74 LPAS licenses and urge the Commission to adopt the proposals in the FNPRM.

Respectfully submitted,

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