



Administrative: 612-333-2700

Patron Services: 612-333-6669

Fax: 612-333-0869

October 11, 2017

Chairman Ajit Pai
Commissioner Mignon Clyburn
Commissioner Michael O'Rielly
Commissioner Brendan Carr
Commissioner Jessica Rosenworcel
c/o Marlene H. Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: ET Docket No. 14-165 and GN Docket Nos. 12-268 and 14-166 Via Electronic Filing

Dear Chairman Pai, Commissioner Clyburn, Commissioner O'Rielly, Commissioner Carr, Commissioner Rosenworcel, and Ms. Dortch,

On behalf of Minnesota Opera, located in Minneapolis, MN, which provides a culture of creativity and fiscal responsibility to produce opera and opera education programs that expand the art form, nurture artists, enrich audiences, and contribute to the vitality of the community. Minnesota Opera is uniquely able to provide Minnesota residents access to the highest quality opera and opera based arts education. Each season the company serves over 400,000 individuals through its core programs, including over youth and adults through its state-wide community education and outreach initiatives. I write with concern about available spectrum and protection for our wireless microphones and backstage communications devices.

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. We support and endorse the Comments filed in these dockets by The Performing Arts Wireless Microphone Working Group. Professional performing arts organizations hold thousands of performances each year, and wireless microphones are essential to producing high-quality performances while mitigating significant public safety concerns. Professional wireless capability, with successful interference protection, is essential to our sector.

Minnesota Opera utilizes microphones, in-ear communications, cueing and control devices and equipment controlling devices. On a per production per performance basis we operate 30 - 40 devices which utilize wireless technology including VHF (channels 2 - 13, 54 MHz to 216 MHz, Low UHF (channels 14 - 36, 470 - 608 MHz, High UHF (channels 38 - 51, the 600 MHz band, 614 MHz to 698 MHz), along with wireless headset intercom which utilizes outside TV channels. As we record and present our performances for broadcast via Public Radio we often use microphone that can tune to 50 - 75 MHz as well. Over 2/3rds of the devices we employ are digital and 1/3rd are analog, with our presenter owning a quarter of the equipment and supplementing the needs with rentals from local sound companies. Through our facilities long range plan we assign this equipment a 15 year lifespan. As these changes

have been anticipated we have dedicated approximately \$61,000.00 toward materials and labor in an effort to accommodate new regulations.

I urge the Commission to grant a Part 74 license if an applicant can provide certification of:

- A mission statement of providing performing arts to the public;
- A history of professional-quality wireless audio presentations to audiences without interference;
- Technical guidance and frequency coordination by qualified professionals (active in audio engineering who have academic degrees or equivalent professional experience and who are familiar with radio-frequency coordination);
- A commitment to register for protection only the frequencies, times, and locations actually needed; and
- A practice of keeping logs of all wireless microphone uses, including frequencies, for all performances.

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. I respectfully endorse the Commission's proposal to expand Part 74 LPAS rules to accommodate performing arts organizations and educational institutions that use fewer than 50 wireless microphones. The proposal is a much-needed solution that benefits the arts community and the public as well as the many new and emerging unlicensed white space technologies.

Sincerely,



Karen Quisenberry
Production Director, Minnesota Opera