



Federal Communications Commission
Washington, D.C. 20554

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Sent via Certified Mail and Electronic Mail

Board of Trustees, Michigan State University
Susanne Elkins
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WKAR-TV, East Lansing, MI
Facility ID No. 6104
File No. 0000160325

Dear Licensee:

This letter is in reference to the above captioned application for an extension of experimental authority filed by the Board of Trustees, Michigan State University (MSU), licensee of full power television station WKAR-TV, East Lansing, Michigan. Specifically, MSU requests an extension of its current Experimental Special Temporary Authority (experimental STA) to conduct experimental operations on channel 35.¹ For the reasons discussed below, we grant MSU's request and extend its experimental authority to operate on channel 35 pursuant to section 5.205 of the Commission's experimental licensing rules through June 11, 2023.

Background. In August 2018 MSU established the NextGen Media Innovation Lab (NMIL) in cooperation with the College of Communication Arts and Sciences at Michigan State University. Since the facility became fully operational in January 2019, MSU has made significant progress in developing and testing ATSC 3.0 applications, especially in the area of education. The Commission initially granted WKAR-TV an experimental STA in June 2018 to operate on Channel 35.² The post-incentive auction transition made it necessary for these operations to shift to Channel 32 in early 2019,³ and then back to Channel 35 at lower power in January 2020.⁴

In its request, MSU not only provides examples of its past work, but also details future efforts it seeks to undertake if granted the instant extension of experimental authority. For example, using WKAR's locally produced program, *Curious Crew*, MSU has infused interactive content with dynamic data to create custom interactive experiences for the show and encourage young viewers to actively participate in the program.⁵ As a next step, the NMIL plans to distribute receivers to *Curious Crew* viewers, which will allow MSU to test the application and will provide it with feedback to guide further

¹ LMS File No. 0000160325 (Experimental Request).

² See LMS File No. 0000053377.

³ See LMS File No. 0000069316.

⁴ See LMS File Nos. 0000096961 (January 2020 Experimental STA). The experimental STA for channel 35 was extended in September 2020. See LMS File No. 0000118359.

⁵ Experiential Request at 1-2.

development.⁶ Also in development is an application that can source the feed from state government websites, customize the data and dashboard behavior by geo-specific information, and provide users with easy ways to interact with the dashboard.⁷

According to MSU, continued operation of the NMIL would help facilitate the development of new innovative ATSC 3.0 applications of interest to public broadcasters.⁸ Furthermore, grant of the extension would allow the NMIL to advance its partnership with the Pearl Group to test applications in markets that have already transitioned to ATSC 3.0. MSU contends that the results of these trials would benefit all broadcasters (commercial and noncommercial) in understanding how to create ATSC 3.0 services and applications that would benefit viewers and consumers.⁹ The requested extension would also allow WKAR to complete an existing proposal to provide a trial NextGen TV platform experience for educators and students in the Lansing School District, which would support distance learning and development of a longer-term hybrid school environment.¹⁰ Finally, now that the Michigan State University campus is returning to some normalcy, the NMIL would be able to test its emergency alerting “use case,” which MSU states has been extremely difficult to do given the restrictions that have been in place as a result of COVID-19.¹¹

As demonstrated in its underlying request, because of the low power at which the NMIL would operate on Channel 35, the proposed facility would not cause more than 0.5% new interference to any other surrounding co-channel or adjacent channel facilities.¹² MSU has previously provided an engineering statement in support of this claim, and Video Division staff has confirmed its analysis.¹³

Discussion. We find, based on the facts and circumstances presented, that the public interest would be served by the grant of MSU’s requested experimental STA on channel 35. We find that the efforts being undertaken by MSU are experimental in nature and that requiring MSU to convert WKAR-TV to a licensed ATSC 3.0 facility, at this time, would not be conducive to furthering the goals of the NMIL. Specifically, MSU seeks to conduct its experiments involving new, innovative, non-traditional broadcast services and to serve as a resource for public broadcasters across the country, thereby helping accelerate their adoption of ATSC 3.0. We recognize the unique nature of the work that MSU is doing and agree that the information obtained from MSU’s continued experimentation may be valuable to broadcasters, notably noncommercial broadcasters, by increasing understanding regarding how the ATSC 3.0 standard can be used for new and innovative broadcast services (video and non-video), and that these findings may prove particularly valuable in the context of remote learning and public safety.

⁶ *Id.*

⁷ *Id.* at 2. The dashboard will present live data at the county level. For example, a QR code option would enable users to book a COVID-19 test or a vaccine appointment. *Id.*

⁸ *Id.* at 2-3.

⁹ *Id.* at 3.

¹⁰ *Id.*

¹¹ *Id.*

¹² January 2020 Experimental STA at 3 and Engineering Statement.

¹³ In the underlying STA MSU also states that it will comply with all Commission out of-band emission requirements for full-service DTV stations through the use of a mask filter. *Id.* at 3-4. MSU must continue to comply with this commitment.

Accordingly, the experimental authority requested by MSU for an experimental broadcast station on channel 35 **IS GRANTED** through June 11, 2023, subject to the provisions of Part 5, Subpart D, any commitments made by MSU in the application, and the following conditions.¹⁴ We note that this will be the final extension. Pursuant to section 5.71(c) of the Commission's rules, broadcast experimental radio licenses may only be issued for up to 5 years from the initial authorizations grant date.¹⁵ MSU was first granted its initial experimental authorization on June 11, 2018.¹⁶

1. MSU is authorized to transmit a signal using the Next Generation TV transmission standard, as defined under 47 CFR § 73.682. Operation under this experimental authorization may not in any way impact the ATSC 1.0 operations of WKAR-TV, Lansing, MI, or the ability of existing viewers to obtain WKAR-TV's ATSC 1.0 over-the-air programming. MSU must also ensure that MVPD subscribers' access to WKAR-TV's programming is not interrupted, and MSU must continue to deliver a good quality ATSC 1.0 signal to all MVPDs.
2. MSU must notify the Video Division within thirty (30) days of plans to discontinue operation prior to the authorization's expiration date.
3. Within thirty (30) days of completing experimentation MSU must provide a report pursuant to the requirements laid out in 47 CFR § 5.207.
4. Grant of the instant experimental authorization does not represent that WKAR-TV would be granted a license to transmit a signal pursuant to the ATSC 3.0 rules.¹⁷ The Commission will consider that grant of such a license only if and when WKAR-TV chooses to convert its facility to ATSC 3.0.
5. Any other broadcast television station that would like to transmit an ATSC 3.0 signal as a guest station over WKAR-TV's experimental facility must file its own application for experimental authority. Any experimental authority granted to another station may be subject to the same terms and conditions, including expiration date, as those adopted herein.
6. Any broadcaster equipment or end-user devices must receive (as applicable) the necessary Commission equipment authorizations prior to use.

Sincerely,

/s/

Kevin R. Harding
Associate Chief, Video Division
Media Bureau

Cc: Jonathan Cohen, Esq. (Counsel for MSU) (joncohen@wbklaw.com)

¹⁴ This action is being taken by the Video Division pursuant to the authority delegated to the Media Bureau under 47 CFR § 0.61.

¹⁵ 47 CFR § 5.71(c)

¹⁶ See LMS File No. 0000053377.

¹⁷ See 47 CFR § 73.3801 *et. seq.*