

**FCC FACT SHEET\***

**Program Originating FM Boosters**

**Second Report and Order and Order on Reconsideration**

**Background:** The *Second Report and Order and Order on Reconsideration* finalizes rules and procedures that will allow FM broadcasters to use booster stations to originate programming on a limited basis. FM boosters are low power, secondary stations that rebroadcast programming on the same frequency as their primary station. Until recently, the only purpose of FM boosters was to rebroadcast to areas where reception was poor, such as where a mountain blocks the primary station from serving part of its community. Commission rules did not allow booster stations to originate content. With advances in technology it has become possible for FM broadcasters to customize the content delivered to different parts of their service areas by using boosters to air programming different from their primary station. Stations choosing to use this technology might, for up to three minutes each hour, air hyper-local news and weather reports or advertisements from small local businesses. Since April 2024, the Commission has permitted broadcasters to apply for program originating boosters on an experimental basis. The *Second Report and Order* adopts rules and procedures that make it possible for program originating boosters to operate on a more permanent basis. The *Order on Reconsideration* denies or dismisses two Petitions for Reconsideration of the *First Report and Order*. The petitions repeat arguments the Commission considered and rejected in the *First Report and Order*.

**What the *Second Report and Order* Would Do:**

- Establishes procedures for broadcasters to notify the Commission of program originating booster operation;
- Establishes procedures to predict and address potential interference for booster station applications prior to building;
- Adopts a 25 booster station cap on the number of program originating boosters a single station may operate;
- Creates notification requirements so that other broadcasters and emergency alert participants will be aware of a booster's program origination to protect the Emergency Alert System;
- Updates political advertising rules for program originating boosters; and
- Adopts a public interest certification to serve as a regular reminder to use program origination equitably as an enhancement to reach listeners in a specific zone rather than to exclude those in another.

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\* This document is being released as part of a "permit-but-disclose" proceeding. Any presentations or views on the subject expressed to the Commission or its staff, including by email, must be filed in MB Docket No. 20-401, which may be accessed via the Electronic Comment Filing System (<https://www.fcc.gov/ecfs/>). Before filing, participants should familiarize themselves with the Commission's *ex parte* rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission's meeting. See 47 CFR § 1.1200 *et seq.*

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

In the Matter of	)	
	)	
Amendment of Section 74.1231(i) of the	)	MB Docket No. 20-401
Commission’s Rules on FM Broadcast Booster	)	
Stations	)	
	)	
Modernization of Media Initiative	)	MB Docket No. 17-105
	)	
Amendment of Section 74.1231(i) of the	)	RM-11854
Commission's Rules on FM Broadcast Booster	)	
Stations	)	

SECOND REPORT AND ORDER AND ORDER ON RECONSIDERATION\*

Adopted: [ ] Released: [ ]

By the Commission:

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\* This document has been circulated for tentative consideration by the Commission at its November 21, 2024 open meeting. The issues referenced in this document and the Commission’s ultimate resolutions of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairwoman has determined that, in the interest of promoting the public’s ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The Commission’s ex parte rules apply and presentations are subject to “permit-but-disclose” ex parte rules. See, e.g., 47 CFR §§ 1.1206, 1.1200(a). Participants in this proceeding should familiarize themselves with the Commission’s ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission’s meeting. See 47 CFR §§ 1.1200(a), 1.1203.

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## I. INTRODUCTION

1. We adopt this *Second Report and Order and Order on Reconsideration (Second Report and Order)* to establish service rules that will enable FM and low power (LPFM) broadcasters to use FM booster stations to originate program content on a non-experimental basis.<sup>1</sup> This action builds upon an April 2024 *Report and Order and Further Notice of Proposed Rulemaking* in this proceeding.<sup>2</sup> We also deny two Petitions for Reconsideration that were filed in response to the *Order*.<sup>3</sup>

2. GeoBroadcast Solutions, LLC (GBS) states that it has developed technology that is designed to allow licensees of primary FM broadcast stations to use boosters to originate programming without raising the potential for harmful co-channel interference to the reception of the primary station's signal outside the coverage of the booster station or to previously authorized secondary stations, thereby allowing broadcasters to air "geo-targeted" content<sup>4</sup> different from their primary station's signal to specific areas, *i.e.*, "zones," within that station's service contour. In the *Booster Rulemaking*, we concluded that it would serve the public interest to provide broadcasters with a limited option to use program originating boosters<sup>5</sup> and adopted a general framework of regulations to govern future service. However, we concluded that we also needed to adopt more specific processing, licensing, and service rules before permitting construction and operation of program originating boosters on a permanent basis.<sup>6</sup>

<sup>1</sup> Prior to adoption of these rules, the Commission has allowed such use of FM booster stations only on an experimental basis. *See infra*, note 6. Both full-service FM and LPFM stations are authorized to operate booster stations. For convenience, we reference below only FM stations. However, our decision herein applies to both full-service FM and LPFM stations.

<sup>2</sup> *See Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations*, Report and Order and Further Notice of Proposed Rulemaking, MB Docket Nos. 20-401, 17-105 and RM-11854, FCC 24-35, 2024 WL 1460460 (rel. April 2, 2024) (collectively, *Booster Rulemaking*, and respectively, *Order* and *FNPRM*). This proceeding originated with a Petition for Rulemaking by GeoBroadcast Solutions, LLC (GBS). Petition for Rulemaking of GeoBroadcast Solutions LLC, RM-11854 (filed Mar. 13, 2020) (Petition).

<sup>3</sup> REC Networks, Petition for Reconsideration (Apr. 29, 2024) (REC Petition); Press Communications, LLC, Petition for Reconsideration (May 16, 2024) (Press Petition).

<sup>4</sup> Geo-targeted content, as the term is used herein, is that which can be heard only within a portion of an FM station's total service area covered by the signal of a co-channel FM booster station. We also refer to the technology generally as geo-casting by a program originating booster. The technology can be used to air hyper-local content such as news, weather, and advertising most relevant to a particular community.

<sup>5</sup> The *Order* added a definition of "program originating booster" to section 74.1201(f)(2) and that rule change became effective on May 16, 2024. *See* 47 CFR § 74.1201(f)(2) (defining "program originating booster" as "an FM broadcast booster station that retransmits the signals of an FM radio broadcast station or a low-power FM broadcast station, and that may replace the content of the incoming signal by originating programming for a period not to exceed three minutes of each broadcast hour," explaining that "[t]his is a strict hourly limit that may not be exceeded by aggregating unused minutes of program origination," and stating that "a program originating FM booster station is subject to the same technical and interference protection requirements as are all FM broadcast booster stations, including but not limited to those set forth in §§ 74.1203 through 74.1262").

<sup>6</sup> We stated that we would, in the interim, consider requests for experimental authorizations pursuant to Part 5 of our rules. *See FNPRM*, paras. 70-71, citing 47 CFR § 5.71(c). We anticipated that the Media Bureau would grant one-year, renewable experimental authorizations obtained through Part 5 of the Commission's rules. To date we have

(continued....)

We adopt such rules in this *Second Report and Order* after considering public comment and petitions for reconsideration.<sup>7</sup> FM and LPFM broadcasters will be able to apply for non-experimental program originating boosters upon the effective date of the rules adopted herein.

## II. BACKGROUND

3. **The FM Booster Service.** FM boosters are low power, secondary stations that operate in the FM broadcast band.<sup>8</sup> They must be licensed to the same broadcaster and on the same frequency as the booster's primary station, and rebroadcast that primary station's signal within its protected contour.<sup>9</sup> Until the recent *Booster Rulemaking*, the sole purpose of boosters was to improve signal strength of primary FM stations in areas where reception is poor.<sup>10</sup> The Commission's rules (Rules) had prohibited booster stations from originating content.<sup>11</sup>

4. **Existing Application Process and Technical Standards.** Historically, a primary station has been able to apply at any time for authorization to build any number of FM booster stations. However, given the limited purpose of traditional FM boosters and the risk that booster stations will cause limited co-channel interference to their primary station, the demand has traditionally been quite limited. As a secondary service, FM booster stations are not permitted to cause adjacent channel interference to other primary services or to previously authorized secondary stations.<sup>12</sup> An FM booster station is allowed to cause "limited interference" to its primary station's co-channel signal, provided it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the primary station's principal community of license.<sup>13</sup> Although the Rules allow an FM booster to cause some

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received requests from one licensee for experimental authority to operate three program originating booster stations. See Application of Radio Activo 2, LLC, File Nos 0000255596, 0000255297, 0000255298 (rec. Oct. 4, 2024) (seeking boosters associated with KADD(FM), St. George, UT).

<sup>7</sup> As noted in the *Booster Rulemaking*, some of these rules implicate all boosters, not only program originating boosters. Rules applicable to all boosters we adopt herein include amending section 74.1204(f) to include a mechanism to address predicted interference while booster construction permit applications remain pending; clarifying in section 74.1231(j) that grandfathered superpowered FM stations are able to implement booster stations only within the standard maximum contour for their class of station; codifying the requirement that booster stations must suspend operations any time their primary stations are not broadcasting and must file notices of suspended operation; and modifying section 74.1232 to clarify that a booster station may not broadcast programming that is not permitted by its FM primary station's authorization.

<sup>8</sup> The Commission created the FM booster service in 1970. See *Amendment of Part 74 of the Commission's Rules and Regulations to Permit the Operation of Low Power FM Broadcast Translator and Booster Stations*, Report and Order, 20 R.R.2d (P & F) 1538 (1970) (*LPFM Broadcast Translator and Booster Stations*). It amended the booster rules in 1987 to increase power and in 2020 to expand the ability of LPFM stations to operate boosters. See *Amendment of Part 74 of the Commission's Rules Concerning FM Booster Stations and Television Booster Stations*, Report and Order, 2 FCC Rcd 4625 (1987) (*1987 Booster Report*); *Amendments of Parts 73 and 74 to Improve the Low Power FM Radio Service Technical Rules*, Report and Order, 35 FCC Rcd 4115 (2020).

<sup>9</sup> 47 CFR § 74.1231(i).

<sup>10</sup> Boosters can alleviate reception problems due to terrain shielding or distance from the transmitter. Traditionally, an FM broadcast station transmits its signal from a single, elevated transmission site central to its protected service contour. This results in a stronger signal near the transmitter and a weaker signal as the distance from the transmitter increases. Intervening terrain can also reduce signal strength (*i.e.*, terrain shielding), regardless of the distance from the transmitter. See Petition at 7-8.

<sup>11</sup> See 47 CFR § 74.1201(f).

<sup>12</sup> *Id.* § 74.1203(a).

<sup>13</sup> *Id.* § 74.1203(c) ("An FM booster station will be exempted from the provisions of paragraphs (a) and (b) of this section to the extent that it may cause limited interference to its primary station's signal, *provided* it does not disrupt the existing service of its primary station or cause such interference within the boundaries of the principal community of its primary station.").

interference to its own primary station outside of its community of license, the Commission has long urged licensees to engineer boosters in a manner that would limit such interference.<sup>14</sup>

5. **History of This Proceeding.** In the *Order*, we identified significant potential benefits of program originating boosters. The *Order* found that the technology could enable radio stations, on a voluntary basis, to seek new sources of revenue, provide audiences with more relevant, hyper-local content, and provide advertisers with better opportunities to direct messages to the listeners they most want to reach.<sup>15</sup> The *Order* identified various technical and non-technical matters that it would need to address but concluded that it could resolve these matters by adopting safeguards and limitations including: limiting program origination to three minutes per hour (five percent of each hour); requiring notification to the Commission before a booster begins to originate programming; requiring program originating boosters to receive and broadcast all emergency alerts in the same manner as their primary station; limiting the number of boosters a station can operate; and actively monitoring the marketplace to ensure that booster stations are not used to disadvantage particular communities or locations.<sup>16</sup> The *Order* also concluded that the Commission could minimize interference by placing conditions on booster authorizations, relying upon proper engineering by broadcasters, and responding, on a case-by-case basis, to any interference that might arise in individual circumstances.<sup>17</sup> Nevertheless, because the record addressed some of these matters quite broadly, we issued the *FNPRM* to propose specific requirements and solicit more detailed input. The *FNPRM* also sought comment on administrative matters not fully discussed in the record, such as processing, licensing, and service rules that the Commission would need in order to authorize program originating boosters and respond to any resulting operational issues.<sup>18</sup> Thus, although the *Order* provided for immediate grant of authorizations to operate program originating boosters on an experimental basis, it determined that permanent authorizations would need to await establishment of more detailed requirements in response to the *FNPRM*.<sup>19</sup>

### III. DISCUSSION

6. We adopt herein service rules to allow for the use of program originating boosters without the need for an experimental authorization. To facilitate the rollout of this service, we detail below the process for stations to notify the Commission and other stations of the commencement of program origination on booster stations. We also update our Rules to allow the Commission to address concerns about predicted interference from proposed booster stations, and we adopt a cap on the total number of program originating boosters each primary station may operate. We update our political broadcasting rules to account for political advertising on program originating boosters. Next, we adopt a public interest certification for broadcasters operating program originating boosters. Finally, we address pending petitions for reconsideration.

#### A. Second Report and Order

7. Based on our review of the record, we refine the proposals put forth in the *FNPRM* and adopt operating rules and administrative procedures for program originating FM boosters. The record of this proceeding represents a broad cross-section of interested parties including advocacy groups representing the interests of full service commercial, noncommercial, and LPFM broadcasters, consulting engineers, and a coalition promoting the voices of communities of color and marginalized groups in the

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<sup>14</sup> *LPFM Broadcast Translator and Booster Stations*, 20 R.R.2d 1538 at para. 20.

<sup>15</sup> *Order*, paras. 21, 32.

<sup>16</sup> *Id.*, para. 11.

<sup>17</sup> *Id.*, para. 10.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*, para. 2.

broadcasting industry. Some express support for program originating boosters<sup>20</sup> and others, while generally opposed to such use of boosters, express support for operational safeguards proposed in the *FNPRM*.<sup>21</sup>

### 1. Application Process

8. We will, as proposed in the *FNPRM*, continue to process booster applications on a first come/first served basis using our existing application procedures.<sup>22</sup> No commenter suggested or identified a need for opening application filing windows for program originating boosters, nor would we anticipate any resulting benefit from doing so.<sup>23</sup> We believe that continuing the existing first come/first served application process will best enable FM broadcasters to design systems that meet their individual circumstances and to determine whether program origination on boosters meets their needs. This also will allow broadcasters to apply for boosters at any time. Therefore, we will continue to process all booster applications, whether for fill-in stations or for those originating programming, using existing first come/first served application procedures.<sup>24</sup>

9. First come/first served procedures can potentially result in mutually exclusive booster applications, *i.e.*, those that cannot each be granted because they are in technical conflict with each other. As a practical matter, mutual exclusivity has not been an issue under current rules due to the small amount of applications that have been filed to date, but we discussed in the *FNPRM* a concern that it might occur with an increase in the number of FM booster applications.<sup>25</sup> For example, we had sought comment in the *NPRM* about a situation where FM stations that are short-spaced under section 74.1204(g) apply for new boosters on the same day.<sup>26</sup> The *FNPRM* asked how we should address any mutually exclusive applications for FM boosters, noting that the Commission had previously sought, but not received, comment on this issue.<sup>27</sup> GBS, the only commenter to respond to this issue, says that it is unlikely for such a problem to arise because boosters can only operate within the protected contour of the primary station and, thus, boosters associated with different primary stations should not be mutually exclusive.<sup>28</sup>

10. We agree with GBS that mutually exclusive booster proposals, while possible in short-spaced situations, would be rare.<sup>29</sup> GBS is the only commenter to respond to our question about this

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<sup>20</sup> *E.g.*, Comments of U.S. Black Chamber, Inc., Multicultural Media, Telecom and Internet Council, National Newspapers Publishers Association, and Roberts Radio Broad. LLC at 1 (Black Chamber Comments) at 1; Reply Comments of Roberts Radio Broad. LLC at 1, 5 (Roberts Reply Comments).

<sup>21</sup> *E.g.*, Comments of National Public Radio at 2, 5 (NPR Comments) (supporting rules intended to mitigate interference, provide monitoring information, and notify public safety entities); Comments of REC Networks at 3, 6, 9 (REC Comments) (supporting proposals to add a mechanism to address predicted interference and a notification requirement for program originating boosters); Comments of National Association of Broadcasters at 2 (NAB Comments) (supporting a notice requirement for program originating boosters, and a synchronization requirement in certain circumstances).

<sup>22</sup> *FNPRM*, para. 73. Compare 47 CFR § 73.3573 (establishing filing windows for applications for full service stations in the non-reserved band).

<sup>23</sup> See NPR Comments at 4 (“NPR does not think the Commission needs to adopt formal filing windows but rather can process applications on a first come/first serve basis...”).

<sup>24</sup> See 47 CFR § 74.1233.

<sup>25</sup> *FNPRM*, para. 73.

<sup>26</sup> *Amendment of Section 74.1231(i) of the Commission’s Rules on FM Broadcast Booster Stations*, Notice of Proposed Rulemaking, 35 FCC Rcd 14213, para. 18 (2020) (*NPRM*).

<sup>27</sup> *FNPRM*, para. 73, citing *NPRM*, para. 18.

<sup>28</sup> Comments of GeoBroadcast Solutions, LLC, at 11 (GBS Comments).

<sup>29</sup> *Id.*

potential issue.<sup>30</sup> Thus, the record does not indicate that this will be a significant issue. Although we continue to anticipate that the use of boosters for program origination will increase the number of booster applications, we recognize that the voluntary nature of the technology is unlikely to result in so many licensees adopting the technology in a single area as to create potentially conflicting proposals. Moreover, conflicts would arise only between stations that are short-spaced and that filed applications on the same day, further reducing the likelihood of mutually exclusive proposals. Thus, we need not create a rule to address mutually exclusive booster proposals at the present time. In the unlikely event of mutual exclusivity of booster proposals, we direct the Media Bureau (Bureau) to first give the applicants an opportunity to adjust their technical proposals to allow for grant of both applications. If applicants determine that a technical solution is not possible, they may present a request for grant of each application on a time-sharing basis, such as with one booster originating programming during a period that includes morning drive time and the other for a period that includes evening drive time, or one during the first half of the hour and the other for the second half of the hour. Such an arrangement should not be difficult given that program origination is limited to three minutes each hour.<sup>31</sup> Further, we expect that the applicants would have an incentive to reach a solution because neither application could otherwise be granted.

11. To the extent that one commenter advocates for a two-step application process to address its concern that program originating boosters have the potential to cause interference to existing broadcast stations, we find that the approach that we adopt today will suffice to address that concern. Specifically, we decline to adopt a proposal by National Public Radio (NPR) that a broadcaster would file a first come/first served application to construct an FM booster as it does currently but, following grant, would file a separate application specifically for program origination.<sup>32</sup> NPR believes that requiring an affirmative grant of program origination authority before a broadcaster can begin using boosters for that purpose would curb any potential interference from increased use of boosters, and best alert the Bureau and the industry of the broadcaster's intent to originate programming.<sup>33</sup> It envisions that the Bureau, while reviewing the application to originate programming, would address any concerns about the specific proposal.<sup>34</sup>

12. We have considered NPR's suggestion but will not require separate applications for booster construction and program origination. The main purpose of NPR's proposal appears to be creation of an opportunity for interested parties to become aware that a booster will be used for program origination and file interference-based objections, which would allow the Commission to consider such matters before authorizing such boosters. However, the Commission already reviews booster applications when authorizing them initially.<sup>35</sup> Thus, even without a separate application to originate programming, interested parties will still have an opportunity to participate in review of booster applications.<sup>36</sup> The Commission will continue to place applications for new FM boosters on public notice, triggering a period

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<sup>30</sup> *NPRM*, para. 18.

<sup>31</sup> *Order*, para. 14. See also 47 CFR § 74.1201(f)(2) (defining a "program originating FM booster station" as "[a]n FM broadcast booster station that retransmits the signals of an FM radio broadcast station or a low-power FM broadcast station, and that may replace the content of the incoming signal by originating programming for a period not to exceed three minutes of each broadcast hour").

<sup>32</sup> *NPR Comments* at 4.

<sup>33</sup> *Id.*

<sup>34</sup> *Id.* ("Concerns about the specifics of any proposal can be captured and vetted during the application review process.").

<sup>35</sup> See 47 CFR § 74.1233.

<sup>36</sup> See 47 U.S.C. § 309(d) (permitting any party in interest to file a petition to deny an application for an FM booster construction permit or license); 47 CFR § 73.3587 (permitting any person to file an objection to any application for an instrument of authorization prior to grant of the application).



to file petitions to deny or informal objections. We find it unnecessary to add an additional prior approval process for program origination. As discussed in more detail below, we are adopting a program origination notification requirement from which the Commission and interested parties can learn of a broadcaster's intent to use a specific booster to originate programming. We believe that notification process will provide sufficient information to the public. Moreover, boosters are secondary facilities and would have to cease broadcasting if causing interference.<sup>37</sup> We will address any specific concerns about interference on a case-by-case basis.

13. Finally, we address how broadcasters that are operating program originating boosters pursuant to experimental authority will transition to permanent operation following adoption of this *Second Report and Order*. Broadcasters currently operating under experimental authorizations that are compliant with the rules adopted herein may file a notification at any time after the effective date of the rules adopted in this *Second Report and Order* and before the existing experimental authority expires so that the program origination can continue uninterrupted.<sup>38</sup> The process for notification using a new form is discussed in more detail later in this document.<sup>39</sup> The Commission has granted experimental authorizations for program originating boosters for one-year terms.<sup>40</sup>

14. Thus, while we anticipate that some broadcasters will file a notification soon after the effective date, others may choose to continue operating pursuant to experimental authority and file the notification shortly before their experimental authority expires. There appears to be no reason to limit FM booster stations with experimental authorizations to any shorter window in which to transition. Therefore, after the rules adopted herein take effect, a notification form is approved by the Office of Management and Budget, and the Commission publishes an announcement of such approval in the *Federal Register*, any station currently employing program originating boosters compliant with the rules adopted in this *Second Report and Order* may transition to non-experimental operation by filing a notification on the new form at any time prior to expiration of the experimental authorization.

## **2. Program Origination Notification**

15. As proposed in the *FNPRM*,<sup>41</sup> we adopt a requirement that licensees notify the Commission of their intent to originate programming over boosters. In this way, interested parties will be on notice for which stations are using boosters to originate content, and the Bureau will best be able to respond to any complaints that may arise.

16. Several commenters responded to our proposal in the *FNPRM*, all supporting a notification requirement.<sup>42</sup> We agree with REC Networks' (REC) assertion that notifications will assist listeners, broadcast stations, and those involved with emergency communications to determine the possible source of interference.<sup>43</sup> REC suggests that the Commission require notification within ten days of commencing program origination, similar to an existing ten-day notification requirement for hybrid digital operations.<sup>44</sup> REC suggests a simple process with notifications through the Bureau's Licensing

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<sup>37</sup> 47 CFR § 74.1203.

<sup>38</sup> *NPRM*, 38 FCC Rcd at 7171, para. 30.

<sup>39</sup> See *infra*, paras. 15-17.

<sup>40</sup> As of the adoption date of this document, the Commission has granted experimental authorizations for three boosters licensed to one party. We anticipate that the rules adopted herein will be finalized before the expiration of those experimental authorizations.

<sup>41</sup> *FNPRM*, para. 74.

<sup>42</sup> REC Comments at 9-10; NPR Comments at 4; NAB Comments at 2-3; GBS Comments at 11.

<sup>43</sup> REC Comments at 9-10.

<sup>44</sup> *Id.* at 9. See 47 CFR § 73.406.



and Management System (LMS) database.<sup>45</sup> The National Association of Broadcasters (NAB) also believes that a notification requirement is important and notes that a notification requirement is essential to allow listeners, stakeholders, and the Commission to track and monitor which stations are using program originating boosters and whether these stations are causing unwanted interference.<sup>46</sup> Similarly, NPR anticipates that notifications will allow the Commission and the industry to monitor station use of the new technology.<sup>47</sup> GBS supports the 15- and 30-day timing of the notification that we proposed in the *FNPRM*, which it says strikes an appropriate balance between the Commission's need for information and the broadcaster's interest in minimizing regulatory burdens.<sup>48</sup>

17. Based on the record, we add a new section 74.1206 to our Rules.<sup>49</sup> The rule establishes a notification requirement but rather than specifying in the rule itself the pieces of information a program originating FM booster station must provide (as we proposed in the *FNPRM*), we direct the Bureau to create a new form that identifies that information. We believe that in this case it will be easier for applicants to provide each required element of the notification by responding to requests for that information on a form rather than referring back to the Rules to locate and provide that information. Additionally, in this case, a form will be more convenient for the public because it presents a uniform format for supplying information to the Commission. Accordingly, we direct the Bureau to create a form containing each of the elements proposed in the *FNPRM*, including: (1) the call sign and facility identification number of the program originating FM booster station; (2) if applicable, the date on which the program originating FM booster station will commence or has terminated originating content; (3) the name and telephone number of a technical representative the Commission or the public can contact in the event of interference; (4) a certification that the program originating FM booster station complies with all Emergency Alert System (EAS) requirements in part 11 of our Rules; (5) a certification that the program originating FM booster station will originate programming for no more than three minutes of each broadcast hour; and (6) a certification that the program originating FM booster minimizes interference to the primary station through synchronization or terrain shielding. This information should assist interested parties in raising any program-origination-related concerns as complaints (at any time) or as objections during the license renewal process. Booster licensees will be required to file the notification form in the LMS database 15 days prior to commencing origination and 30 days after permanently terminating origination. We do not see any particular advantage to narrowing the timing of the notification period from 15 days to 10 days as suggested by REC.<sup>50</sup> We delegate to the Bureau authority to create the new form.

18. In the *FNPRM*, we asked whether there was any reason that information shared with the Commission in the proposed FM Booster Program Origination Notification should not be publicly available under the OPEN Government Data Act.<sup>51</sup> We received no comments on whether the FM Booster Program Origination Notification should be made public subject to the OPEN Government Data

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<sup>45</sup> REC Comments at 9-10.

<sup>46</sup> NAB Comments at 4.

<sup>47</sup> NPR Comments at 4.

<sup>48</sup> GBS Comments at 11.

<sup>49</sup> See *FNPRM*, Appendix C.

<sup>50</sup> See REC Comments at 9-10.

<sup>51</sup> Congress enacted the OPEN Government Data Act as Title II of the Foundations for Evidence-Based Policymaking Act of 2018, Pub. L. No. 115-435 (2019), §§ 201-202. It requires agencies to make "public data assets" available under an open license and as "open Government data assets," *i.e.*, in machine-readable, open format, unencumbered by use restrictions other than intellectual property rights, and based on an open standard that is maintained by a standards organization. 44 U.S.C. §§ 3502(20), (22) (definitions of "open Government data asset" and "public data asset"), 3506(b)(6)(B) (public availability). The OPEN Government Data Act requirements are to be implemented "in accordance with guidance by the Director" of the Office of Management and Budget, 44 U.S.C. § 3506(b)(6), which OMB has not yet issued in final form.

Act. We have determined above that this information will be made publicly available in the Commission's LMS database.

### 3. Synchronization/Self-Interference

19. Although we conclude that boosters work best if broadcasters minimize self-interference by synchronizing the signals of their primary station with those of their boosters, we decline to adopt uniform synchronization standards for program originating boosters at this time. Rather, we will allow each broadcaster to determine what synchronization practices will work best in its own circumstances to minimize self-interference.

20. The *Order* noted that GBS' proposal was based on "carefully located and synchronized booster transmitters" and that GBS employed synchronization in its tests of the technology.<sup>52</sup> We, thus, included a general synchronization requirement when we established rules governing self-interference for program originating boosters.<sup>53</sup> We did not, however, specify a particular method that a broadcaster would be required to use to implement such synchronization. The *FNPRM* asked whether it would be helpful to adopt a rule establishing uniform synchronization standards for all broadcasters with program originating boosters or if that would be an unnecessary burden given that broadcasters already have strong economic incentives to avoid self-interference.<sup>54</sup> As we noted therein, it is not a new concern that booster stations operating on the same channel as a primary station within that primary station's service contour will impact the primary station's signal.<sup>55</sup> The fact that program originating boosters are broadcasting different programming than the primary station has the potential to increase listener perception of an impact to the primary station's signal, *i.e.*, to hear a mix of signals that the listener might perceive as interference.<sup>56</sup> However, broadcasters have an economic interest in not substantially degrading their own signals, and the Commission has encouraged stations with associated boosters to engineer their systems to ensure that the boosters' impact on the primary station is as limited as possible.<sup>57</sup> The *FNPRM* also asked any commenters in favor of a Commission-established standard to identify desired specifics such as whether the Commission, in developing and applying a standard, should establish particular synchronization levels, equipment, monitoring, and/or recalibration requirements.

21. Several commenters believe that program originating boosters will increase interference between a broadcaster's boosters and its primary station. Aaron Read (Read) predicts significant self-interference, leading to a degradation of service and general confusion among listeners.<sup>58</sup> He explains that broadcasters will need to have identical waveforms for both the main and the booster signal(s) to

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<sup>52</sup> *Order*, n. 19, citing Petition at 5, 8-9. *See id.*, para. 59 (GBS "test reports demonstrate that boosters can originate programming, without material degradation of the listener's experience, when deployed with optimal system design and successful synchronization.").

<sup>53</sup> *See* 47 CFR § 74.1203 ("A properly synchronized program originating FM booster station transmitting programming different than that broadcast by the primary station, subject to the limits set forth in § 74.1201(f)(2), is not considered to cause interference to its primary station solely because such originated programming differs from that transmitted by the primary station.").

<sup>54</sup> *FNPRM*, para. 77.

<sup>55</sup> *Id.*, paras. 38, 45, citing *1987 Booster Report*.

<sup>56</sup> *See, e.g.*, Comments of Aaron Read (Read Comments) at 1 ("To have two different waveforms drastically expands how much further the 'interference' [from the booster to the main station] will be perceived.").

<sup>57</sup> *See, e.g.*, *1987 Booster Report*, 2 FCC Rcd at 4629, para. 28 (observing that "careful attention must be devoted to selection of a booster's site, power, antenna height, and directional pattern to avoid undue disruption to service by the primary station" and stating "[i]t is our intention that boosters not disrupt the existing service of the primary stations and in this context we expect licensees to be diligent in their efforts to maintain their stations' existing service when introducing new booster facilities").

<sup>58</sup> Read Comments at 1.

ensure proper masking of any self-interference.<sup>59</sup> NPR is concerned that if self-interference results in parts of the FM band becoming unlistenable, listeners will increasingly move to other sources of audio news, music and public affairs programming.<sup>60</sup> NAB predicts that signal disruption is inevitable in transition areas where a station's primary signal meets the signal of a booster that is airing different content.<sup>61</sup> NAB states that such interference would harm the station employing the technology and is likely to erode public confidence in FM broadcasting generally.<sup>62</sup> NAB, thus, believes that it is important to adopt safeguards and suggests that the Commission require licensees of program originating boosters to design systems that prevent unwanted interference, including voluntary self-interference to the station's primary signal.<sup>63</sup> GBS, however, argues that the Commission should rely upon broadcasters and their experts because they are best positioned to determine the most effective way to synchronize and have both the ability and economic incentive to minimize any self-interference.<sup>64</sup>

22. Only NPR and NAB support adoption of a specific Commission-devised synchronization requirement. NPR views such a requirement as an additional safeguard but does not identify any desired specifics.<sup>65</sup> NAB believes that synchronization requirements should apply if the program originating boosters are not serving areas shielded by terrain or if a primary station will operate more than a certain number of program originating booster stations (*e.g.*, four).<sup>66</sup> NAB observes that synchronization involves several methodologies and proposes standards for each.<sup>67</sup>

23. Other commenters view synchronization as a good practice whose specifics should be left up to each licensee. GBS states that synchronization is essential and that it advises all broadcasters deploying program originating boosters to synchronize their primary and booster signals to the highest

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<sup>59</sup> *Id.*

<sup>60</sup> NPR Comments at 3.

<sup>61</sup> NAB Comments at 2.

<sup>62</sup> *Id.*

<sup>63</sup> *Id.*

<sup>64</sup> GBS Comments at 7.

<sup>65</sup> NPR Comments at 3.

<sup>66</sup> NAB Comments at 6.

<sup>67</sup> With respect to carrier frequency synchronization, NAB proposes that carrier frequencies should be locked together using a common reference, such as GPS. It states that failure to maintain coherence between main and program originating booster carrier frequencies would cause incidental AM modulation or beating, which will manifest as "picket-fence" interference that would frustrate listeners. *Id.* at 7. With respect to synchronization of modulation parameters, NAB proposes that modulation levels, including peak deviation and stereo pilot frequency, should also be identical. It argues that studies show that even a small mismatch in composite baseband modulation levels, such as 0.5 dB, can dramatically increase perceived audio distortion when the signal levels of the booster and main transmitter are similar. *Id.* Concerning synchronization based on program time delay, NAB states that time alignment of programming is particularly critical in transition areas where the main and booster RF signal levels are approximately the same because rapid degradation in audio distortion occurs when the time misalignment exceeds 1 microsecond. *Id.* at 7-8. NAB, therefore, recommends that the alignment should be adjusted so that the program material received from the booster and main transmitters has no time delay in areas where the booster and main signal levels are within 10 dB. *Id.* Finally, NAB submits that stations should be required to verify proper synchronization after a "crash" or when the system reboots for some reason because restarting a system may impact synchronization. NAB suggests that broadcasters have a means for disabling the booster if they are not operating as designed. *Id.* at 8. Because we are providing broadcasters the flexibility to design systems most suited to their individual circumstances and are not adopting a uniform synchronization standard, we do not respond to each of these suggestions. However, we note that NAB's concerns may be useful to individual broadcasters and their consulting engineers in determining what synchronization parameters are most appropriate for the particular issues that may affect individual booster systems.

degree possible.<sup>68</sup> It states that such a practice leads to minimal transition periods that are less noticeable to the listener and more consistent with the broadcasters' own strong incentive to provide a quality signal.<sup>69</sup> Nevertheless, GBS believes that the Commission should not develop or require specific synchronization standards because the broadcasters' own on-site technical experts are in a better position to determine the most effective way to synchronize under each broadcaster's individual conditions.<sup>70</sup> It states that synchronization is a routine part of existing booster station operations and that GBS' technology does not presently require any new or specialized equipment. Therefore, GBS would view Commission-mandated engineering standards for synchronization as unnecessary and time-consuming "micromanagement" of a highly technical and evolving process for no apparent gain.<sup>71</sup> Similarly, REC opposes a synchronization requirement because not all stations are alike.<sup>72</sup> It contends that synchronization should be left up to the engineer designing the particular system who would best know whether there is a need for synchronization and, if so, what type.<sup>73</sup> NAB also states that the Commission, if it adopts a synchronization requirement, should apply it only to program originating boosters and not to traditional boosters which are generally limited to two or three needed to enhance reception and, thus, more limited in the potential for interference.<sup>74</sup>

24. We decline to go beyond the general synchronization requirement in section 74.1203(c) at this time. A specific standard establishing the manner in which each licensee must achieve such synchronization is unnecessary, and hinders flexibility for each station's particular circumstance. Although synchronization is important to limit self-interference in areas not already shielded by terrain, we are convinced that broadcasters have a strong economic incentive to synchronize in the manner most effective to their own particular location and system design in order to provide the best listener experience. We are persuaded that individually engineered synchronization parameters optimized for each station would be better than a one-size-fits-all Commission-developed synchronization standard. Nevertheless, we may revisit the issue if we find during the rollout of the technology that stations are not minimizing self-interference by implementing proper synchronization on their own.

#### **4. Predicted Interference/Section 74.1204(f)**

25. We modify section 74.1204(f) of the Rules to include applications to construct FM booster stations among those subject to objections based on predicted interference to another station. Section 74.1204(f) currently addresses predicted interference only for FM translator stations.<sup>75</sup> Interference by FM booster stations is resolved under section 74.1203, but only once the booster station is constructed and actual interference is alleged. In the *FNPRM*, we sought comment on whether to modify section 74.1204(f) to include a mechanism to address predicted interference for FM booster stations while

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<sup>68</sup> GBS Comments at 7-8.

<sup>69</sup> *Id.*

<sup>70</sup> *Id.*

<sup>71</sup> *Id.* at 8.

<sup>72</sup> REC Comments at 9.

<sup>73</sup> For example, NAB and REC assert that there would be no purpose to requiring synchronization of signals if a Longley-Rice study shows no possible interference due to intervening terrain. NAB Comments at 7; REC Comments at 9. The Longley-Rice method is an irregular terrain model that predicts radio field strength based on the elevation of terrain between the transmitter and specific reception points. *See also* OET Bulletin No. 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference* (2004) available at <https://transition.fcc.gov/oet/info/documents/bulletins/oet69/oet69.pdf>.

<sup>74</sup> NAB Comments at 6.

<sup>75</sup> 47 CFR § 74.1204(f). Also, to conform to the publishing conventions of the National Archives and Records Administration's Office of the Federal Register, we move the Note to paragraph (a)(4) of section 74.1204 into a new paragraph (a)(5), and make minor, non-substantive changes to the language in order for it to be easier for permittees and licensees to understand. *See* Appendix B. *See also FNPRM*, n. 209.

their construction permit applications remain pending.<sup>76</sup> We asserted that such a change could ensure that broadcasters do not invest in developing booster stations that will later cause actual interference that must be resolved under section 74.1203 once the booster commences broadcasts.<sup>77</sup>

26. Commenters addressing this issue generally supported the proposed rule change. NPR, which has ongoing concerns about interference to adjacent channel stations, believes that an amendment to section 74.1204(f) may help guard against such occurrences by providing an early mechanism to identify and address potential interference.<sup>78</sup> GBS states that it does not oppose a modification to section 74.1204(f) to include a procedure to raise concerns of predicted interference.<sup>79</sup> However, it urges the Commission not to tolerate frivolous filings intended mainly to delay that raise unfounded predictions of interference.<sup>80</sup>

27. We adopt the proposed amendment to section 74.1204(f) to provide a mechanism for complaints of predicted interference against FM booster applications. We will begin to accept such complaints upon the effective date of the revisions to section 74.1204(f). In addition, consistent with the proposal in the *FNPRM*, we will permit such complaints to be filed with respect to any booster applications that are pending at the time the revisions to section 74.1204 take effect.<sup>81</sup> By amending section 74.1204(f) to allow complaints of predicted interference against FM booster applications, we establish a process that will provide the earliest indication that developing booster stations may cause interference that must be resolved under section 74.1203 once the booster commences broadcasts. We find that this early warning is best received prior to investing in the development of booster stations. We also agree with GBS, however, that the Commission will not tolerate frivolous claims of predicted interference filed primarily to delay the authorization of a booster station. The Commission's policy against such "strike petitions" provides for sanctions in order to curb abuses of the Commission's processes.<sup>82</sup> Although we do not anticipate that our rule change will trigger strike petitions against booster applications, we would enforce that policy should the matter arise.

## 5. Compatibility with EAS Alerts/Notification to EAS Participants

28. In order to protect public safety, we are adopting an EAS-specific notification requirement to ensure that program originating boosters do not negatively impact the public's receipt of EAS alerts. During earlier stages of this proceeding, the Federal Emergency Management Agency (FEMA) questioned whether program originating boosters would create a three-minute time period each hour when listeners in the booster's zone would not receive emergency messages from the primary station.<sup>83</sup> In the *Order*, we concluded that program origination would not cause harmful interference to EAS, primarily because GBS' tests demonstrated that stations can be engineered to allow the EAS signal to override programming from both the primary station and program originating booster.<sup>84</sup> We authorized the use of program originating boosters based on our amendment to section 11.11 of the Rules to establish

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<sup>76</sup> *FNPRM*, para. 76. We also proposed to apply this new mechanism to any booster applications that are pending at the time the modifications to section 74.1204 are adopted. We further proposed a minor editorial change to the translator rule in section 74.1204(f)(1) to conform to the proposed changes to the booster rules in section 74.1204(f)(2).

<sup>77</sup> *FNPRM*, para. 76.

<sup>78</sup> NPR Comments at 1-2.

<sup>79</sup> GBS Comments at 14-15.

<sup>80</sup> *Id.*

<sup>81</sup> *FNPRM*, para. 76. REC supported this proposal. See REC Comments at 4.

<sup>82</sup> See *Warren C. Havens*, Third Order on Reconsideration, 26 FCC Rcd 10888, 10892, para. 11 (2011), citing *Radio Carrollton*, 69 FCC Rcd 1138, 1148-55 (1978).

<sup>83</sup> 2021 Comments of Federal Emergency Management Agency at 1-2.

<sup>84</sup> *Order*, para. 58.

that program originating boosters must receive and broadcast all emergency alerts in the same manner as their primary station.<sup>85</sup> We also stated that the Commission would closely monitor the rollout of program originating boosters and would revisit this issue, in consultation with FEMA, if it receives reports of EAS disruption by program originating boosters.<sup>86</sup>

29. In the accompanying *FNPRM*, we sought comment on FEMA's 2021 recommendation that FM primary stations using program originating boosters should notify all EAS Participants monitoring that primary station.<sup>87</sup> FEMA believed that such a notification would put participating stations on notice that they should monitor the primary station rather than the associated booster.<sup>88</sup> We asked whether the new section 11.11 requirement that all program originating boosters transmit emergency alerts negates the need for FEMA's proposal.<sup>89</sup> The *FNPRM* also asked whether to require broadcasters using program originating boosters to report EAS-related problems or interference to the Commission and/or to FEMA and, if so, the best means for broadcasters to provide such information.

30. FEMA did not submit any comments to the *FNPRM*. However, several others express continued concern about whether EAS performance might be negatively affected around booster transition zones and would support additional testing.<sup>90</sup> REC states that GBS' technology has not been fully tested to ensure proper switching from program origination to traditional relay upon receipt of a forwarded EAS alert.<sup>91</sup> It is not confident, based on the number of tests performed to date, that the system will work every time. Therefore, REC seeks a three-year moratorium on program origination for FM booster stations that are identified in a State EAS Plan at any level above "participating national."<sup>92</sup> Alternatively, REC recommends requiring licensees that use program originating boosters to notify all broadcast facilities that, pursuant to a state plan, must monitor the booster's primary station for EAS alerts. REC proposes that the licensee also notify the State Emergency Communications Committee(s) (SECC) of the state(s) that require monitoring of that primary station.<sup>93</sup> REC states that such requirements will alert EAS recipients to the source of their EAS alerts.

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<sup>85</sup> The Rule change adopted in the *Order* explicitly made all EAS requirements that are applicable to full-service AM and FM stations and LPFM stations also applicable to program originating FM booster stations. The *FNPRM* also proposed an administrative update to section 73.801 of the Rules to cross-reference the EAS obligation for LPFM stations contained in section 11.11 of the Rules.

<sup>86</sup> *Order*, at para. 58.

<sup>87</sup> *FNPRM*, para. 79. See 2021 Comments of FEMA at 2 ("FEMA's operational concern applies in particular to those radio stations that are designated as an EAS Local Primary (LP), State Primary (SP), State Relay (SR), or are otherwise monitored as an over-the-air source of EAS messages. Should such a station commence operation with booster stations configured for local programming insertion, FEMA recommends that, before such operation may commence, the licensee of the primary must notify any and all EAS Participants monitoring said primary of their intent to transmit unique local programming on one or more boosters. That will be necessary to ensure that any and all monitoring EAS Participants continue to monitor only the primary and not a booster. This must be done to ensure the integrity of EAS over-the-air relay performance during booster local programming breaks.").

<sup>88</sup> *Id.*

<sup>89</sup> *FNPRM*, para. 79.

<sup>90</sup> See, e.g., Press Comments at 2.

<sup>91</sup> REC Comments at 5.

<sup>92</sup> *Id.* at 4-6. It envisions that stations positioned at the lowest-level of the EAS alert transmission chain would conduct monthly EAS tests during these three years to determine whether the technology properly switches between the program origination and information relay modes, followed by a Commission evaluation of the test data before authorizing EAS participants higher in the chain to use program originating boosters.

<sup>93</sup> SECCs are volunteer non-governmental organizations that develop plans for administering the EAS in each state. Committee members typically represent EAS participants, such as broadcasters and cable companies, and may also include state and local government officials. See <https://www.fcc.gov/SECC-Resources> (accessed Sept. 27, 2024).



31. NPR supports an EAS-specific notification requirement which would go beyond the general notification discussed in the *FNPRM*.<sup>94</sup> NPR envisions that stations using the new technology would notify all EAS Participants monitoring a booster's primary station.<sup>95</sup> It asserts that the Commission should place an affirmative requirement on booster-using EAS Participants to notify their upstream stations so that stations in an EAS daisy chain will not have to determine on their own whether the stations from which they receive their EAS signals are originating programming.<sup>96</sup> NPR argues that such notifications will not be burdensome for the stations with program originating boosters, but will provide an important alert to upstream stations that they should closely monitor their sources of EAS alerts.<sup>97</sup> NPR also suggests requiring stations employing the technology to test the consistency of alert distribution.<sup>98</sup>

32. NAB submits that it is critical that stations provide public notification of their intent to use program originating boosters to allow FEMA, EAS alert originators, and others to monitor the program originating booster station for EAS alerts, and to watch for problems that could affect public safety.<sup>99</sup> NAB also questions whether boosters will simulcast or be turned off during periods when a station's main channel and program originating boosters are broadcasting the same content, and notes the possibility that some designs will require the former and others the latter. NAB submits that the Commission should require stations to disclose their system plans in this context because the chosen approach will bear upon the potential interference expected at the boundaries during simulcasting, and in particular, during the broadcast of EAS messages.<sup>100</sup>

33. GBS agrees that notifications to the Commission, FEMA, and other EAS Participants in the alert daisy chain are valuable and should be required.<sup>101</sup> However, we disagree with GBS' view that the requirement need not be incorporated into a new rule and we find existing rules are not sufficient to provide for such notifications. With respect to notification to the Commission, GBS cites section 11.61(a)(3)(iv)(A) of the Rules, which requires EAS Participants to file with the Commission identifying information in the EAS Test Reporting System (ETRS).<sup>102</sup> GBS states that the existing disclosure requirement would include the make, model, and current software version of each booster's EAS equipment, its place within its State's EAS hierarchy, the EAS sources the booster monitors as well as the geographic zone in which other EAS Participants may be required to monitor the booster (or its primary station).<sup>103</sup> GBS states that the Commission shares such information with FEMA.<sup>104</sup> With respect to notifications to other stations in the EAS chain, GBS contends that this matter is satisfied by the State

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<sup>94</sup> See *supra*, para. 15-17.

<sup>95</sup> NPR Comments at 4.

<sup>96</sup> *Id.*

<sup>97</sup> *Id.* at 5.

<sup>98</sup> *Id.*

<sup>99</sup> NAB Comments at 4-5.

<sup>100</sup> *Id.* at 9.

<sup>101</sup> Reply Comments of GeoBroadcast Solutions, LLC, at 7 (GBS Reply Comments).

<sup>102</sup> *Id.*, citing 47 CFR § 11.61(a)(3)(iv)(A).

<sup>103</sup> *Id.* See FCC, ETRS Form One Filing Guide, <https://www.fcc.gov/general/eas-test-reporting-system> (last visited Oct. 1, 2024).

<sup>104</sup> GBS says that although ETRS data is confidential to the public, the Commission shares it with FEMA. GBS Reply Comments at 7.



EAS Plans filed in the Commission's Alert Reporting System (ARS) by each SECC.<sup>105</sup> GBS believes that stations would learn about a primary station's booster use because monitoring sources must disclose identifying information, including any "additional information" relevant to the efficient operation of the EAS, and a station could disclose in that "additional information" field that it employs a program originating booster.<sup>106</sup>

34. We agree that consistent distribution of EAS alerts is a public safety matter that should be a key consideration in launching this new technology. However, given the ability of technology to transmit EAS alerts by overriding signals of both the primary station and the booster, as GBS has tested successfully, and the limitation of program origination to three minutes per hour, we do not see a need for delaying full deployment as proposed by REC. Nor do we believe that existing reporting currently built into EAS rules, as cited by GBS, is the best method of notification concerning program originating boosters. Specifically, we do not believe that ETRS is an appropriate mechanism for effecting notification of a booster's program-originating status. Identifying information is only required to be submitted in ARS annually.<sup>107</sup> We believe that any delay between the time when a booster begins originating programming and the time when the primary station files in ETRS would reduce visibility into program originating boosters' participation in the EAS daisy chain. GBS is also mistaken as to what information is currently required to be included in the State EAS Plans that are submitted in ARS, which is only used by SECCs and does not support the submission of information by EAS Participants directly.

35. To ensure that EAS Participants are aware of program originating boosters in their EAS chain we modify our Rules to include, in addition to the general notification requirement discussed earlier in this document,<sup>108</sup> an EAS-specific notification requirement. In the *FNPRM*, we sought comment on FEMA's recommendation that we require FM primary stations implementing program originating boosters to notify all EAS participants monitoring that primary station of the booster's program origination.<sup>109</sup> Based on FEMA's recommendation as well as comments submitted by NAB and REC on this issue<sup>110</sup> we are convinced that an EAS-specific notification requirement is necessary. Specifically, each primary station adopting program originating boosters must alert the appropriate SECC that it is using program-originating boosters and whether the boosters will simulcast the primary station or remain off-air during periods when they are not originating programming.<sup>111</sup> We find that SECCs are best situated to receive these notifications. SECCs administer State EAS Plans, which set forth monitoring assignments for all EAS Participants in the covered state or territory.<sup>112</sup> SECCs can assess whether the primary station providing the notification is monitored by other EAS Participants, and typically will know

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<sup>105</sup> *Id.* at 8. The ARS requires detailed information regarding the State's EAS distribution architecture, including the geographic areas in which EAS participants monitor sources and the identity of the monitoring sources (State Primary, Local Primary, etc.) within each area.

<sup>106</sup> *Id.* GBS states that the Commission allows States to publicly disclose the information contained in their State EAS Plans, which they routinely publish, often on the web site of their respective broadcast associations. *Id.*

<sup>107</sup> See, e.g., 47 CFR § 11.61(a)(3)(iv)(A).

<sup>108</sup> See *supra*, para. 15-17 Appendix B, section 74.1206.

<sup>109</sup> *FNPRM*, para. 79, citing FEMA's Comments to the *NPRM*, at 2.

<sup>110</sup> NAB Comments at 4-5; REC Comments at 5.

<sup>111</sup> While we require each primary station to inform the appropriate SECC as to whether program originating boosters will simulcast the primary station or remain off-air during periods when they are not originating programming, we decline NAB's suggestion to require licensees of program originating boosters to make this information more broadly available to other stations. See NAB Comments at 9. We find this additional information unnecessary to address potential interference concerns in light of the fact that applications for new FM boosters are placed on public notice and that licensees must separately notify the Commission of their intent to originate programming over boosters. See *supra* paras. [12 and 17].

<sup>112</sup> See 47 CFR § 11.21.

the approximate geographic area served by the station. SECC contact information can be found on the Commission's website.<sup>113</sup> We require broadcasters to notify their SECCs at least 30 days prior to employing a program originating booster, or implementing changes to booster status. We also require that stations employing program originating boosters report to the Commission's Operations Center, at [FCCOPS@fcc.gov](mailto:FCCOPS@fcc.gov), any problems of which they become aware concerning the EAS and interference. The Commission will coordinate with FEMA to determine under what circumstances and in what format FEMA would find it helpful for the Commission to share that information with them.

36. To ensure that potentially affected EAS Participants are aware that a monitored alert source employs a program originating booster, we amend section 11.21(a)(4) to require State EAS Plans to indicate whether any of the EAS monitoring sources in the monitoring assignment matrix are primary stations adopting program originating boosters and whether the boosters will simulcast the primary station or remain off-air during periods when they are not originating programming.<sup>114</sup> Because EAS Participants are required to adhere to the EAS monitoring assignments in their respective State EAS Plans, we believe that this approach is the most efficient way to inform EAS Participants that a station they monitor is utilizing a program originating booster and the implications thereof. To minimize the scope of any potential problems with respect to the EAS and interference, we urge SECCs to only assign EAS Participants to monitor program originating boosters if reasonable alternatives are unavailable. In connection with this requirement, we will not adopt FEMA<sup>115</sup> and REC's<sup>116</sup> recommendation that primary stations notify all monitoring EAS Participants that they are adopting program originating boosters. SECCs, not individual EAS Participants, are ultimately responsible for determining EAS monitoring assignments. In addition, we observe that most State EAS Plans assign monitoring obligations to most EAS Participants based on the operational area in which they are located instead of by making assignments to every individual station. For this reason, we believe it would be unduly burdensome to require primary stations to identify and contact, based on operational area alone, every EAS Participant that monitors it. By contrast, we believe it will be far less burdensome for EAS Participants to understand the status of the sources they are monitoring by reviewing their State EAS Plan, which SECCs typically make available via website.

37. The *FNPRM* also proposed an EAS-related administrative update to section 73.801 of the Rules, which currently lists all Part 73 general broadcast rules that are outside of Subpart G that also apply to LPFM stations, so as to include section 11.11, the specific EAS rule from Part 11 that is impacted by this proceeding.<sup>117</sup> REC opposes the proposed update as confusing. It notes that, even with the update, the rules cross-referenced in section 73.801 would be incomplete because the rule excludes many non-EAS rules applicable to LPFM stations.<sup>118</sup> REC is concerned that less experienced licensees might be led to believe that the other rules do not apply to LPFM stations, even though they do, potentially leading to unintentional violations and enforcement issues.<sup>119</sup> REC also suggests that the proposed cross-referencing in section 73.801 is contrary to the lack of such cross-referencing of EAS requirements for low power television (LPTV) and Class A television stations.<sup>120</sup> REC also opposes a related administrative update of section 73.860 to reference the three-minute-per-hour limit for program

<sup>113</sup> See FCC, SECC Resources, <https://www.fcc.gov/SECC-Resources> (last visited Oct. 15, 2024).

<sup>114</sup> See 47 CFR § 11.21(a)(4). See NAB Comments at 9.

<sup>115</sup> See 2021 Comments of Federal Emergency Management Agency at 2.

<sup>116</sup> REC Comments at 6.

<sup>117</sup> *FNPRM*, n.215.

<sup>118</sup> REC Comments at 10.

<sup>119</sup> *Id.* at 10-11.

<sup>120</sup> *Id.* at 10, citing 47 CFR § 74.480 (Low Power TV stations) and § 73.6026 (Class A TV stations). REC also states that rules in Part 73, Subpart C concerning digital broadcasting, as well as some regulations in Parts 1, 2, 5, 11, 17, 73 and 74 that apply to LPFM stations are not listed in section 73.801.

originating boosters operated by LPFM stations. It contends that it is unnecessary to add this language to Part 73 because the Commission proposed to add the same language to Part 74.<sup>121</sup>

38. We agree with REC that adding a reference to section 11.11 in section 73.801 may cause confusion about the applicability of other Part 11 rules.<sup>122</sup> Nonetheless, EAS responsibilities of licensees operating program originating boosters was a topic of significant concern in this proceeding. Due to the importance of this issue we believe that an explicit reference to the EAS requirement for LPFM stations is vital. Thus, we amend section 73.860(b)(5), the rule concerning program origination by LPFM-owned boosters. We will cross-reference Part 11 there to emphasize that program originating boosters operated by LPFM stations that are EAS Participants must comply with EAS rules in Part 11. In this manner, we will ensure licensees operating program originating boosters will be reminded of their EAS responsibilities without our rules inadvertently suggesting that the only portion important to LPFM stations is section 11.11.

39. We find REC's comments about a different amendment to section 73.860 which implements the three-minute-per-hour limit on program origination by FM boosters to LPFM stations, to be beyond the scope of the *FNPRM*. We adopted that language, which serves as a safeguard addressing potential EAS and non-EAS interference concerns, in the *Order* and it has become effective.<sup>123</sup> Although REC filed a separate Petition for Reconsideration of the *Order* which we discuss later in this document, REC did not raise section 73.860 in that filing.<sup>124</sup>

## 6. Cap on Program Originating FM Boosters and Other LCRA Issues

40. We amend section 74.1232(g),<sup>125</sup> as proposed in the *FNPRM*, to limit each FM station to 25 program originating booster stations. No commenter suggests an alternative number. We find that this limit, as well as authorization of program originating boosters in general, is consistent with the Local Community Radio Act of 2010 (LCRA).

41. Placing a cap on the number of program originating FM booster stations represents a change from the current Rules, which impose no numerical limit on full power FM booster stations using boosters in a traditional fill-in role.<sup>126</sup> In the *Order*, we concluded that a limit on the number of program originating FM boosters a station can operate may be needed to ensure that our decision to authorize program originating boosters is consistent with section 5 of the LCRA.<sup>127</sup> That section requires that the Commission make licenses available for different types of stations that may operate on the same spectrum.<sup>128</sup> As noted in the *FNPRM*, we do not yet know the extent of demand for program originating

<sup>121</sup> REC Comments at 10-11.

<sup>122</sup> REC Comments at 10.

<sup>123</sup> *Effective Date for FM Broadcast Booster Station Rules*, Public Notice, DA 24-465, 2024 WL 2244733 (MB May 16, 2024).

<sup>124</sup> *See infra*, paras. 72-74.

<sup>125</sup> 47 CFR § 74.1232(g).

<sup>126</sup> FM stations using boosters in the traditional manner rarely need more than three, so the Commission has not previously limited them. The Rules do, however, limit LPFM use of boosters due to the small service contours of those stations. *See* 47 CFR § 73.860(b), (c). Non-Tribal LPFM stations are limited to attributable interests in two FM translators, two FM boosters, or one translator and one booster. *Id.* § 73.860(b). Tribal Applicants may hold attributable interests in up to two LPFM stations and four FM translators. *Id.* § 73.860(c). We are not changing these caps which we believe would be adequate for LPFM stations considering program originating boosters within their relatively small service areas.

<sup>127</sup> *Order*, para. 66.

<sup>128</sup> *Order*, paras. 66-69, citing Pub. L. 111-371, 124 Stat. 4072 (2011) (Section 5). That portion of the LCRA requires the Commission to ensure, when licensing new FM translators, FM boosters, or LPFM stations, that: (1) "licenses are available" to FM translator stations, LPFM stations, and FM booster stations; (2) licensing decisions

(continued....)

FM booster stations, nor the impact that potentially large numbers of such stations in a market could have on spectrum availability on adjacent channels where new FM translators and LPFM stations might conceivably wish to locate.<sup>129</sup> We also considered whether such a cap would ensure that increased use of FM boosters would not significantly increase the noise floor.<sup>130</sup> We tentatively concluded that a limit of 25 program originating boosters per full-service FM primary station would be reasonable but sought comment on that tentative conclusion as well as any alternative number for the cap.<sup>131</sup>

42. We also sought comment on whether there are other requirements needed to ensure compliance with the LCRA.<sup>132</sup> For example, we noted that currently, LPFM stations are permitted to originate programming 100 percent of the time, while FM translators and boosters do not originate programming. We asked what difference, if any, would allowing some FM boosters to originate programming for five percent of each broadcast hour make to the relative status of those secondary services.<sup>133</sup>

43. REC expresses concern that existing LPFM and FM translator stations not be displaced by program originating boosters and would define displacement to include interference requiring the LPFM or FM translator to take engineering action to retain their service.<sup>134</sup> Although REC does not specifically object to a 25 booster cap or propose an alternative number, it contends that the number is arbitrary.<sup>135</sup> REC instead asks the Commission to protect incumbent LPFM stations by amending section 74.1204(i) to require that the signal of pre-existing co-channel and first-adjacent channel stations exceed by 20 dBu that of a booster anywhere within the existing station's protected contour.<sup>136</sup> REC believes that such a protection would reduce the burden on existing primary and secondary facilities to monitor the potential for interference by each booster application and reduce the potential burden on staff resources by stopping interfering proposals "up front" and, thus, resulting in fewer interference challenges filed pursuant to section 74.1204(f).<sup>137</sup> It contends that authorization of program originating boosters could otherwise be contrary to "community need" under the LCRA.<sup>138</sup>

44. NAB says that it does not know whether 25 is an appropriate cap but believes that the number of boosters used for program origination will be self-limiting. Specifically, NAB does not believe that licensees will build very large numbers of FM boosters for each primary station because it posits that the incremental advertising revenue created by program origination is unlikely to justify the costs associated with such boosters (*e.g.*, purchase and installation, tower and site leasing fees,

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are made "based on the needs of the local community"; and (3) FM translator stations, LPFM stations, and FM booster stations remain "equal in status" and secondary to existing and modified full-service FM stations.

<sup>129</sup> *FNPRM*, para. 81.

<sup>130</sup> *Id.* The noise floor refers to unwanted radio frequency (RF) energy from man-made sources. It increases as the number of devices in use that emit radio energy grows. *See generally* Office of Engineering and Technology Announces Technological Advisory Council (TAC) Noise Floor Technical Inquiry, Public Notice, <https://docs.fcc.gov/public/attachments/DA-16-676A1.pdf> (OET June 16, 2016).

<sup>131</sup> *FNPRM*, para. 81.

<sup>132</sup> *Id.*, para. 82.

<sup>133</sup> *Id.*

<sup>134</sup> REC Comments at 7.

<sup>135</sup> *Id.*

<sup>136</sup> *Id.* at 8.

<sup>137</sup> *Id.* at 4.

<sup>138</sup> *Id.*

maintenance, power, and licensing fees).<sup>139</sup>

45. GBS supports an initial cap of 25 boosters but states that the number of boosters needed in a particular system will vary because different physical, geographic, and other factors require different designs to create the geo-targeted zone. For example, it notes that its test in the San Jose, California market required only three boosters but tests in Jackson, Mississippi used nine boosters.<sup>140</sup> Accordingly, although GBS believes that 25 boosters per station is a reasonable limit for now, it suggests that some systems may need more boosters in the future to ensure effective implementation with minimal interference.<sup>141</sup> Thus, GBS views a cap of 25 boosters per station as an appropriate starting point during the rollout of the technology, but encourages the Commission to consider raising the limit if evidence demonstrates that this number is artificially low.<sup>142</sup>

46. With respect to concerns that increased numbers of boosters might raise the noise floor, GBS states that administrative safeguards already prevent such an occurrence in a noticeable manner.<sup>143</sup> For example, GBS contends that because boosters are not permitted to propagate further than the predicted contour of their primary signal or to have wider bandwidths than their main signal, they will not raise the noise floor sufficiently to impact nearby FM broadcast service. GBS further states that the Commission's interference rules protect receivers in adjacent bands that could be close to boosters.

47. GBS agrees with our conclusion in the *Order* that authorization of program originating boosters is consistent with LCRA.<sup>144</sup> Given that FM boosters must remain within the protected contour of the primary signal, GBS does not believe that allowing FM boosters to originate programming for a small portion each hour would have any effect on the relative status of other secondary services. GBS, thus, "cautions the Commission about overcomplicating the deployment of program originating boosters by significantly raising the regulatory burdens to do so, without actual evidence of a harm to be mitigated."<sup>145</sup>

48. We affirm our earlier conclusion that authorization of program originating boosters is consistent with LCRA.<sup>146</sup> With respect to the *FNPRM*'s question about secondary status, we agree with GBS that such boosters, accompanied by safeguards that limit the number of boosters and portion of time in which they broadcast would not affect their secondary status or the status of other services. For example, a booster's new ability to originate programming for five percent of each hour would not place it higher in priority than LPFM stations, a secondary service which can originate programming for its entire broadcast day. Concerning the cap on the number of boosters, we believe that 25 boosters per station, as GBS originally proposed, is a generous amount that will allow for design of several zones of program origination within each station's service area. If, however, unusual geography of a particular community makes it impossible for a particular station to originate geo-targeted programming with 25

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<sup>139</sup> NAB Comments at 8.

<sup>140</sup> GBS Comments at 5-6.

<sup>141</sup> GBS encourages the Commission to consider delegating to the Media Bureau the authority to raise the cap if evidence obtained through the rollout indicates that there is no harm to the public interest from raising or eliminating the cap. *Id.* at 6. GBS believes that technical and administrative safeguards will ensure that program originating boosters do not raise the noise floor and that an artificial cap of 25 may not be necessary to accomplish that goal. *Id.* Below we conclude that 25 is an appropriate cap on program originating boosters per station, and thus we decline to delegate to the Media Bureau the authority to raise the cap.

<sup>142</sup> *Id.* at 5, citing *FNPRM*, para. 81 (the Commission does "not yet know the extent of demand for program originating FM booster stations" and "imposing an artificially low number of program originating boosters could make it harder for licenses to design and deploy boosters in a way that minimizes the risk of interference.").

<sup>143</sup> GBS Comments at 6-7.

<sup>144</sup> *Id.* at 15.

<sup>145</sup> *Id.*

<sup>146</sup> See *Order*, paras. 66-69.



boosters, it can provide evidence of that issue in a request for waiver of the cap. We do not see a need to revise section 74.1204(i) in the manner proposed by REC, and discuss that matter in greater detail in the portion of this *Second Report and Order* addressing “Other Safeguards.”<sup>147</sup>

## 7. Part 74 Licensing Issues

49. As proposed in the *FNPRM*, we clarify several operational issues for program originating boosters.<sup>148</sup> The only commenter to address any of our licensing proposals was NAB, which supports the proposal to make explicit the requirement that booster stations suspend operations any time their primary stations are not broadcasting and file notices of suspended operations.<sup>149</sup> NAB asks the Commission to clarify that suspension of program origination on booster stations should take place immediately upon cessation of the primary signal.<sup>150</sup> GBS states that such a clarification is not necessary because the Rules already address suspension of booster operations.<sup>151</sup>

50. After consideration of the record, we adopt the rule change as originally proposed in the *FNPRM* and conclude it is unnecessary to adopt the clarification NAB requested.<sup>152</sup> We conclude it is useful to clarify that all FM broadcast booster stations, including both program originating and non-program originating boosters, must suspend operations anytime their primary station is not operating and add a new section 74.1231(k) addressing this issue. The new rule section explicitly codifies existing requirements by requiring booster stations to suspend operations any time their primary stations are not broadcasting and to file notices of suspended operations/requests for special authority to remain silent pursuant to section 73.1740 of the Rules.<sup>153</sup> However, we do not believe it is necessary to adopt NAB’s suggestion of a statement that suspension of booster program origination must occur immediately upon cessation of the primary signal.

51. As proposed in the *FNPRM*,<sup>154</sup> we also reorganize and clarify section 74.1231 by adding new paragraph (j). The provisions of paragraph (j), previously contained in a Note, clarify that grandfathered superpowered FM stations will only be able to implement booster stations within the

<sup>147</sup> See *infra* paras. 68-70.

<sup>148</sup> *FNPRM*, para. 80 (proposing to (1) clarify that grandfathered superpowered FM stations will be allowed to implement booster stations only within the standard, non-superpowered maximum contour for their class of station, (2) add a requirement that booster stations suspend operations any time their primary stations are not broadcasting and file notices of suspended operations pursuant to section 73.1740 of the Rules, and (3) clarify that a booster station may not broadcast programming that is not permitted by its primary station’s authorization).

<sup>149</sup> NAB Comments at 9.

<sup>150</sup> *Id.*

<sup>151</sup> GBS Reply Comments at 4, citing 47 CFR § 74.1263.

<sup>152</sup> The original proposal is sufficiently clear. The new language in 47 CFR § 74.1231(k) is consistent with and to be read in combination with that in 47 CFR § 74.1263(b), which states a booster “shall not be permitted to radiate during extended periods when signals of the primary station are not being retransmitted.” That section of our rules authorizes minor episodes of booster operation without a primary signal due to brief periods of maintenance of the primary station or instances where a station is switching between primary and auxiliary facilities. Similarly, section 74.1231(k) is to be read in combination with existing section 74.1231(i), 47 CFR § 74.1231(i), which permits local generation of signals on a booster “for the purpose of conducting tests and measurements essential to the proper installation and maintenance of the apparatus.”

<sup>153</sup> See 47 CFR §§ 74.1231(i) (an FM booster station shall not retransmit the signals of any other station nor make independent transmissions), 74.1263(b) and (c) (an FM booster is not permitted to radiate during extended periods when signals of the primary station are not being retransmitted and must notify the Commission of its intent to discontinue operations for 30 or more consecutive days. Notification must be made within 10 days of the time the station first discontinues operation and Commission approval must be obtained for such discontinued operation to continue beyond 30 days).

<sup>154</sup> *FNPRM*, para. 80.

standard (*i.e.*, non-superpowered) maximum contour for their class of station.<sup>155</sup> This should help to minimize interference risks by further isolating program originating boosters from adjacent FM broadcast stations.

52. Finally, we modify section 74.1232 to clarify that a booster station may not broadcast programming that is not permitted by its FM primary station's authorization, as proposed in the *FNPRM*.<sup>156</sup> This will ensure that program originating boosters are not used in a manner that is inconsistent with the primary station. For example, licensees of noncommercial FM stations may not use booster stations for commercial broadcasts.

## 8. Political Broadcasting and Advertising

53. We next adopt safeguards to ensure that stations using program originating boosters comply with political broadcasting and recordkeeping requirements. To the extent an FM booster station originates programming that includes political (*i.e.*, candidate and certain issue-related) programming, it will be subject to the full array of political programming requirements that are applicable to full power broadcast stations.<sup>157</sup>

54. The *FNPRM* invited comments on a number of political programming issues including obligations to maintain political files, provide equal opportunities,<sup>158</sup> ensure reasonable access, and charge candidates lowest rates.<sup>159</sup> These obligations ensure that qualified candidates for elective office have access to broadcast facilities and certain other media platforms and foster transparency about entities sponsoring advertisements.<sup>160</sup> In its comments addressing these matters, GBS agrees with the general approach of applying existing political programming rules to program originating boosters and recognizes that the Act requires as much.<sup>161</sup> GBS anticipates that broadcasters will sell advertising time on program originating boosters at rates distinct from those on their primary signal and that the program originating booster will not reach every part of a service area.<sup>162</sup> Accordingly, GBS believes it would be appropriate to treat a program originating booster as its own facility for the limited purposes of applying the equal opportunities, reasonable access, and lowest unit charge rules to program originating booster advertising sales.<sup>163</sup> Similarly, GBS urges the Commission to treat each program originating booster as its own facility with regard to political file requirements. It suggests that the Commission require the licensee to

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<sup>155</sup> The current version of section 74.1231 includes a Note following paragraph (i) that reads: "In the case of an FM broadcast station authorized with facilities in excess of those specified by § 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted on the basis of the maximum powers and heights set forth in that section for the applicable class of FM broadcast station concerned." We now move that requirement into new paragraph (j), and clarify that "an FM broadcast station authorized with facilities in excess of those specified by § 73.211 of this chapter" refers to superpowered FM facilities. *See* Appendix B.

<sup>156</sup> *FNPRM*, para. 80.

<sup>157</sup> *See* 47 CFR §§ 73.1212 (Sponsorship identification), 73.1940 (Legally qualified candidates for public office), 73.1941 (Equal opportunities), 73.1942 (Candidate rates), 73.1943 (Political file), 73.1944 (Reasonable access); 47 U.S.C. §§ 312(a)(7), 315, and 317.

<sup>158</sup> Under section 73.1941 of the Rules and section 315(a) of the Act, if a licensee permits a legally qualified candidate for any public office to use its station, it must, with some exceptions, permit all other legally qualified candidates for the same office to also use its station. *See* 47 CFR § 73.1941 and 47 U.S.C. § 315(a).

<sup>159</sup> *FNPRM*, paras. 85-88.

<sup>160</sup> *Revisions to Political Programming and Record-Keeping Rules*, Report and Order, MB Docket No. 21-293, 37 FCC Rcd 1359, 1360, para. 2 (2022).

<sup>161</sup> GBS Comments at 13-14. *See* 47 U.S.C. § 315(e).

<sup>162</sup> GBS Comments at 13.

<sup>163</sup> *Id.* at 13-14.



denote in its primary station's political file whether an ad was booster originated, and if so, the area in which it was broadcast.<sup>164</sup> GBS states that this information will be essential for candidates seeking to obtain equal opportunities and for the Commission to ensure compliance with the political broadcast Rules.<sup>165</sup>

55. In response to GBS' comments, Roberts Radio Broadcasting, LLC (Roberts) agrees that program originating boosters could be useful for political candidates.<sup>166</sup> However, it seeks streamlined political file requirements because small, independent broadcasters like itself have limited resources.<sup>167</sup>

56. We amend section 74.1290 of the Rules<sup>168</sup> as proposed, to make all political programming requirements explicitly applicable to program originating FM booster stations. In light of the record, we will treat each booster as a separate facility from its primary station for purposes of compliance with the political programming rules but, for sake of simplicity, will allow broadcasters to include information about their boosters within the political file of their primary stations.<sup>169</sup> Traditional booster stations are not required to maintain a public file,<sup>170</sup> but we will require full power broadcasters originating programming on a booster to include information about any political uses of each booster in the online political file of the booster's primary station.<sup>171</sup>

57. As GBS suggests, each program originating booster and primary station would be considered its own, separate facility for purposes of political file obligations. The primary FM station's political file would denote whether material was booster-originated, and if so, the booster station over which it was broadcast. We will implement this requirement by amending sections 73.3526 (online public inspection file of commercial stations)<sup>172</sup> and 73.3527 (online public inspection file of noncommercial educational stations).<sup>173</sup> The *FNPRM* asked whether we should require licensees to provide a separate political file subfolder for each booster or whether licensees would be free to commingle records of political use of broadcast time on a program originating booster station along with records of requests for the use of broadcast time on the licensee's primary station. Since this question did not elicit any comments on advantages or disadvantages of either approach, we will provide broadcasters with the

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<sup>164</sup> *Id.* at 14.

<sup>165</sup> *Id.*

<sup>166</sup> Roberts Reply Comments at 1-2.

<sup>167</sup> *Id.* at 2.

<sup>168</sup> 47 CFR § 74.1290 (currently "Reserved").

<sup>169</sup> Pursuant to sections 315(e) of the Act and 73.1943 of the Rules, licensees must maintain and make available for public inspection a complete record of each request for the purchase of broadcast time that is made: by or on behalf of a legally qualified candidate for public office, or by or on behalf of an issue advertiser whose ad communicates a political matter of national importance. *See* 47 U.S.C. § 315(e); 47 CFR § 73.1943.

<sup>170</sup> 47 CFR § 73.3526(a)(2) ("Every permittee or licensee of an AM, FM, TV or Class A TV station in the commercial broadcast services shall maintain a public inspection file. . ."); *Id.* § 73.3527(a)(2) ("Every permittee or licensee of an AM, FM, or TV station in the noncommercial educational broadcast services shall maintain a public inspection file. . .").

<sup>171</sup> LPMF stations do not have an online public file requirement and, thus, an LPMF station operating program originating boosters will need to maintain a physical political file for its booster(s) consistent with existing requirements for political use of the LPMF station.

<sup>172</sup> *Id.* § 73.3526. For example, commercial licensees must maintain online political files of requests for the purchase of broadcast time by or on behalf of all legally qualified candidates for public office and by or on behalf of issues advertisers whose ads communicate a message relating to any political matter of national importance.

<sup>173</sup> *Id.* § 73.3527. The requirement to maintain a political file applies to full service noncommercial stations and LPMF stations to the extent that they make time available without charge for use by a candidate. 47 CFR §§ 73.3527(e)(5), 73.1943(c).

flexibility to arrange their files in the manner they deem best suited to their operations, provided that they appropriately label the records to identify the station airing the political material. We find this will provide broadcasters flexibility, while also ensuring that qualified candidates have access to information that may trigger their rights, while also providing transparency to the public.

58. Because we are treating program originating boosters as separate facilities from the licensee's primary station for purposes of political broadcasting and advertising requirements, candidates who request equal opportunities in response to an advertisement or noncommercial announcement broadcast on a particular program originating booster station will be entitled to use that booster station but not the primary station (if the primary station did not air the material). Similarly, primary stations and program originating boosters will be treated as separate facilities with respect to requests for reasonable access by Federal candidates. Under section 73.1944 of the Rules and section 312(a)(7) of the Act, commercial broadcast stations must permit candidates for Federal office to purchase reasonable amounts of advertising time.<sup>174</sup> In determining what is "reasonable" for reasonable access purposes, the amount of time that a Federal candidate has purchased on a licensee's primary station will not affect the amount of time which the same candidate is entitled to purchase on one of the licensee's program originating booster stations, and vice versa. With respect to candidate rates, during the 45-day period preceding a primary or primary run-off election, and the 60-day period preceding a general or special election, stations must charge a candidate's campaign no more than the station's lowest unit charge for the same class and amount of time during the same period.<sup>175</sup> As GBS notes, rates charged on a program originating booster may be lower than those charged on the primary station because the booster reaches a smaller zone. Therefore, in determining lowest unit charges, licensees should treat their program originating booster stations and primary stations as separate facilities.

## 9. Patent Licensing Issues

59. We will not at this time require vendors of program originating technology and patent owners in program origination technology to take any additional steps pursuant to the Commission's patent policy,<sup>176</sup> or to comply with any other guidelines common to open standards, such as requiring that licenses be available to all parties on fair, reasonable and nondiscriminatory terms.<sup>177</sup> The *FNPRM* asked whether such a requirement was necessary and an appropriate exercise of Commission authority given that the *Order* did not endorse a particular technical approach. We requested that parties suggesting patent-related requirements provide detailed information, including how long such requirements should last and our authority to adopt such requirements.<sup>178</sup>

60. GBS is the only commenter to address this issue. It argues that the Commission should not get involved in patent matters for three reasons.<sup>179</sup> First, GBS observes that use of program origination technology for boosters is not mandatory and the technology can be supplied by multiple vendors. GBS emphasizes that it does not hold a patent on the concept of program originating boosters, just on its own particular design, and other vendors could, thus, enter the market.<sup>180</sup> Second, GBS argues

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<sup>174</sup> 47 CFR § 73.1944 and 47 U.S.C. § 312(a)(7).

<sup>175</sup> 47 CFR § 73.1942 and 47 U.S.C. § 315(b).

<sup>176</sup> *Revised Patent Procedures of the Federal Communications Commission*, 3 FCC 2d 26 (1966).

<sup>177</sup> See American National Standards Institute, ANSI Essential Requirements: Due process requirements for American National Standards at section 3.1 (March 2, 2022), [https://share.ansi.org/Shared%20Documents/About%20ANSI/Current\\_Versions\\_Proc\\_Docs\\_for\\_Website/ER\\_Pro\\_current.pdf](https://share.ansi.org/Shared%20Documents/About%20ANSI/Current_Versions_Proc_Docs_for_Website/ER_Pro_current.pdf) (essential patents must be made available, "under reasonable terms and conditions that are demonstrably free of any unfair discrimination.").

<sup>178</sup> *FNPRM*, para. 89.

<sup>179</sup> GBS Comments at 8-10.

<sup>180</sup> *Id.* at 9.

that free-market forces would address any concerns. GBS highlights its willingness to do business with all parties and lack of any intent to require the licensing of other, extraneous technologies or services for broadcasters to license its program origination technology.<sup>181</sup> Third, GBS contends that the Commission does not have the authority to regulate patents. It argues that the policy cited in the *FNPRM* allows the Commission to study whether patents for new technical developments might interfere with services provided under Commission standards, but contends that the policy is inapplicable in the instant proceeding because GBS' technology works with existing receivers and standards.<sup>182</sup>

61. Based on the record in this rulemaking, we decline at this time to impose any patent-related requirements.<sup>183</sup> We base this decision on our determination that program originating boosters work with existing equipment and standards, the Commission has not endorsed GBS' particular product, and others can enter the market if there is sufficient demand. Therefore, we do not believe that it is necessary at this time for us to adopt regulations governing program origination licensing and usage fees. If we receive information that suggests we need to explore this issue further, such as if it becomes necessary for stations to use a particular proprietary system for program origination to work, we will take appropriate action at that time.

#### 10. Other Safeguards

62. Based on input in the comments, we adopt a new requirement that licensees of program originating boosters certify quarterly that their operations have not diminished their responsiveness to needs and issues of their service areas, especially minority communities. We also consider but do not adopt a suggestion to heighten co-channel interference standards.

63. *Public Interest Certification.* The *FNPRM* sought comment on a "Public Interest Certification" suggestion, *i.e.*, a reporting requirement in which licensees of program originating boosters would self-certify that they are, consistent with the public interest, using the boosters in a manner that is responsive to the needs and issues of their service areas, especially minority communities.<sup>184</sup> That suggestion arose in response to prior commenter concerns that a station's geo-targeted programming or advertising might result in intentional or inadvertent socio-economic "redlining"<sup>185</sup> or exclusion of minorities. Although, we found no evidence that program origination would cause redlining,<sup>186</sup> we sought comment on whether the suggested reporting requirement might be a useful safeguard and, if so, what timing and content of the certification would be best. We, as part of our overall efforts to promote equity,<sup>187</sup> also asked how program originating boosters may promote or inhibit advances in diversity, equity, inclusion, and accessibility.

64. The U.S. Black Chamber, National Newspaper Publishers Association, Roberts, and the

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<sup>181</sup> *Id.*

<sup>182</sup> *Id.* at 9-10.

<sup>183</sup> We therefore decline to address GBS' comments regarding Commission authority to administer its patent policy.

<sup>184</sup> *FNPRM*, para. 90, citing 2022 Comments of Reps. Horsford and Thompson at 1-2 ("While we support the proceeding, we also believe the adoption of a Public Interest Certification should be required by all licensees of FM booster stations under this new authority, requiring the licensee to be responsive to the needs and issues of the people in their service area. This certification will provide an additional layer of oversight for the Commission and provide minority communities with a certainty that geotargeting will be deployed equitably.").

<sup>185</sup> See *FNPRM*, para. 35. Redlining, is a term used when private or public actors limit or deny services to poor or minority communities. It occurred most frequently in the 1970s when banks and financial institutions marked up maps with red lines around neighborhoods that they deemed undeserving of loans and insurance coverage. *Id.*

<sup>186</sup> See *Order*, paras. 35-36.

<sup>187</sup> Section 1 of the Act as amended provides that the Commission "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

Multicultural Media, Telecom and Internet Council contend, in joint comments, that program originating boosters allow radio stations to reach isolated and minority communities with programming geared towards them – ultimately creating more engaging content for listeners with specific needs and interests – and reorient radio stations with their communities.<sup>188</sup> They also state that in a time when the radio industry is facing falling advertising revenue, program originating boosters provide a new avenue for local businesses to better engage with listeners via hyper-local advertising and help broadcasters reach their target audiences more effectively. They jointly support adoption of a public interest certification as proposed<sup>189</sup> because they believe that such a certification would provide an additional layer of oversight to ensure that program originating boosters are used appropriately and equitably.

65. GBS states that it is eager to work with these groups to unlock the benefits of program originating boosters and has recently chartered a Diversity Advisory Committee to help GBS coordinate, monitor, and facilitate activities that promote localism, diversity, equity, and inclusion.<sup>190</sup> GBS further predicts that “[p]rogram originating boosters will be uniquely beneficial to small businesses and minority communities, and concerns about discriminatory practices are baseless and unwarranted.”<sup>191</sup> GBS supports a public interest certification, which it contends will ensure that program originating boosters advance diversity, equity, and inclusion.<sup>192</sup> GBS agrees with the Commission’s conclusion that program originating boosters will not create redlining but also believes that requiring broadcasters to consider on a regular basis how they are using their program originating boosters and to certify that they have done so, would nullify any diversity concerns raised in prior stages of this proceeding.<sup>193</sup> GBS contends that, if the Commission adopts the proposal, no other safeguards would be needed because current rules, other safeguards established in the *Order*, and market forces are sufficient to ensure that program originating boosters serve the public interest.<sup>194</sup> None of the commenters who address this issue propose any specific language, frequency, or method for the suggested certification.

66. We adopt a self-certification requirement, which will contain the call sign of the relevant booster(s) and state that in originating programming over the booster(s) the licensee has considered the characteristics and needs of the coverage area of the booster station and has not used the booster to exclude or diminish service to other populations within that area or other areas within the service area of the booster’s primary station. Licensees may, but are not required to, include other information about use of the booster. We conclude that this licensee certification of its efforts to deploy its program originating technology in an equitable manner provides some assurance that licensees are mindful of their obligation to make such service available to all the people of the United States, including minority communities within their broader coverage areas, and are not discriminating on the basis of race, color, religion, national origin, or sex. This requirement would pose a very minimal burden on licensees of program originating boosters but serve as a regular reminder to licensees of best practices to use program origination as an enhancement of local messaging intended to target rather than to exclude.

67. As stated above, we consider program originating boosters to be facilities distinct from their primary stations for purposes of political broadcasting and advertising requirements, but the primary station’s publicly available file is a useful mechanism for dissemination of information about booster operations. Therefore, we will require licensees of full power commercial and noncommercial FM stations to place their booster-related certification in the online public file of their primary station

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<sup>188</sup> Comments of U.S. Black Chamber at 1.

<sup>189</sup> *Id.*

<sup>190</sup> GBS Comments at 12.

<sup>191</sup> GBS Reply Comments at 9.

<sup>192</sup> GBS Comments at 12-13.

<sup>193</sup> *Id.*

<sup>194</sup> *Id.* at 14.

concurrently with their quarterly issues programs lists for the primary station.<sup>195</sup> We amend the public file rules in sections 73.3526 and 73.3527 to reference the certification. The certification need not be under oath but should be signed by an officer of the licensee. We do not see a need for LPFM stations to make this certification which serves to remind broadcasters operating program originating boosters not to exclude listeners in portions of their service area. First, there is no evidence in the record that LPFM stations are especially at risk of intentionally or inadvertently using program originating boosters to exclude particular segments of the community, given that LPFM stations have limited service areas with far fewer potential zones than full power stations because they may not operate more than two booster stations.<sup>196</sup> Accordingly, we find it is unlikely redlining or any other potential use of boosters by LPFM stations to exclude listeners in certain zones would result. Second, we note that the filing of the certification will coincide with the quarterly filing of issues/programs lists in an online public inspection file but LPFM stations are not required to compile such lists or to maintain an online inspection file. Therefore, we decline to require LPFM stations to prepare the public interest certification.

68. *Co-Channel Interference Standards.* We believe that our existing co-channel interference standards provide sufficient interference protection and, thus, will not adopt a new standard that REC proposes.<sup>197</sup> REC anticipates that new FM boosters could cause co-channel interference to existing LPFM or FM translator stations licensed to a different broadcaster. Specifically, because a booster's 60 dBu service contour covers a smaller area than its 40 dBu interference contour, a booster associated with a primary station that relocates might have a service area that remains within that of the primary station but that nevertheless places an interfering contour over a pre-existing LPFM or FM translator station.<sup>198</sup> REC acknowledges that an affected station could pursue an interference claim against the booster under sections 74.1203 and 73.809 of the Rules, but REC views this remedy as burdensome because the affected station would need to monitor booster application activity, conduct its own contour studies, and compile the information necessary to present a complaint to the Commission.<sup>199</sup> Instead, REC recommends that the Commission amend section 74.1204(i) to require that the signal of a co-channel station exceeds by 20 dBu that of a booster anywhere within the co-channel protected contour.<sup>200</sup> REC states that such revisions to the Rules would prevent interference "up front" and obviate the need for stations and Commission staff to devote time to interference challenges.<sup>201</sup>

69. GBS considers REC's co-channel interference concerns as "unfounded" and REC's proposed remedies as beyond the scope of this proceeding.<sup>202</sup> GBS emphasizes that FM boosters remain obligated to operate within the contour of their primary FM station, which has priority over any secondary

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<sup>195</sup> We direct the Bureau to create a new "Additional Documents" folder within the online public inspection file template that licensees can use for this purpose.

<sup>196</sup> 47 CFR § 73.860.

<sup>197</sup> REC states that the possibility of co-channel interference has increased due to a massive growth in the number of equal-in-status secondary facilities since the 1990s following an FM translator window and AM revitalization auctions. REC Comments at 2-3.

<sup>198</sup> *Id.* at 3.

<sup>199</sup> *Id.* at 4.

<sup>200</sup> *Id.* REC further suggests in its related Petition for Reconsideration that the Commission require applicants for new or modified boosters (whether originating programming or not) to show that the 40 (or 34 or 37) dBu contour of the proposed station does not overlap with the 60 dBu (or 54 or 57) of any incumbent FM, Class D, LPFM, FM translator, or FM booster. REC Petition at 2. As discussed below, we decline to adopt the changes proposed in REC's Petition and consider existing requirements to sufficiently protect incumbent stations. See *infra*, paras. 72-74.

<sup>201</sup> REC Petition at 4.

<sup>202</sup> GeoBroadcast Solutions, LLC, Opposition to Petitions for Reconsideration, at 3 (GBS Opposition).

services such as LPFM stations.<sup>203</sup> GBS, therefore, contends interference will not occur.<sup>204</sup> GBS also argues that REC's proposed solution is outside the bounds of the original *NPRM* and the *Order* because REC is proposing to alter interference standards for all FM boosters, not only those originating programming.<sup>205</sup>

70. We decline to adopt REC's suggested revision of co-channel interference standards. Our amendment to section 74.1204(f), as discussed previously, should partially address REC's concern by making boosters subject to predicted interference provisions rather than having to await actual interference. We do not believe that additional rule changes are needed to protect co-channel, secondary stations. REC's proposal is similar to interference protection standards that the Commission considered but declined to adopt in 1987, in favor of less complex and burdensome requirements.<sup>206</sup> The record does not support a finding that the landscape has changed so significantly since that time as to establish a need for different standards applicable to FM booster stations. As stated in the *Order*, the Commission's experience with boosters over many years has demonstrated that the framework in section 74.1203 adequately addresses claims of actual interference caused by boosters.<sup>207</sup> Our decision to limit program origination to three minutes per hour would further minimize any potential interference. We acknowledge that the LPFM service did not yet exist at the time of the 1987 decision and that the number of FM boosters will likely increase with the option to use them for program origination. However, we do not consider that change to negate the effectiveness of the existing requirement that secondary stations, such as LPFM stations, FM translators, and FM boosters must protect full service stations and also pre-existing secondary stations.<sup>208</sup> Because FM boosters can only operate within the 60 dBu contour of their primary stations, and the Rules already require primary stations to protect other full service stations, it is unlikely that a booster would cause co-channel interference that its primary station does not. Nevertheless, as stated in the *Order*, we will continue to monitor concerns about interference as broadcasters adopt program originating boosters and will revisit this issue if we receive reports of widespread interference.

## **B. Order on Reconsideration**

71. In addition to the comments in response to the *FNPRM*, the Commission received petitions for reconsideration of the *Order* from REC and Press Communications, LLC (Press). The Commission will consider a petition for reconsideration in a rulemaking proceeding if, for example, the petitioner shows a material error or raises additional facts not known or existing at the time of the petitioner's last opportunity to present such matters.<sup>209</sup> The Commission may dismiss petitions that rely

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<sup>203</sup> *Id.* at 4.

<sup>204</sup> *Id.*

<sup>205</sup> *Id.*

<sup>206</sup> See *1987 Booster Report*, 2 FCC Rcd. at 4626-27, paras. 10, 16, 26 (considering whether to provide interference protection in terms of desired to undesired signal ratios at the protected contour of co-channel and first, second, and third adjacent channels by requiring that the signal of any co-channel station must exceed the signal of the booster station by 20 dB at all points within the protected contour of the co-channel station and the ratio of the signal of any first, second, or third adjacent channel station to the booster's signal must exceed 6, -40, and -40 dB, respectively, at any location within the protected contours of such stations); see also *FNPRM*, para. 38 (discussing history of Commission's adoption of booster interference standards).

<sup>207</sup> 47 CFR § 74.1203.

<sup>208</sup> See, e.g., 47 CFR § 74.1203(a)(3) (stating that an FM booster or FM translator station will not be permitted to continue operating if it causes actual interference to the direct reception by the public of the off-the-air signals of any full-service station or any previously authorized secondary station).

<sup>209</sup> See 47 CFR § 1.429(b), (l); see also *WWIZ, Inc.*, Memorandum Opinion and Order, 37 FCC 685, 686, para. 2 (1964), *aff'd sub nom.*, *Lorain Journal Co. v. FCC*, 351 F.2d 824 (D.C. Cir. 1965), *cert. denied*, 383 U.S. 967

(continued....)

upon arguments that have been fully considered and rejected in the proceeding.<sup>210</sup> We find that REC has not demonstrated any material error and that Press raises matters already considered and rejected. Nor are there any new facts that would support our alteration of the framework established in the *Order*. For example, because we have only received a few requests for experimental authority to operate program originating boosters and no station has operated for a sufficient time to generate interference complaints, if any, there is no event after the adoption of the *Booster Rulemaking Order*, that would support a need for a different interference standard. Therefore, concerns raised on reconsideration are speculative, and there is nothing in the record that would justify changing the operations authorized in the *Order*.

72. **REC Petition.** REC, in two different contexts, seeks to amend co-channel interference standards, first in comments to the *FNPRM* and also in a Petition for Reconsideration of the *Order*. We have already discussed the merits of this suggestion in considering REC's comments on the *FNPRM* and will not repeat that analysis in the context of the *Order*.<sup>211</sup> We will, however, address REC's procedural argument that the Commission erred by mistaking or disregarding the argument that REC raised in its comments about co-channel interference concerns.<sup>212</sup>

73. REC argues that the Commission misunderstood REC's concern about co-channel interference and addressed it in the *Order* as if pertaining to the booster's own primary station although REC's actual concern was interference to stations licensed to other broadcasters.<sup>213</sup> Accordingly, REC contends that the Commission did not properly and fully consider its views.<sup>214</sup>

74. In discussing potential co-channel interference, the *Order* focused on self-interference from a program originating booster to the signal of the broadcaster's own primary station (or to another co-owned booster rebroadcasting that primary station).<sup>215</sup> This is because FM boosters can only operate on the same channel and within the same contours as the primary station, making it unlikely that a booster would affect stations outside the contour or licensed to anyone other than the booster's own licensee. We also noted that licensees would have an economic incentive to minimize co-channel interference.<sup>216</sup> Therefore, the circumstances in which REC believes there could be co-channel interference to secondary stations licensed to others would be exceedingly rare. We find that the *Order*'s consideration of co-channel interference was appropriate. Moreover, we have now thoroughly addressed REC's concerns in this *Second Report and Order*,<sup>217</sup> and are not persuaded that additional protections are necessary at this time. Accordingly, we deny REC's petition.

75. **Press Petition.** Press' concerns are similar to those expressed and considered at earlier stages of this proceeding. Press is concerned about potential self-interference between a broadcaster's boosters and its primary stations, causing listener confusion. It argues that GBS did not present sufficient evidence that interference will not occur and that its tests were conducted in hand-picked markets, under the most favorable circumstances, with ideal conditions.<sup>218</sup>

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(1966). Petitions for reconsideration which rely on facts not previously presented to the Commission may be granted only if the Commission determines that consideration is in the public interest. See 47 CFR § 1.429(b).

<sup>210</sup> *Id.* § 1.429(b)(3).

<sup>211</sup> See *supra*, paras. 68-70.

<sup>212</sup> REC Petition at 2-4.

<sup>213</sup> *Id.* at 3.

<sup>214</sup> *Id.*

<sup>215</sup> *Order*, paras. 37, 44-52.

<sup>216</sup> *Id.*, para. 44.

<sup>217</sup> See *supra*, paras. 68-70.

<sup>218</sup> Press Petition at 2.



76. Press also raises competitive concerns about the potential economic impact of program originating boosters, especially what it characterizes as “unfair competition.”<sup>219</sup> Press specifically seeks to prohibit the use of program originating boosters in markets with embedded metros as defined by Nielsen, especially those in New Jersey.<sup>220</sup> It further alleges that there is no widespread industry support for program originating boosters and that the *Order* is based on a flawed premise that broadcasters need this technology.<sup>221</sup> Press contends that broadcasters already have a means of targeting subsections of the market by using existing HD Radio technology capable of creating five separate and distinct channels of programming.<sup>222</sup> Press also expresses concern about compatibility of program originating boosters with EAS, a matter on which the Commission sought further comment in the *FNPRM*.<sup>223</sup>

77. GBS responds that Press is merely repeating earlier arguments without showing any error or new facts and is advocating anew for a New Jersey carve-out that would benefit its own situation.<sup>224</sup> GBS contends that the proposed carve-out of embedded metro markets is just an attempt to limit competition.

78. We dismiss the Press Petition on procedural grounds because it repeats arguments that the Commission already addressed in the *Order*.<sup>225</sup> The primary bases on which Press now seeks reconsideration are concerns about the sufficiency of GBS’ tests, the economic impact of program originating boosters on stations in embedded markets like New Jersey, and compatibility with EAS, all of which we considered in the *Order*.<sup>226</sup> With respect to GBS’ testing, the Commission considered views of opponents, including Press, who argued that GBS’ tests of its program originating booster technology were optimized in favor of its proposal, and those of supporters who asserted that the tests demonstrated

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<sup>219</sup> *Id.* at 3.

<sup>220</sup> *Id.* at 6. Nielsen describes a metro as embedded if it is located within a larger market also reported by the company. For example, Nielsen ranks the New York metro as number one but separately ranks as number 42 a portion of New Jersey (Middlesex-Somerset-Union) that is also included within the New York metro. *See, e.g.*, Nielsen Radio Market Survey Population, Rankings, and Information, Spring 2024, [https://www.nielsen.com/wp-content/uploads/sites/2/2024/04/Populations\\_Rankings.pdf](https://www.nielsen.com/wp-content/uploads/sites/2/2024/04/Populations_Rankings.pdf) at 8 (accessed Oct. 7, 2024). Press notes that Nielsen further divides the New Jersey portion of the New York market into three component embedded metros and that the New York market also includes the additional embedded metros of Hudson Valley, Nassau-Suffolk, and Fairfield CT. Press Petition at nn. 6-7. It states that it is aware of three other markets with embedded metros: San Jose in the San Francisco market, New Bedford-Fall River MA in the Providence RI market, and Frederick MD in the Washington DC market. *Id.* at n. 7. Press anticipates that larger, higher powered stations from elsewhere in the New York market will use program originating boosters to sell time to local advertisers in an embedded New Jersey metro at rates far below what a local Class A station can afford to offer. *Id.* at 3. Press characterizes this as an “inequity” contrary to the mandate of section 307(b) of the Act to make “fair and equitable distribution of frequencies and power among the several communities and states.” *Id.* at 5-6, citing 47 U.S.C. § 307(b).

<sup>221</sup> *Id.* at 3.

<sup>222</sup> *Id.* This is a new argument which Press could have raised earlier. At earlier stages of this proceeding Press’ discussion on HD radio was limited to concern about compatibility with program originating boosters. *See* 2022 Press Comments at 3. Because Press did not present its current argument of HD radio as a substitute for the type of content offered by program originating boosters, we dismiss it pursuant to 47 U.S.C. § 1.429(l)(2). Moreover, while HD radio facilitates broadcast of different content, it does not differentiate the geographic reach of that content.

<sup>223</sup> *FNPRM*, para. 79.

<sup>224</sup> GBS Opposition at 5.

<sup>225</sup> *Order*, paras. 20, 22, 47-51, 53-58. *See* 47 CFR § 1.429(l)(3) (petitions for reconsideration that plainly do not warrant consideration may be dismissed, including those that rely on arguments that have been fully considered and rejected within the same proceeding); *Connect America Fund*, Sixth Order on Reconsideration and Memorandum Opinion and Order, 28 FCC Rcd 2572, 2573, para. 3 (2013) (stating that if a petition for reconsideration simply repeats arguments that were previously fully considered and rejected in the proceeding, it will not likely warrant reconsideration).

<sup>226</sup> Press Petition at 2-6.

the ability of program originating boosters to minimize interference.<sup>227</sup> We concluded that predictions of harmful interference were speculative and that properly engineered program originating boosters should not cause undue interference to the primary station or adjacent channel stations.<sup>228</sup> Further, we noted the very limited operation of program originating boosters for three minutes per hour, and the Bureau's ability to address any interference concerns that arise in individual circumstances by placing conditions on licenses as part of the authorization process.<sup>229</sup> The Press Petition provides no new arguments or information on GBS' testing that were not addressed in the *Order*.

79. With respect to economic impact on stations in markets like New Jersey, the *Order* recognized commenters' concern that use of program originating boosters by competitors could affect a few markets differently due to geography and size, such as the example of small New Jersey stations located between the larger markets of New York and Philadelphia.<sup>230</sup> However, we declined to prohibit the rollout of a new optional technology solely to address speculative concerns in one market.<sup>231</sup> The Press Petition provides no new arguments or information on the economic impact of program origination boosters on stations in embedded markets that were not addressed in the *Order*.

80. With respect to compatibility of program originating boosters with EAS signals, the *Order* addressed such issues and amended section 11.11 of the Rules to require that program originating boosters receive and broadcast all emergency alerts in the same manner as their primary station.<sup>232</sup> Press does not allege any problem with such a requirement. Nor does Press demonstrate any error in the *Order*'s conclusion that program origination is unlikely to cause harmful interference to EAS.<sup>233</sup> The Press Petition provides no new arguments or information on EAS compatibility that were not addressed in the *Order*. Accordingly, we dismiss the Press Petition on procedural grounds.

## IV. PROCEDURAL MATTERS

### A. Regulatory Flexibility Act

81. The Regulatory Flexibility Act of 1980, as amended (RFA),<sup>234</sup> requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies

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<sup>227</sup> See *Order*, para. 9.

<sup>228</sup> *Id.*, paras. 10, 37.

<sup>229</sup> *Id.*, para. 10.

<sup>230</sup> *Id.*, para. 22.

<sup>231</sup> *Id.*

<sup>232</sup> *Id.*, para. 53. We note that Roberts, in reply comments, argues that requiring EAS equipment for program originating boosters is expensive for small broadcasters and largely unnecessary because it says that boosters do not need separate EAS equipment to deliver an identical, overriding EAS alert from the main station. Roberts Reply Comments at 3. Although we acknowledge Roberts' concern, our determination that program origination is consistent with EAS relies upon GBS' testing of boosters with their own separate EAS equipment. GBS did not to our knowledge conduct tests that relied solely upon EAS equipment of the primary station. Given the importance of emergency communications, the integrity of EAS requires that we adopt the equipment requirement as proposed. Use of program originating boosters is voluntary so no licensee will be required to invest in additional EAS equipment for boosters unless it determines that the potential benefits of voluntarily choosing to originate programming over boosters outweighs the costs.

<sup>233</sup> We also note that, to the extent that the *Order* left open the question of whether there was a need for any additional EAS-related safeguards and sought comment in the *FNPRM*, we adopt herein in the *Second Report and Order* a further EAS safeguard by requiring licensees using program originating boosters to notify their State Emergency Communications Committee(s) to ensure that program origination does not negatively impact the public's receipt of EAS alerts. See *supra*, para. 35.

<sup>234</sup> 5 U.S.C. §§ 601–612. The RFA has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

that “the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities.”<sup>235</sup> Accordingly, we have prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of the rule changes contained in this *Second Report and Order*. The FRFA is set forth in Appendix C.

### 1. Final Paperwork Reduction Act of 1995 Analysis

82. This *Second Report and Order* may contain new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA).<sup>236</sup> All such new or modified information collections will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA.<sup>237</sup> OMB, the general public, and other Federal agencies are invited to comment on any new or modified information collection requirements contained in this proceeding. In addition, pursuant to the Small Business Paperwork Relief Act of 2002,<sup>238</sup> the Commission previously sought specific comment on how it might further reduce the information collection burden for small business concerns with fewer than 25 employees. In Appendix C, we have assessed the effects of the required collection of information on these small entities.

### B. Congressional Review Act

83. [The Commission will submit this *Second Report and Order* to the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, for concurrence as to whether this rule is major or non-major under the Congressional Review Act, 5 U.S.C. § 804(2).] The Commission will send a copy of the *Second Report and Order* to Congress and the Government Accountability Office pursuant to 5 U.S.C. § 801(a)(1)(A).

84. *People with Disabilities.* To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to [fcc504@fcc.gov](mailto:fcc504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

85. *Additional Information.* For additional information on this proceeding, contact Albert Shuldiner, Media Bureau, Audio Division, at (202) 418-2721 or [Albert.Shuldiner@fcc.gov](mailto:Albert.Shuldiner@fcc.gov); or Irene Bleiweiss, Media Bureau, Audio Division, at (202) 418-2785 or [Irene.Bleiweiss@fcc.gov](mailto:Irene.Bleiweiss@fcc.gov).

## V. ORDERING CLAUSES

86. Accordingly, **IT IS ORDERED** that pursuant to the authority contained in sections 1,2, 4(i), 7, 301, 302, 303, 307, 308, 309, 316, 319, and 324 of the Communications Act of 1934, 47 U.S.C. §§151, 152, 154(i), 157, 301, 302, 303, 307, 308, 309, 316, 319, and 324, this *Second Report and Order and Order on Reconsideration* **IS ADOPTED**.

87. **IT IS FURTHER ORDERED** that the *Second Report and Order* and the amendments to the Commission’s rules set forth in Appendix B **SHALL BE EFFECTIVE** 30 days after publication of a summary in the Federal Register except that the amendments to sections 73.3526(a), (e); 73.3527(a), (e); 74.1204(f); and 74.1206, which may contain new or modified information collection requirements, will not become effective until OMB completes review of any information collection requirements that the Media Bureau determines is required under the Paperwork Reduction Act. The Commission directs the Media Bureau to announce the effective date of the rule changes to sections 73.3526(a), (e); 73.3527(a), (e); 74.1204(f), and 74.1206, by subsequent Public Notice.

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<sup>235</sup> 5 U.S.C. § 605(b).

<sup>236</sup> Pub. L. No. 104-13, 109 Stat 163 (1995) (codified at 44 U.S.C. §§ 3501-3520).

<sup>237</sup> 44 U.S.C. § 3507(d).

<sup>238</sup> Pub. L. No. 107-198, 116 Stat 729 (2002) (codified at 44 U.S.C. § 3506(c)(4)).

88. **IT IS FURTHER ORDERED** that the Commission's Office of the Secretary **SHALL SEND** a copy of this *Second Report and Order and Order on Reconsideration*, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

89. **IT IS FURTHER ORDERED** that Office of the Managing Director, Performance Program Management, **SHALL SEND** a copy of this *Second Report and Order and Order on Reconsideration* in a report to Congress and the Government Accountability Office pursuant to the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A).

90. **IT IS FURTHER ORDERED** that the Petition for Reconsideration filed by REC Networks of the Report and Order in MB Docket No. 20-401 **IS DENIED**.

91. **IT IS FURTHER ORDERED** that the Petition for Reconsideration filed by Press Communications, LLC of the Report and Order in MB Docket No. 20-401 **IS DISMISSED**.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

**APPENDIX A**  
**List of Commenters**

Aaron Read

GeoBroadcast Solutions, LLC\*\*\*

National Association of Broadcasters

National Public Radio, Inc.

Press Communications, LLC\*

REC Networks\*\*

Roberts Radio Broadcasting, LLC\*\*\*\*

U.S. Black Chamber; Multicultural Media, Telecom and Internet Council;  
National Newspapers Publishers Association; and Roberts Radio Broadcasting, LLC

\* Filed Petition for Reconsideration only

\*\* Petition for Reconsideration, Comments, Reply Comments, and Reply to Opposition

\*\*\* Filed comments, Reply comments, and Opposition to Petition for Reconsideration

\*\*\*\* Filed individual Reply comments and comments as part of a group

**APPENDIX B****Final Rules**

Deleted text is marked with a strikethrough and new text is bolded. Other text is current and remains part of the Commission's rules.

**For the reasons discussed in this preamble, the Federal Communications Commission amends Part 11, Part 73, and Part 74 of Chapter I of Title 47 of the Code of Federal Regulations as follows:**

**PART 11 – EMERGENCY ALERT SYSTEM (EAS)**

1. The authority citation for part 11 continues to read as follows:  
Authority: 47 U.S.C. 151, 154 (i) and (o), 303(r), 544(g), 606, 1201, 1206.
2. Amend Section 11.21(a)(4) to add a new final sentence to read as follows:

**§ 11.21 State and Local Area plans and FCC Mapbook.**

\* \* \*

(a) \* \* \*

**(4)** A monitoring assignment matrix, in computer readable form, clearly showing monitoring assignments and the specific primary and backup path for the National Emergency Message (EAN) from the NPWS to all key EAS sources (using the uniform designations specified in § 11.18) and to each station in the plan, organized by operational areas within the state. If a state's emergency alert system is capable of initiating EAS messages formatted in the Common Alerting Protocol (CAP), its EAS State Plan must include specific and detailed information describing how such messages will be aggregated and distributed to EAS Participants within the state, including the monitoring requirements associated with distributing such messages. **State EAS Plans must indicate whether any of the EAS monitoring sources in the monitoring assignment matrix are primary stations adopting program originating boosters and, if so, whether the boosters will simulcast the primary station or remain off-air during periods when they are not originating programming;**

\* \* \*

**PART 73 – RADIO BROADCAST SERVICES**

1. The authority citation for part 73 continues to read as follows:  
Authority: 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, 339.
2. Amend Section 73.860 adding a new final sentence to paragraph (b)(5), to read as follows:

**§ 73.860 Cross-ownership.**

\* \* \*

**(b)** \* \* \*

**(5)** Booster stations commonly owned by LPFM stations may conduct transmissions independent of those broadcast by the primary LPFM station for a period not to exceed three minutes of each broadcast hour. This is a strict hourly limit that may not be exceeded by aggregating unused minutes of program origination. **Any such booster stations must comply with the rules concerning the Emergency Alert System set out in Part 11.**

\* \* \*

3. Amend Section 73.3526 by adding paragraphs (a)(3) and (e)(20), to read as follows:

**§ 73.3526 Online public inspection file of commercial stations.**

(a) \* \* \*

**(3) Every permittee or licensee of a program originating FM booster station, as defined in § 74.1201(f)(2) of this chapter, shall maintain in the political file of its FM primary station the records required in § 73.1943 of this part for each such program originating FM booster station.**

\* \* \*

(e) \* \* \*

**(20) *Certification by Licensees of Program Originating FM Boosters.* Every licensee of an FM primary station using a program originating FM booster station, as defined in § 74.1201(f)(2) of this chapter, shall concurrently with its quarterly issues programs lists for the primary station, place a booster public interest certification in the online public file of its FM primary station. The certification must contain the call sign(s) of the relevant booster(s) and certify that in originating programming over the booster(s) the licensee has considered the characteristics and needs of the coverage area of the booster station and has not used the booster to exclude or diminish service to other populations within that area or any other area served by the booster's primary station.**

\* \* \* \* \*

4. Amend Section 73.3527 by adding paragraphs (a)(3) and (e)(16), to read as follows:

**§ 73.3527 Online public inspection file of noncommercial educational stations.**

(a) \* \* \*

**(3) Every permittee or licensee of a program originating FM booster station, as defined in § 74.1201(f)(2) of this chapter, in the noncommercial educational broadcast service shall maintain in the political file of its FM primary station the records required in § 73.1943 of this part for each such program originating FM booster station.**

\* \* \*

(e) \* \* \*

**(16) *Certification by Licensees of Program Originating FM Boosters.* Every licensee of an FM primary station using a program originating FM booster station, as defined in § 74.1201(f)(2) of this chapter, shall concurrently with its quarterly issues programs lists for**



the primary station, place a booster public interest certification in the online public file of its FM primary station. The certification must contain the call sign(s) of the relevant booster(s) and certify that in originating programming over the booster(s) the licensee has considered the characteristics and needs of the coverage area of the booster station and has not used the booster to exclude or diminish service to other populations within that area or any other area served by the booster's primary station.

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## **PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES**

1. The authority citation for part 74 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, 307, 309, 310, 325, 336, and 554.

2. Amend Section 74.1204 by removing the Note to paragraph (a)(4), adding paragraph (a)(5), revising paragraph (f)(1), adding new paragraphs (f)(2) and (f)(3), redesignating current paragraphs (f)(1) – (f)(5) as paragraphs (f)(3)(i) – (f)(3)(v), revising paragraph (f)(3)(iv), and revising paragraph (i), to read as follows:

### **§ 74.1204 Protection of FM broadcast, FM Translator and LP100 stations.**

(a) \* \* \*

~~Note to paragraph (a)(4): LP100 stations, to the purposes of determining overlap pursuant to this paragraph, LPFM applications and permits that have not yet been licensed must be considered as operating with the maximum permitted facilities. All LPFM TIS stations must be protected on the basis of a nondirectional antenna.~~

**(5) For the purposes of determining overlap pursuant to this paragraph, LP100 stations, LPFM applications, and LPFM permits that have not yet been licensed must be considered as operating with the maximum permitted facilities. All LPFM TIS stations must be protected on the basis of a nondirectional antenna.**

\* \* \* \* \*

**(f) (1) An application for an FM translator station will not be ~~accepted for filing~~ **granted** even though the proposed operation would not involve overlap of field strength contours with any other station, as set forth in paragraph (a) of this section, if grant of the authorization will result in interference to the reception of a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, including previously authorized secondary service stations within the 45 dBμ field strength contour of the desired station. ~~Interference is demonstrated by:~~**

~~(1) The required minimum number of valid listener complaints as determined using Table 1 to § 74.1203(a)(3) of this part and defined in § 74.1201(k) of this part;~~

~~(2) A map plotting the specific location of the alleged interference in relation to the complaining station's 45 dBμ contour;~~

- ~~(3) A statement that the complaining station is operating within its licensed parameters;~~
- ~~(4) A statement that the complaining station licensee has used commercially reasonable efforts to inform the relevant translator licensee of the claimed interference and attempted private resolution; and~~
- ~~(5) U/D data demonstrating that at each listener location the undesired to desired signal strength exceeds –20 dB for co-channel situations, –6 dB for first adjacent channel situations or 40 dB for second- or third-adjacent channel situations, calculated using the methodology set out in paragraph (b) of this section.~~

**(2) An application for an FM broadcast booster station will not be granted even though the proposed operation would not involve overlap of field strength contours with any other station, as set forth in paragraph (i) of this section, if grant of the authorization will result in interference to the reception of a regularly used, off-the-air signal of any authorized co-channel, first, second or third adjacent channel broadcast station, other than the booster's primary station, but including previously authorized secondary service stations within the 45 dBμ field strength contour of the desired station.**

**(3) Interference, with regard to either an FM translator station or an FM broadcast booster station application, is demonstrated by:**

- ~~(4i)~~ The required minimum number of valid listener complaints as determined using Table 1 to § 74.1203(a)(3) of this part and defined in § 74.1201(k) of this part;
- ~~(2ii)~~ A map plotting the specific location of the alleged interference in relation to the complaining station's 45 dBμ contour;
- ~~(3iii)~~ A statement that the complaining station is operating within its licensed parameters;
- ~~(4iv)~~ A statement that the complaining station licensee has used commercially reasonable efforts to inform the relevant translator **or booster** licensee of the claimed interference and attempted private resolution; and
- ~~(5v)~~ U/D data demonstrating that at each listener location the undesired to desired signal strength exceeds –20 dB for co-channel situations, –6 dB for first-adjacent channel situations or 40 dB for second- or third-adjacent channel situations, calculated using the methodology set out in paragraph (b) of this section.

\* \* \* \* \*

(i) FM **broadcast** booster stations shall be subject to the requirement that the signal of any first adjacent channel station must exceed the signal of the booster station by 6 dB at all points within the protected contour of any first adjacent channel station, except that in the case of FM stations on adjacent channels at spacings that do not meet the minimum distance separations specified in § 73.207 of this chapter, the signal of any first adjacent channel station must exceed the signal of the booster by 6 dB at any point within the predicted interference free contour of the adjacent channel station.

\* \* \* \* \*

3. Add Section 74.1206, to read as follows:

**§ 74.1206 Program originating FM booster station notifications.**

- (a) A program originating FM booster station must electronically file an FM Booster Program Origination Notification with the Commission in LMS using the form provided for this purpose, before commencing or after terminating the broadcast of booster-originated content subject to the provisions of § 74.1201(f)(2) of this part. Such a notification must be filed within 15 days before commencing origination, or within 30 days after terminating origination.
- (b) A primary FM station that is designated in a state emergency communications plan as an Emergency Alert Service Local Primary (LP), State Primary (SP), State Relay (SR), or otherwise monitored as an over-the-air source of EAS messages must notify the proper State Emergency Communications Committee(s) of its intent to transmit unique local programming on one or more program originating FM boosters at least 30 days prior to employing a program originating booster, or implementing changes to booster status. The notification should disclose whether the booster(s) will simulcast the primary station or remain off-air during periods when not originating programming and advise continued monitoring of the primary station and not of a booster.
- (c) Stations employing program originating boosters must report to the Commission's Operations Center, at FCCOPS@fcc.gov, any problems of which they become aware concerning EAS-related interference.

4. Amend Section 74.1231 by removing the Note to paragraph (i) and adding paragraph (j) and paragraph (k), to read as follows:

**§ 74.1231 Purpose and permissible service.**

\* \* \* \* \*

(j) In the case of a superpowered FM broadcast station, authorized with facilities in excess of those specified by § 73.211 of this chapter, an FM booster station will only be authorized within the protected contour of the class of station being rebroadcast as predicted based on the maximum facilities set forth in § 73.211 for the applicable class of FM broadcast station being rebroadcast.

(k) An FM broadcast booster station, as defined in § 74.1201(f)(1) or (f)(2) of this part, must suspend operations at any time its primary station is not operating. If a full-service FM broadcast station suspends operations, in addition to giving the notification specified in § 73.1740(a)(4) of this chapter, each FM broadcast booster station and program originating FM booster station must also file a notification under § 73.1740(a)(4) that it has suspended operations.

5. Amend Section 74.1232 by adding the second sentence of paragraph (g), adding new paragraph (h), and redesignating paragraph (h) as paragraph (i), to read as follows:

**§ 74.1232 Eligibility and licensing requirements.**

\* \* \* \* \*

(g) No numerical limit is placed upon the number of FM booster stations which may be licensed to a single licensee. **No more than twenty five (25) program originating FM booster stations may be licensed to a single full-service FM broadcast station. \* \* \***

**(h) A program originating FM booster station, when originating programming pursuant to the limits set forth in § 74.1201(f)(2) of this part, may not broadcast programming that is not permitted by its primary station's authorization (e.g., a program originating FM booster station licensed to a noncommercial educational primary station may only originate programming consistent with § 73.503 of this chapter).**

**(hi)** Any authorization for an FM translator station issued to an applicant described in paragraphs (d) and (e) of this section will be issued subject to the condition that it may be terminated at any time, upon not less than sixty (60) days written notice, where the circumstances in the community or area served are so altered as to have prohibited grant of the application had such circumstances existed at the time of its filing.

6. Add Section 74.1290, to read as follows:

**§ 74.1290 Political programming rules applicable to program originating FM booster stations.**

**To the extent a program originating FM booster station originates programming different than that broadcast by its FM primary station, pursuant to the limits set forth in § 74.1201(f)(2) of this part, it shall comply with the requirements in §§ 73.1212 (Sponsorship identification), 73.1940 (Legally qualified candidates for public office), 73.1941 (Equal opportunities), 73.1942 (Candidate rates), 73.1943 (Political file), and 73.1944 (Reasonable access) of this chapter.**

\* \* \* \* \*

## APPENDIX C

## Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA)<sup>1</sup> an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, Report and Order and Further Notice of Proposed Rulemaking (FNPRM)*, released in April 2024.<sup>2</sup> The Federal Communications Commission (Commission) sought written public comment on the proposals in the *FNPRM*, including comment on the IRFA. No comments were filed addressing the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.<sup>3</sup>

**A. Need for, and Objectives of, the Second Report and Order**

2. In the *Second Report and Order*, the Commission establishes service rules that will enable FM and low power FM (LPFM) broadcasters to use FM booster stations to originate program content. This action builds upon an April 2024 *Report and Order (Order) and Further Notice of Proposed Rulemaking (FNPRM)* stemming from a Petition for Rulemaking by GeoBroadcast Solutions, LLC (GBS). GBS developed technology designed to allow FM broadcast stations to use boosters as a means of airing “geo-targeted” content different from their primary station’s signal to specific areas, *i.e.*, “zones,” within that station’s service contour. Stations choosing to use this technology might, for example, air advertisements from businesses whose needs or budgets are best focused on small geographic areas, and/or might air hyper-local news and weather reports most relevant to a particular segment of the community. Because FM boosters were traditionally used only as a means to enhance weak signals of a primary station and could not originate programming, GBS asked the Commission to modify the rules to allow program originating boosters.

3. In the *Order*, after considering responsive comments, we identified significant potential benefits of program originating boosters. The technology could enable radio stations to seek new sources of revenue, provide audiences with more relevant, hyper-local content, and provide advertisers with better opportunities to direct messages to the listeners they most want to reach. Nevertheless, because the record addressed some technical and administrative issues quite broadly, we issued the *FNPRM* to propose specific requirements and solicit more detailed input. We, thus, provided for immediate grant of authorizations to operate program originating boosters on an experimental basis pursuant to Part 5 of the Commission’s rules, but determined that permanent authorizations would need to await establishment of more detailed requirements following an opportunity for public comment.

4. Commenters generally support a process that is simple and flexible for booster applicants while including safeguards to ensure that booster operations do not impact emergency communications or signal quality to listeners of the primary station and other co-channel and adjacent channel stations. The *Second Report and Order* thus adopts processing, licensing, and service rules to enable the Commission to authorize broadcasters to originate programming on boosters without the need for an experimental authorization. To facilitate the rollout of this service, we establish that FM licensees will apply for boosters on a first come/first served basis. Before commencing or suspending program origination the licensee will file a notification (FM Booster Program Origination Notification) using an electronic form available in the Media Bureau’s Licensing and Management System (LMS) database. The notification will enable the Commission and interested parties to be aware of which boosters are being used for this purpose. In response to public safety concerns about potential impact on the Emergency Alert System

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<sup>1</sup> 5 U.S.C. § 603. The RFA, 5 U.S.C. §§ 601-612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996).

<sup>2</sup> *Amendment of Section 74.1231(i) of the Commission's Rules on FM Broadcast Booster Stations, Report and Order and Further Notice of Proposed Rulemaking*, MB Docket Nos. 20-401, 17-105 and RM-11854, FCC 24-35, 2024 WL 1460460 (rel. April 2, 2024).

<sup>3</sup> 5 U.S.C. § 604.

(EAS), the Commission will require broadcasters whose signals are specified in a state emergency communications plan to notify their State Emergency Communications Committee(s) (SECC) of their use of program originating boosters. We also update our rules to allow the Commission to address concerns about predicted interference from proposed booster stations, and adopt a cap on the total number of program originating boosters each primary station may operate. We update our political broadcasting rules to account for political advertising on program originating boosters. Finally, we adopt a commenter-proposed public interest certification for broadcasters operating program originating boosters.

**B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA**

5. There were no comments filed that specifically addressed the proposed rules and policies presented in the IRFA. However, Roberts Radio Broadcasting (Roberts), which supports program originating boosters, offered its perspective on several administrative matters as a small, independent broadcaster with limited resources. Specifically, Roberts seeks streamlined political file requirements and opposes separate EAS requirements for program originating boosters, citing concerns regarding the limited resources of small, independent broadcasters.<sup>4</sup> As discussed in greater detail in section F, the *Second Report and Order* streamlines political file reporting, but maintains certain EAS notification requirements.

**C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration**

6. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.<sup>5</sup> The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

**D. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply**

7. The RFA directs the agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.<sup>6</sup> The RFA generally defines the term “small entity” as having the same meaning as the terms “small business,” “small organization,” and “small government jurisdiction.”<sup>7</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>8</sup> A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>9</sup>

8. *Radio Stations.* This industry is comprised of “establishments primarily engaged in broadcasting aural programs by radio to the public.”<sup>10</sup> Programming may originate in their own studio,

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<sup>4</sup> Roberts Reply Comments at 2-4.

<sup>5</sup> 5 U.S.C. § 604(a)(3).

<sup>6</sup> *Id.* § 604(a)(4).

<sup>7</sup> *Id.* § 601(6).

<sup>8</sup> *Id.* § 601(3) (incorporating by reference the definition of “small business concern” in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies “unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register.” 5 U.S.C. § 601(3).

<sup>9</sup> 15 U.S.C. § 632.

<sup>10</sup> See U.S. Census Bureau, 2017 NAICS Definition, “515112 Radio Stations,” <https://www.census.gov/naics/?input=515112&year=2017&details=515112>.



from an affiliated network, or from external sources.<sup>11</sup> The SBA small business size standard for this industry classifies firms having \$47 million or less in annual receipts as small.<sup>12</sup> U.S. Census Bureau data for 2017 show that 2,963 firms operated in this industry during that year.<sup>13</sup> Of this number, 1,879 firms operated with revenue of less than \$25 million per year.<sup>14</sup> Based on this data and the SBA's small business size standard, we estimate a majority of such entities are small entities.

9. The Commission estimates that as of September 30, 2024, there were 4,400 licensed commercial AM radio stations and 6,618 licensed commercial FM radio stations, for a combined total of 11,018 commercial radio stations.<sup>15</sup> Of this total, 11,017 stations (or 99.99 %) had revenues of \$47 million or less in 2023, according to Commission staff review of the BIA Kelsey Inc. Media Access Pro Database (BIA) on October 15, 2024, and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates that as of September 30, 2024, there were 4,377 licensed noncommercial (NCE) FM radio stations, 1,967 low power FM (LPFM) stations, and 8,894 FM translators and boosters.<sup>16</sup> The Commission however does not compile, and otherwise does not have access to financial information for these radio stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of radio station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

10. We note, however, that in assessing whether a business concern qualifies as "small" under the above definition, business (control) affiliations<sup>17</sup> must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, another element of the definition of "small business" requires that an entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio or television broadcast station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the definition of a small business on this basis and is therefore possibly over-inclusive. An additional element of the definition of "small business" is that the entity must be independently owned and operated. Because it is difficult to assess these criteria in the context of media entities, the estimate of small businesses to which the rules may apply does not exclude any radio or television station from the

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<sup>11</sup> *Id.*

<sup>12</sup> See 13 CFR § 121.201, NAICS Code 515112 (as of 10/1/22 NAICS Code 516110).

<sup>13</sup> See U.S. Census Bureau, *2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017*, Table ID: EC1700SIZEREVFIRM, NAICS Code 515112, <https://data.census.gov/cedsci/table?y=2017&n=515112&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false>. We note that the US Census Bureau withheld publication of the number of firms that operated for the entire year. At this time, the 2022 Economic Census data is not available.

<sup>14</sup> *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We note that the U.S. Census Bureau withheld publication of the number of firms that operated with sales/value of shipments/revenue in the individual categories for less than \$100,000, and \$100,000 to \$249,999 to avoid disclosing data for individual companies (see Cell Notes for the sales/value of shipments/revenue in these categories). Therefore, the number of firms with revenue that meet the SBA size standard would be higher than noted herein. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see [https://www.census.gov/glossary/#term\\_ReceiptsRevenueServices](https://www.census.gov/glossary/#term_ReceiptsRevenueServices).

<sup>15</sup> *Broadcast Station Totals as of September 30, 2024*, Public Notice, DA 24-1034 (rel. Oct. 7, 2024) (*October 2024 Broadcast Station Totals PN*), <https://docs.fcc.gov/public/attachments/DA-24-1034A1.pdf>.

<sup>16</sup> *Id.*

<sup>17</sup> "[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has the power to control both." 13 CFR § 21.103(a)(1).

definition of a small business on this basis and similarly may be over-inclusive.

**E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities**

11. The *Second Report and Order* modifies reporting requirements that may impact compliance requirements for small entities, as described below. These changes will likely result in a modified paperwork obligation for small and other entities. The Commission has considered the benefits and costs of allowing program originating booster licensees to submit certain notifications in LMS. While there is not specific information on the record to quantify the cost of compliance for small entities, or determine whether they will need to hire professionals to comply with its decisions, the Commission has determined that the benefits of allowing small and other broadcasters to operate program originating boosters outweigh any potential costs for small entities. The Commission will seek approval of and submit the corresponding burden estimates to account for this modified reporting requirement.

12. The *Second Report and Order* adopts processing, licensing, and service rules permitting construction and operation of program originating boosters. The Commission adds a new section 74.1206 to the rules, requiring that a program originating booster formally notify the Commission through the Media Bureau's LMS database of the commencement and suspension of operations. FM Booster Program Origination Notifications must be filed 15 days prior to the start of programming and 30 days after permanently terminating programming. It also adopts a separate notification requirement pertaining to the EAS to ensure that EAS participants are aware of program originating boosters in their EAS chain. Broadcasters must alert their SECC that content on their boosters may differ from that on their primary station so that the SECC can take this into account in making EAS monitoring assignments. The *Second Report and Order* also requires that stations employing program originating boosters report to the Commission any problems of which they become aware concerning the EAS and interference. This EAS-related notification requirement is codified in new rule section 74.1206.

13. The *Second Report and Order* clarifies that the programming originated by an FM booster station must conform to that broadcast by the FM primary station, *e.g.*, a booster re-transmitting a noncommercial educational (NCE) FM station may also only broadcast NCE content, and that booster stations must suspend operations when the primary station is not operating. Information collected in the FM Booster Program Origination Notification will be publicly available in the Commission's LMS database.

14. The Commission further amends section 74.1232(g), limiting full-service FM stations to 25 program originating FM booster stations. This cap represents a change from the current rule, which imposes no numerical limit on FM booster stations. The cap is intended to ensure that spectrum remains available for other purposes despite an increase in the overall number of booster stations anticipated from our decision to authorize program originating boosters, consistent with the Local Community Radio Act of 2010 (LCRA).<sup>18</sup>

15. The *Second Report and Order* also addresses issues regarding political broadcasting. To the extent that political advertising may be broadcast over a program originating booster, the Commission requires that such a booster station must follow all of the Commission's political broadcasting rules. These would include rules requiring the maintenance of a political file, provision of equal opportunity and reasonable access to political candidates, and limiting the rates charged to political candidates for air time.

16. The Commission adopts a suggestion from commenters that licensees of program originating boosters periodically self-certify that they are, consistent with the public interest, using the boosters in a manner that is responsive to the needs and issues of their service areas, especially minority communities. Although the Commission found no evidence that program origination would inhibit advances in diversity, equity, inclusion, and accessibility, it views this requirement as one posing a very minimal burden on licensees but serving as an important, regular reminder to licensees of best practices to

<sup>18</sup> Pub. L. 111-371, 124 Stat. 4072 (2011).

use program originating boosters as an enhancement of local messaging intended to target rather than to exclude. The Commission amends the online public inspection file rules in sections 73.3526 and 73.3527 to reference this new public interest self-certification requirement, requiring stations to place their booster-related certification in the online public file.

17. Finally, the *Second Report and Order* concludes that it is unnecessary to specify that vendors of program originating technologies must abide by the Commission's patent policy or any other guidelines, which require that licenses be available to all parties on fair, reasonable, and nondiscriminatory terms. There is not a need for such action at present because program originating boosters work with existing equipment and standards, the Commission has not endorsed GBS' particular product, and others can enter the market if there is a sufficient demand.

#### **F. Steps Taken to Minimize the Significant Economic Impact on Small Entities and Significant Alternatives Considered**

18. The RFA requires an agency to provide, "a description of the steps the agency has taken to minimize the significant economic impact on small entities...including a statement of the factual, policy, and legal reasons for selecting the alternative adopted in the final rule and why each one of the other significant alternatives to the rule considered by the agency which affect the impact on small entities was rejected."<sup>19</sup> In the *Second Report and Order*, the Commission considered a number of alternatives that may impact small entities when it adopted processing, licensing, and service rules for authorizing program originating boosters. These rules benefit the public by providing small broadcasters with increased options to serve listeners, and provide for more targeted and varied advertising and content that many small stations are not able to currently offer.

19. Many alternatives considered in the *Second Report and Order* seek to avoid imposing additional burdens on small radio stations where practicable. The Commission considered and responded favorably to commenter suggestions to keep administrative processes associated with program originating FM boosters as simple and flexible as possible. For example, the Commission will accept applications to construct program originating boosters on a first come/first served basis, and not add separate applications for program origination as proposed in comments. This will give applicants the flexibility to apply as needed rather than having to await a specific filing window and additional application review. In this way, FM broadcasters will be able to design systems that meet their individual circumstances by applying for many or just a few stations at any point in time. In the unlikely event of mutually exclusive booster proposals filed on the same day, the Commission decided to give the applicants an opportunity to adjust their technical proposals to allow for grant of both applications. The Commission will allow for additional flexibility if applicants are unable to adjust their engineering parameters and will grant each application on a time-sharing basis. Such an arrangement should not be difficult given that program origination is limited to three minutes each hour. In considering alternatives to the proposed political file requirements, the *Second Report and Order* retains filing obligations, however it allows small broadcasters to include information on the program originating booster in the political file of the main station, thereby streamlining recordkeeping obligations for smaller broadcasters with limited resources.

20. The Commission considered whether to codify technical specifications for synchronization of the program originating booster's signal with that of the FM primary station, and agreed with commenters who emphasized the importance of allowing each licensee to design a system that best meets the engineering specifications appropriate in its particular environment, providing small broadcasters further flexibility. Commenters also expressed concerns regarding co-channel interference standards, however we believe the existing standards, are sufficient and less burdensome for small and other broadcasters, and will retain those standards at this time.

21. In considering related recordkeeping and notification requirements, the Commission endeavored to strike an appropriate balance between the Commission's need for information and the

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<sup>19</sup> 5 U.S.C. § 604(a)(6).

small broadcaster's interest in minimizing regulatory burdens. For example, in establishing a new section 74.1206 to the rules, which prescribes LMS notification of the commencement or suspension of program originating booster service, the Commission accepted a suggestion that licensees provide the notification in the LMS database. The majority of Commission notifications in the media services are delivered through LMS, which is less burdensome than requiring separate mail or electronic mail notification. Further, the rule also simplifies notification and certification requirements for broadcasters, allowing 15 days for notification that programming will begin, instead of 10 days as proposed in comments, and 30 days to file a notification that it will permanently discontinue originating programming. The Commission delegated to the Media Bureau authority to create the new notification form and to coordinate with any other agencies as needed to obtain all form approvals. We believe that unlike other alternatives for compliance, such as a separate full application filing, this notification-based approach will provide adequate notice to the Commission while minimizing the regulatory burden for small broadcast stations. We anticipate that publicly available notifications will allow the Commission and the industry to monitor station use of the new program origination booster technology. Rather than adopting a suggestion that licensees of program originating boosters identify and contact, based on operational area alone, every EAS Participant that monitors its primary station, we adopt a far less burdensome requirement that they notify their State Emergency Communications Committee (SECC). This will enable EAS Participants to more readily understand the status of the sources they are monitoring by reviewing their State EAS Plan, which SECCs typically make available via website.

**G. Report to Congress**

22. The Commission will send a copy of the *Second Report and Order*, including this FRFA, in a report to Congress pursuant to the Congressional Review Act.<sup>20</sup> In addition, the Commission will send a copy of the *Second Report and Order*, including this FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Second Report and Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*.<sup>21</sup>

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<sup>20</sup> *Id.* § 801(a)(1)(A).

<sup>21</sup> *Id.* § 604(b).