

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

In the Matter of )  
 )  
Amendment of Part 74 of the Commission’s Rules ) MB Docket No. 18-119  
Regarding FM Translator Interference )

**REPORT AND ORDER**

**Adopted: May 9, 2019**

**Released: May 9, 2019**

By the Commission: Chairman Pai and Commissioners O’Rielly, Carr, and Starks issuing separate statements

**TABLE OF CONTENTS**

Heading	Paragraph #
I. INTRODUCTION .....	1
II. BACKGROUND .....	2
III. DISCUSSION.....	5
A. Channel Changes .....	5
B. Required Contents of Translator Interference Claims .....	11
C. Remediation Procedures .....	27
D. Contour Limit on Translator Interference Complaints .....	36
E. Pending Proceedings .....	49
F. Non-Substantive Updates.....	50
IV. CONCLUSION .....	51
V. PROCEDURAL MATTERS.....	52
A. Regulatory Flexibility Act .....	52
B. Paperwork Reduction Act of 1995.....	53
VI. ORDERING CLAUSES.....	55
APPENDIX A—List of Commenters	
APPENDIX B—Final Rule Changes	
APPENDIX C—Final Regulatory Flexibility Analysis	

**I. INTRODUCTION**

1. In this *Report and Order*, we adopt proposals to streamline the rules relating to interference caused by FM translators and to expedite the translator complaint resolution process. Specifically, we adopt the following proposals: (1) allowing FM translators to resolve interference issues by changing channels to any available same-band frequency using a minor modification application; (2) standardizing the information that must be compiled and submitted by any station claiming interference, including establishing a required minimum number of listener complaints; (3) establishing interference complaint resolution procedures; and (4) establishing an outer contour limit for the affected station within which interference complaints will be considered actionable while providing for a process to waive that limit in special circumstances. These measures are designed to limit or avoid protracted and contentious interference disputes, provide translator licensees additional investment certainty and flexibility to

remediate interference, and provide affected stations earlier and expedited resolution of interference complaints.

## II. BACKGROUND

2. In the *NPRM*, the Commission noted the substantial growth in the number of FM translators in recent years, as well as the increased financial importance of translators to many AM operators and to FM operators rebroadcasting digital subchannels.<sup>1</sup> The Commission originally established the FM translator service to provide “supplementary service to areas in which direct reception of [full-service] stations is unsatisfactory due to distance or intervening terrain barriers.”<sup>2</sup> As an outgrowth of its AM Revitalization proceeding, however, the Commission recently has authorized many AM stations to rebroadcast their signals over FM translators to enhance the viability of the AM service.<sup>3</sup> In addition, digital FM stations increasingly use translators to broadcast analog versions of their digital subchannels.<sup>4</sup> Overall, the number of licensed FM translators has grown from approximately 1,850 in 1990 to approximately 8,048 in 2019.<sup>5</sup> This substantial growth in the translator service—and the economic importance of translators for many broadcasters—has increased industry interest in clarifying and streamlining the interference rules for translator stations to create greater investment certainty and avoid protracted and expensive interference disputes.<sup>6</sup>

3. Commenters and petitioners have raised a variety of issues regarding the existing translator interference claim and resolution process during this proceeding.<sup>7</sup> The record indicates that some stations have raised interference claims against relatively distant translator stations with little evidentiary support, but where preventing service may provide a competitive advantage.<sup>8</sup> Such interference claims can be extremely damaging: under our rules, a translator station may be forced to cease operations due to just one unresolved listener complaint. Moreover, the Commission classifies translator licensee applications seeking to remediate interference by changing channels as a major change unless they are to first-, second-, or third-adjacent (collectively, Adjacent) or intermediate frequency (IF)

---

<sup>1</sup> *Amendment of Part 74 of the Commission’s Rules Regarding FM Translator Interference*, Notice of Proposed Rulemaking, 33 FCC Rcd 4729, 4731, para. 4 (2018) (*NPRM*). A list of commenters is included at Appendix A. The rule revisions adopted herein apply to translator and booster stations to the extent that the relevant rule parts govern both types of stations. See *NPRM*, 33 FCC Rcd at 4729, n.2, 4736, para. 16. We recognize that booster stations are located within the protected contour of their primary stations and thus will not normally trigger interference complaints. See Brown at 2; Fybush at 5; NTA at 4.

<sup>2</sup> *Amendment of Part 74 of the Commission’s Rules Concerning FM Translator Stations*, Report and Order, 5 FCC Rcd 7212, 7232, para. 143 (1990) (*1990 Translator Order*); *FM Translator and Booster Stations*, Report and Order, 20 RR.2d 1538 (1970) (*1970 Translator Order*).

<sup>3</sup> See *Filing Instructions for Second Cross-Service FM Translator Auction Filing Window for AM Broadcasters (Auction 100) to be Open January 25-January 31, 2018*, Public Notice, 32 FCC Rcd 10173 (MB/WTB Dec. 4, 2017); *Media Bureau Announces FM Translator Filing Window for Long-Form Applications*, Public Notice, 32 FCC Rcd 9248 (MB Nov. 1, 2017) (announcing filing window for new FM translator construction permit applications); *Filing Instructions for Cross-Service FM Translator Auction Filing Window for AM Broadcasters (Auction 99) to be Open July 26-August 2, 2017*, Public Notice, 32 FCC Rcd 4663 (MB/WTB 2017); *Media Bureau Announces Filing Dates and Procedures for AM Station Filing Window for FM Translator Modifications and Availability of FM Translator Technical Tools*, Public Notice, 30 FCC Rcd 14690 (MB 2015); see generally, *Revitalization of the AM Radio Service*, First Report and Order, 30 FCC Rcd 12145, 12147 *et seq.* (2015).

<sup>4</sup> See NAB at 1 (“Many broadcasters now use translators to offer additional content by rebroadcasting HD Radio multicast program services . . .”); Xperi at 2; NJBA at 2; Anderson at 1; ADX at 1; see generally, *Coe W. Ramsey, Esq.*, Letter, DA-17-1147 (MB rel. Nov. 29, 2017); *Digital Audio Broadcasting Systems*, First Report and Order, 17 FCC Rcd 19990 (2002).

<sup>5</sup> See Federal Communications Commission’s Electronic Document Management System (EDOCS), Broadcast Station Totals, <https://www.fcc.gov/document/broadcast-station-totals-march-31-2019> (last visited April 5, 2019).

channels.<sup>9</sup> The interference resolution process is often sidetracked by disputes over the validity of the claimed interference and the objectivity of complaining listeners, or by other intentional or unintentional delays.<sup>10</sup> Rather than focusing on remediating interference, many translator stations respond to interference complaints by attacking the validity of the complaints—e.g., that the complainant is not disinterested or otherwise not “bona fide,” that interference locations are not properly identified, that complainants did not cooperate with remediation attempts, etc.<sup>11</sup> Analyzing the validity of listener complaints can be time-consuming and expensive for all parties involved. Many listeners experiencing interference may simply switch to another station without first complaining to the Commission or to the desired station.<sup>12</sup> Moreover, seemingly similar cases can vary in the time, effort, and expense needed to resolve them, “at times leading to a perception of an *ad hoc* process with inconsistent outcomes.”<sup>13</sup> Finally, as noted in the *NPRM*, the current interference resolution process may promote negative interactions between translator operators and listener complainants.<sup>14</sup>

4. In this *Report and Order*, we adopt rules to address these issues by providing greater flexibility to translator operators to change channels, strengthening complaint requirements, reducing the role of listeners in the complaint resolution process in favor of a more objective technical approach, and setting an outer signal strength limit on actionable complaints while providing a process to waive that limit in special circumstances. Clarifying the process and balancing the interests of the various services involved is particularly critical given the present-day saturation of the FM spectrum in many markets.<sup>15</sup> Because of the maturity of the FM service, we must not only balance the needs of translator, low power FM and full-service licensees, but also take into account concerns such as the overall noise floor and

(Continued from previous page) \_\_\_\_\_

<sup>6</sup> Petition of NAB, RM-11787 at 1-3 (filed Apr. 20, 2017) (NAB Petition); Wheeler at 7 (“To these small [AM] broadcasters the thousands of dollars invested in the translator represents a significant expenditure and the loss of that investment, or, even worse, the loss of the translator signal combined with the cost of litigation could actually put them out of business.”).

<sup>7</sup> We find comments regarding: (1) strengthening the technical standards for translator antennas under 47 CFR § 74.1250(b); (2) expanding the FM band by reallocating VHF TV Channels 5 and 6; (3) reducing or eliminating adjacent channel overlap protection under 47 CFR § 74.1204(a); and (4) LPFM/translator contour overlap spacing issues raised in rulemaking docket RM-11810, to be outside the scope of this proceeding, and we decline to consider them. Proposals on any of these topics should be submitted in a separate petition for rulemaking. However, we will take into account in any interference proceeding whether the translator antenna was constructed and installed in accordance with the terms of the construction permit.

<sup>8</sup> Petition of Aztec, RM-11786, at 2 (filed Apr. 7, 2017); MCT at 4; ADX at 1; Cumulus at 4-5; Aleluya at 1; Radio Sharon at 2.

<sup>9</sup> Any change to a station’s facility that does not qualify as a minor change may only be submitted during a filing window (and is therefore subject to competing applications). 47 CFR § 74.1233(a)(1).

<sup>10</sup> NAB Petition at 8.

<sup>11</sup> See, e.g., *Marissa G. Repp, Esq.*, Letter, 32 FCC Rcd 7538 (MB 2017); *Arohi Media LLC*, Letter, Ref. No. 1800B3-PPD (MB May 9, 2017) (ordering that W252DK, Durham, NC, cease operation under 47 CFR § 74.1203(e)) (*Arohi Media*).

<sup>12</sup> We may refer herein to a “full-service” station when referring to any station that is protected from translator interference, with the acknowledgment that existing secondary service stations are also entitled to such protection. Likewise, we may refer to a station whose listener reception is potentially affected by translator interference as a “affected,” “desired,” or “complaining” station, depending on the context.

<sup>13</sup> NAB Petition at 8.

<sup>14</sup> *NPRM*, 33 FCC Rcd at 4733, para. 7.

<sup>15</sup> See EMF at 5 (“the FM band is essentially full in many of the major markets, and rapidly becoming so in smaller and smaller population centers”); Fybush at 8 (“Now that the FM band is fully mature and all but full to bursting  
(continued....)

technical integrity of the FM band. We believe that the measures adopted herein strike a balance between managing FM band spectrum, providing greater certainty for translator operators, and preserving existing protections for full-service stations, as detailed below.

### III. DISCUSSION

#### A. Channel Changes

5. As discussed in more detail below, we adopt the *NPRM*'s proposal to allow FM translator stations to remediate interference either caused to or received from another broadcast station by changing channels to any available same-band frequency as a minor change. Commenters generally support this proposal and confirm that the option to change to non-Adjacent channels would benefit translators by providing a relatively low cost way to resolve interference with little or no reduction in service area.<sup>16</sup> The ability to change channels will be particularly valuable in less populous markets, where the "FM band is more likely to have open frequencies, and where translators may be the only local broadcast radio services."<sup>17</sup> We anticipate that the option to change channels will help keep translators on the air and reduce the intensity of conflicts stemming from the fact that the translator's future operation is at stake.<sup>18</sup>

6. For these reasons, we modify section 74.1233(a)(1) of the Commission's rules (Rules) to define an FM translator's change to any available same-band FM channel as a minor change, upon a showing of actual or predicted interference to or from any other broadcast station. This rule change is limited to the channel change provision of section 74.1233(a)(1) and does not affect other applicable definitions or allocation requirements, including the requirement that a minor change applicant must provide service to some portion of its existing service area.<sup>19</sup> Moreover, when a proposed channel change is due to predicted interference to or from a new or modified facility, we may condition grant of such non-Adjacent or non-IF channel change applications on the construction of the other new or modified facility, thus preventing unnecessary channel changes.<sup>20</sup>

7. *Band-hopping.* Given this increased flexibility to change channels, we are not persuaded that it is also necessary to allow translator operators to "band hop"—i.e., to move between the reserved FM band and the non-reserved FM band—to resolve interference issues.<sup>21</sup> In the FM service, the

(Continued from previous page) \_\_\_\_\_

with signals, a reasonable set of compromises ought to allow existing full-power stations to preserve nearly all their real-world listening while eliminating the substantial uncertainty that the current rules impose on translator operators whose significant investments can now be all but wiped out by an interference complaint"); Press at 6 ("[T]he FM band is now fully packed with little room to meet the 'need' for more translators without destroying existing service.").

<sup>16</sup> See, e.g., Wheeler at 5; Dayton at 1; Crawford at 2; Brown at 1; CTI at 2; Fitzgerald at 1; Coastal at 5; REC Networks at 3-4; Monroe at 4-5; Kids First at 4-5; Araiza at 4-5; WSOU-FM at 4-5; Bishop at 1; Beaver Springs at 4-5; Delmar at 4-5; Anderson at 1; Aztec at 5-6; Henson at 2; EMF at 2-3; Cohen et al. at 1-2; CCCM at 1; Fybush at 4; ADX at 2; Chang at 3; Cumulus at 2; Aleluya at 2; but see LPFM Coalition at 4-5 (arguing that channel changes should include LPFM preclusion showing); Sibert at 3 (asserting that channel changes will eliminate LPFM opportunities); Corso at 1-2 (objecting to channel changes because other stations would have to monitor for new interference).

<sup>17</sup> NAB Petition at 6.

<sup>18</sup> See EMF at 15.

<sup>19</sup> See, e.g., 47 CFR § 74.1233(a)(1).

<sup>20</sup> See NAB at 5.

<sup>21</sup> A number of commenters suggested allowing translators to band hop to resolve interference, in some cases with various limitations or conditions. See Brown at 1; Fitzgerald at 1; NPR at 7-8; MCT at 3; Cumulus at 2-3; REC Reply at 2-3; NABC Reply at 2; Changs Reply at 1-2.

Commission has reserved twenty specific channels (channels 201 to 220) exclusively for full-power FM and FM translator use by noncommercial educational (NCE) stations,<sup>22</sup> to ensure that NCE stations would have the opportunity to develop without being precluded by commercial stations.<sup>23</sup> The Commission grants licenses in the reserved band using different procedures than those used for the non-reserved band. Specifically, non-reserve band channels are subject to competitive bidding when there is mutual exclusivity among competing applicants while reserve band channels are allocated through filing windows with mutually exclusive applications being resolved through a point system.<sup>24</sup> With the increased channel change activity that we anticipate will be generated by the rule change adopted herein, as well as the overall growth of the FM translator service, we believe that restricting such channel changes to the same band is necessary to preserve the integrity of the different processing systems we use for each band and to prevent licensees from avoiding competitive bidding by band hopping. Moreover, our use of filing windows is critical to provide equal opportunity to frequencies for translator applicants across the country.<sup>25</sup> “Band-hopping” circumvents the need to file in an appropriate window. In addition, allowing an NCE station to move from the reserved FM band to the non-reserved FM band potentially precludes the use of the relevant frequencies in future auctions.<sup>26</sup> We decline to undermine the filing window and auction processes by allowing translator operators the additional flexibility of cross-band channel changes for interference mitigation purposes, despite the potential lack of availability of a suitable channel in the same band.<sup>27</sup> Therefore, we modify section 74.1233(a)(1) to define as a major change any channel change for a translator seeking to resolve interference from a non-reserved band frequency to a reserved band frequency, or vice versa, as proposed in the *NPRM*.<sup>28</sup> This amendment of section 74.1233(a)(1) does not affect our existing provision classifying band-hopping channel changes by any unbuilt station as a major change.<sup>29</sup>

8. *Required showing.* We agree with NAB that “a simple engineering statement of mitigation of interference at the requested frequency” is sufficient as a threshold standard to permit the translator applicant to request a channel change as a minor modification.<sup>30</sup> This showing harmonizes

---

<sup>22</sup> 47 CFR §§ 73.501, 74.1202(b)(2).

<sup>23</sup> See, e.g., *Reexamination of Comparative Standard for Noncommercial Educational Applicants*, Report and Order, 18 FCC Rcd 6691, 6703, para. 31 (2003).

<sup>24</sup> 47 CFR §§ 73.5000, 73.7003.

<sup>25</sup> *Policies to Promote Rural Radio Service and to Streamline Allotment and Assignment Procedures*, Second Report and Order, 26 FCC Rcd 2556, 2579, para. 42 (2011) (*Rural Radio Second Report and Order*). We also seek to avoid the inconsistent result, under the existing rule, that band change requests by applicants responding to Section 74.1204(f) objections could be prohibited as “unbuilt,” while band change applications filed by operating translator stations in response to actual interference complaints under Section 74.1203(a)(3) would be permitted.

<sup>26</sup> *Rural Radio Second Report and Order*, 26 FCC Rcd at 2579, para. 42.

<sup>27</sup> See, e.g., NPR at 6-7.

<sup>28</sup> *NPRM*, 33 FCC Rcd at 4735-36, para. 14. A licensed station seeking a modification to an Adjacent or IF frequency in another band may continue to request to do so as a minor change, whether or not it seeks to avoid interference by the modification. 74 CFR § 74.1233(a)(1). Our experience has been that this long-established and highly circumscribed rule has not been detrimental to the integrity of the FM bands.

<sup>29</sup> 47 CFR § 74.1233(a)(1). The Commission adopted this provision in response to its experience with parties filing an application for a new station in a non-reserved (commercial) band window and then, before constructing or operating, filing a modification application to move to a reserved (noncommercial educational) band channel.

<sup>30</sup> NAB at 3-4; see also NTA at 2-3; REC at 2-3; Fybush at 4 (arguing for allowing channel changes with “at most a minimal interference showing.”).

closely with our policy for LPFM stations under section 73.870(a) of the Rules.<sup>31</sup> We are not persuaded that translator stations seeking to change channels should be required to submit listener complaints<sup>32</sup> or demonstrate that no Adjacent or IF frequency is available.<sup>33</sup> Our goal in classifying such modifications as minor changes is to encourage translators to avoid unnecessary disputes by changing channels, not to erect barriers to doing so. Moreover, we believe that the potential harm of using modification applications to obtain an allegedly more desirable channel is minimal because we do not recognize a qualitative difference between FM channels, and it is established that the channel change will mitigate interference at the existing frequency and will not cause any interference at the new frequency.<sup>34</sup>

9. *LPFM preclusion.* We reject the suggestion of the LPFM Coalition that the facilities specified in a translator channel change modification application must not preclude future LPFM licensing opportunities in the relevant market.<sup>35</sup> As noted by REC and NAB, such an approach is not required by Section 5 of the Local Community Radio Act of 2010 (LCRA),<sup>36</sup> which pertains to the licensing of new rather than existing stations.<sup>37</sup> For this reason, we will not require LPFM preclusion showings to be included with translator channel change modification applications.

10. *Notification.* We conclude that the record does not support imposing a notification requirement on applicants, as suggested by some commenters.<sup>38</sup> Such an approach would conflict with our current system of requiring licensees and permittees to be aware of information published in public notices.<sup>39</sup> This system already includes notification of channel changes by full-service and other stations, which have no additional notification requirement. We agree with NAB that a separate notice requirement would be “burdensome and unnecessary.”<sup>40</sup> Therefore, we see no reason to impose special burdens in this case and will continue to rely on the public notice system to inform potentially affected

---

<sup>31</sup> 47 CFR § 73.870(a) (“Minor changes of LPFM stations may include . . . [c]hanges in frequency to adjacent or IF frequencies or, upon a technical showing of reduced interference, to any frequency”).

<sup>32</sup> See NABC Reply at 2 (suggesting a minimum number of listener complaints to be eligible for a channel change as a minor modification).

<sup>33</sup> See NAB Petition at 6; Siebert at 3; NTA at 3; Pueblo Reply at 2 (arguing that the minor change rule should be modified to codify our existing waiver policy for displaced translators).

<sup>34</sup> See NABC Reply at 2; Pueblo Reply at 2.

<sup>35</sup> LPFM Coalition at 3-4.

<sup>36</sup> *Local Community Radio Act of 2010*, Pub. L. No. 111-371, 124 Stat. 4072 (2011) (LCRA), Sec. 5.

<sup>37</sup> REC Reply at 2-3; NAB Reply at 3-4. Specifically, Section 5 mandates that the Commission, “when licensing *new* FM translator stations, FM booster stations, and low-power FM stations,” shall ensure that they “remain equal in status and secondary to existing and modified full service FM stations.” LCRA Section 5(3) (emphasis added).

<sup>38</sup> See Corso at 2 (suggesting a notification requirement for translator modifications that comply with contour overlap requirements but still “pose a foreseeable risk of interference to existing service”); LPFM Coalition Reply at 13 (also supporting a notification requirement and setting a minimum processing time to “allow an affected station to analyze and, if appropriate, object early—when issues are easier to correct through prevention”); EMF Reply at 9 (supporting a “limited requirement for notice where there is likely to be interference to the listeners of a station beyond the station’s protected contour . . . most likely to occur when a translator agrees to accept incoming interference within its predicted 60 dBu contour from any co-channel or first-adjacent channel station.”).

parties of the acceptance for filing of translator channel change applications.<sup>41</sup> However, we direct the Bureau to ensure that both the proposed channel and new community of license, if applicable, are disclosed in its public notice so that potentially affected parties have a meaningful opportunity to comment or raise objections.

### B. Required Contents of Translator Interference Claims

11. In this section, we standardize the required contents of interference claims, including establishing a minimum number of listener complaints and the additional interference claim requirements set out below. In the rare instance that the Commission receives an individual complaint directly from a listener, we will forward it to both stations concerned to be resolved privately. If the stations cannot resolve the matter and Commission involvement becomes necessary, the affected station must submit a complete interference claim package to the Commission, as detailed below, and serve the interference claim package on the allegedly interfering translator operator.

12. *Minimum number of listener complaints.* We establish a requirement for a minimum number of listener complaints ranging from at least 6 to a cap of 25 depending on the population served by the complaining station. Adopting complaint minimums will prevent translators from having to reduce power or suspend operations based on claims supported by just one or two listener complaints and will reduce disputes over whether such claims have been adequately substantiated.<sup>42</sup>

13. In the *NPRM*, the Commission sought comment on a minimum number of listener complaints that a complaining station must submit to support its claim of translator interference. Specifically, the *NPRM* asked whether six is a sufficient threshold or whether the figure should vary based on the population the complaining station serves.<sup>43</sup> A universal six-complaint minimum received some support,<sup>44</sup> although several commenters object to it as arbitrary.<sup>45</sup> LPFM advocates urge that we require fewer listener complaints from LPFM stations, based on their smaller audience size, limited

(Continued from previous page)

<sup>39</sup> See, e.g., *K. Rupert Murdoch (Transferor) and Fox Entm't Group (Transferee)*, Memorandum Opinion and Order on Reconsideration, 24 FCC Rcd 5824, 5827, para. 11 (2009) (“The Commission has repeatedly held that public notice constitutes constructive notice to interested parties of the filing of an application.”).

<sup>40</sup> NAB Reply at 2, n.7.

<sup>41</sup> We note that if prompt processing of an application effectively precludes the filing of an informal objection, the Commission routinely entertains otherwise-compliant petitions for reconsideration. See, e.g., *Anthony T. Lepore, Esq.*, Letter Order, 31 FCC Rcd 2217, 2219 (MB 2016). For this reason, we also reject REC’s suggestion that we put a 7-day hold on processing licensing applications to allow petitions to deny. See REC at 8-9. Applicants are, as always, cautioned that an applicant opting to construct before the grant of its application becomes final does so at its own risk. *Las Americas Comm’n, Inc.*, Memorandum Opinion and Order, 6 FCC Rcd 1507, 1510 (1991).

<sup>42</sup> NAB Petition at 9; NABC Reply at 2 (arguing that a complaint minimum would prevent translators “being removed from the air by as few as one unresolved listener complaint”); NAB Reply at 5 (arguing that a complaint minimum will avoid the “preclusion of a translator” by one “single truly unique” distant listener).

<sup>43</sup> *NPRM*, 33 FCC Rcd at 4736-37, paras. 15-16.

<sup>44</sup> See Crawford at 2; Anderson at 3; Seaman at 1; CCCM at 1; MCT at 3; Cumulus at 4; NAB at 5-6; Joint Commenters at 1-2; ADX at 3; Cromwell at 2; NJBA, *ex parte* filed April 30, 2019 (arguing that six listener complaints would be sufficient, but no more than 12 listener complaints should be required).

<sup>45</sup> See Wheeler at 6; Brown at 2; WGTO at 2-3; Fybush at 5; NPR at 4; Sibert at 5. Other commenters reject the idea of a complaint-based system altogether, proposing instead a system based on technical data such as undesired-to-desired (U/D) ratios or signal strength measurements. See Dayton at 1 (complaint-based system is “unscientific and unpredictable...a [U/D] contour-based method is the only practical solution”); Crawford at 2 (citing 74.1204(a) U/D ratios for adjacent channels); Funk at 1 (interference claim should be based, at least in part, on “actual signal

(continued....)

resources, unique programming, and lack of streaming capabilities.<sup>46</sup> As an alternative to a single minimum number, some commenters propose an adjustable listener complaint minimum based on population or market size. Such alternative suggestions include a minimum of 0.05 percent of the population within the desired station's protected contour with a minimum of 20,<sup>47</sup> 0.01 percent of the population in a Nielsen Metro market,<sup>48</sup> 0.0005 percent of the population within the desired station's protected contour with a minimum of six,<sup>49</sup> six complaints up to 100,000 population and then one additional complaint for every 100,000 people,<sup>50</sup> and six complaints up to 600,000 population and one additional complaint for every 100,000 people in a Nielsen Metro market.<sup>51</sup> Others object that such a formula could be cumbersome and difficult to administer.<sup>52</sup>

14. Upon review of the record and careful consideration of the views presented, we conclude that a more tailored and proportionate approach than a single minimum number for all populations is appropriate. We agree with commenters who contend that the most fair and effective method would be based on the total population covered by a station's protected contour.<sup>53</sup> Specifically, we base the complaint minimums on an approximate increase of one complaint for every 100,000 people within the complaining station's protected contour<sup>54</sup>, with a baseline minimum of six and a cap of 25. Such an approach would be proportionate to the population within a station's protected contour without resulting in inordinately large and burdensome complaint minimums for heavily populated areas. Moreover, capping the total number of possible required listener complaints at 25 mitigates commenters' concerns that higher minimums might inhibit interference claims by stations in more populated markets that may experience smaller areas of interference.<sup>55</sup> For administrative feasibility and ease of calculation, we adopt the following table specifying each complaint minimum by population tier:

(Continued from previous page) \_\_\_\_\_

strength measurements" rather than relying "exclusively upon the opinion of listeners"); T Z Sawyer at 2 (listeners should be taken out of complaint system and Video process used instead (TVStudy)). We decline to adopt NPR's suggestion that we eliminate the listener complaint requirement for predicted interference in favor of using engineering criteria to predict interference to any populated area. NPR at 9-10. Such a measure would be a departure from our longstanding emphasis on interference caused to listeners of the complaining station and would be more burdensome and costly than the existing system.

<sup>46</sup> See REC at 5-6 (arguing that if a limit is set for LPFM stations, it should be three due to the "niche nature" of such stations); LPFM Coalition at 7 (pointing out that it would be harder to find six listeners from among a smaller LPFM audience); Sibert at 5 (arguing that legal costs involved in making an interference claim can be prohibitively expensive for LPFM and other small broadcasters); REC Reply at 4 (recommending three listener complaints, if any, as a minimum for LPFM stations because of their unique programming and lack of streaming as alternative).

<sup>47</sup> CTI at 3-4.

<sup>48</sup> Braccili at 2.

<sup>49</sup> Fitzgerald at 2.

<sup>50</sup> NTA at 4 (based on translator's protected contour).

<sup>51</sup> NABC at 2.

<sup>52</sup> See Brown at 1, NJBA at 3; NJBA *ex parte* filed April 25, 2019 at 3.

<sup>53</sup> See, e.g., CTI at 4.

<sup>54</sup> The protected contour is the 54 dBu contour for a non-reserved band Class B FM station, the 57 dBu contour for a non-reserved band Class B1 FM station, and the 60 dBu contour for all other classes of FM stations. See, e.g., 47 CFR § 73.215(a) and 73.509(a). The protected contour for a translator station and an LPFM station is the 60 dBu contour. See, e.g., 47 CFR § 74.1204(a)(3)-(4).

<sup>55</sup> See NAB, *ex parte* filed May 2, 2019 (arguing that stations in markets with larger populations will have difficulty meeting higher complaint minimums and recommending that any population-based methodology be capped at 25 listener complaints); Beasley Media Group, LLC, Educational Media Foundation, and iHeart Communications, Inc.,

(continued....)

Population within Protected Contour	Minimum Listener Complaints Required for Interference Claim
1-199,999	6
200,000-299,999	7
300,000-399,999	8
400,000-499,999	9
500,000-999,999	10
1,000,000-1,499,999	15
1,500,000-1,999,999	20
2,000,000 or more	25
LPFM stations with fewer than 5,000	3

To accommodate the concerns raised by LPFM advocates, we adopt three complaints as the minimum complaint number for LPFM stations with less than 5,000 people within their protected contour. For all other broadcast services, as well as for LPFM stations with 5,000 or more people within their protected contour, the minimum number at the lowest population tier is six complaints.<sup>56</sup>

15. In the *NPRM*, the Commission tentatively concluded that it would not adopt NAB’s proposal that the Commission require a showing of interference at a sufficient number of locations within the affected area to demonstrate “a real and consistent interference problem,”<sup>57</sup> instead proposing that translator interference claims by affected stations must be based on “separate receivers at separate locations.”<sup>58</sup> In its comments, NAB reiterates that “separate locations” should be construed as multiple,

(Continued from previous page)

\_\_\_\_\_ *ex parte* filed April 30, 2019 (urging the Commission to cap complaint minimums at 25 and to make the complaint minimums proportionate to either the area of potential interference or the relevant translator’s protected contour). Although we adopt a maximum complaint minimum of 25 as suggested, we conclude that the population in the complaining station’s protected contour is a more appropriate basis for our tiered minimums than population in the area of potential interference. We believe that using the population of the protected contour, which is well defined by the Rules and is incorporated in available modeling tools, is less burdensome for the parties. This data is readily available and less likely to be contested than more subjective assessments of how to calculate the potential area of interference and the population within those zones. *See also* Beasley Media Group, LLC, Educational Media Foundation, and iHeart Communications, Inc., *ex parte* filed May 1, 2019. Moreover, focusing only on the area of interference ignores potentially significant numbers of listeners that live outside the interference area but listen to the complaining station when travelling through that area. Finally, stations with a relatively larger listener population within its protected contour should generally be expected to produce a larger number of complaints than a station with a smaller listener population to reflect the proportional impact of the interference on its larger population base.

<sup>56</sup> The requirement that complaining stations submit a minimum number of listener complaints applies to both claims of actual interference from existing stations under section 74.1203(a)(3) and predicted interference claims for pending applications under section 74.1204(f). We recognize that in the context of claims against pending applications under section 74.1204(f) a “listener complaint” involves a listener providing information regarding identity, location, etc., to enable a predicted interference analysis rather than a report about interference the listener experienced. However, we use the phrase “listener complaint” in both contexts for simplicity.

<sup>57</sup> *NPRM*, 33 FCC Rcd at 4737, para. 17 (reasoning that requiring a minimum number of locations as well as complaints “would have us overlook or undervalue multiple listener complaints from the same approximate location, such as an apartment building,” in tension with our focus on “reception by the public” in section 74.1203(a)(3) and prevention of interference to “populated areas” in section 74.1204(f)).

unique, locations, “to ensure that an interference complaint truly warrants Commission action.”<sup>59</sup> Similarly, NABC argues that “[a]ll complaints should be from uniquely different locations,”<sup>60</sup> and Henson points out that multiple complaints in a single location may be the result of terrain shielding rather than translator interference.<sup>61</sup> Based upon the record, we are persuaded that translator interference claims must be based on “separate receivers at separate locations” and that multiple listener complaints from a single building (e.g., complaints from multiple dwellers of an apartment building or house) or workplace will not count beyond the first complaint toward the six-complaint minimum. The existence of a “real and consistent interference problem” will also be confirmed by our threshold requirement, established at paragraph 23, *infra*, that valid listener complaints be located within a “zone of potential interference.”

16. *Contents of each listener complaint.* We adopt specific content requirements for a listener complaint to be considered valid, as enumerated below. As described in the *NPRM*, translator interference proceedings often involve disputes over the bona fides of the complaining listeners.<sup>62</sup> Therefore, the Commission proposed to strengthen and standardize the upfront requirements for each listener complaint included in an interference claim package, to avoid contention and delay in the resolution process. This proposal received broad support by commenters, with some specific concerns addressed below.<sup>63</sup>

17. As proposed in the *NPRM*,<sup>64</sup> we will define a listener complaint as a complaint that is signed and dated by the listener and contains the following information: (1) the complainant’s full name, address, and phone number; (2) a clear, concise, and accurate description of the location where the interference is alleged to occur;<sup>65</sup> (3) a statement that the complainant listens to the desired station using an over-the-air signal at least twice a month, to demonstrate the complainant is a regular listener; and (4) a statement that the complainant has no legal, employment, financial, or familial affiliation or relationship with the desired station, to demonstrate the complainant is disinterested.<sup>66</sup> In the *NPRM*, the Commission sought comment on its proposal to require listeners to sign interference complaints. In its reply comments, New Jersey Broadcasters Association suggested that we allow such complaints to be signed electronically.<sup>67</sup> Because accepting electronic signatures would allow broadcasters to collect listeners’

(Continued from previous page) \_\_\_\_\_

<sup>58</sup> *NPRM*, 33 FCC Rcd at 4737, para. 16.

<sup>59</sup> NAB at 6.

<sup>60</sup> NABC Reply at 2.

<sup>61</sup> Henson at 4.

<sup>62</sup> *NPRM*, 33 FCC Rcd at 4730, 4738, para. 3.

<sup>63</sup> See CTI at 5; Fitzgerald at 2; REC at 6; Monroe at 3-4; Kids First at 3-4; Araiza at 3-4; WSOU-FM at 3-4; Beaver Springs at 3-4; Delmar at 3-4; EMF at 16; Cohen et al at 3; CCCM at 1; MCT at 3-4; Changs at 1; Crawford at 3; Coastal at 4; NAB at 7.

<sup>64</sup> *NPRM*, 33 FCC Rcd at 4738-39, paras. 19-21.

<sup>65</sup> Appropriate descriptions include map coordinates, street addresses, street intersections, or other descriptions such as “along Route XX near mile marker XX” or “between Exits 1 and 2 on Route XX.” Unacceptable descriptions would include “on my way to work” or “downtown,” as they do not inform the complaining station of whether the location is within its 45 dBU contour or provide the translator information with sufficient information to resolve the complaint.

<sup>66</sup> This language addresses CTI’s suggestion that each complaint include a certification that the desired station is received directly over-the-air and not via internet, wi-fi, cell phone, or other digital delivery service. See CTI at 6-7. Complaints that are not in English will be accepted with accompanying translation, as long as all other requirements are met.

<sup>67</sup> New Jersey Broadcasters Association Reply at 4.

complaints over the Internet, we agree. It is the responsibility of the complaining station to verify the validity of listener complaints, including those submitted electronically, and failure to do so or knowingly submitting false information will be subject to strict enforcement measures.<sup>68</sup> We anticipate that these enhanced listener complaint requirements will significantly reduce challenges to a listener's bona fides and thus simplify and streamline translator interference proceedings.

18. We adopt the *NPRM* proposal to define a “regular listener” as a complainant that listens to the desired station at least twice a month.<sup>69</sup> A number of commenters suggested alternative definitions of “regular” ranging from “almost daily” to once a month.<sup>70</sup> LPFM advocates urge a different definition for LPFM stations, pointing out that niche programming may occur weekly, monthly, or even yearly.<sup>71</sup> We are not persuaded that any of these alternative definitions is more appropriate or rational than our original proposal, which represents a common sense compromise between the various definitions suggested by commenters and will serve the function of providing reassurance to complainants who might otherwise question whether they could certify to being a “regular listener.” We conclude that codifying additional details regarding what constitutes a “regular listener”—for example, setting a minimum time for each listening session<sup>72</sup>—is not necessary in light of the fact that each listener is sufficiently committed to the complaining station to complete and sign a statement with the enhanced requirements set out in this *Order*.

19. Regarding the requirement that a complainant have no legal, financial, employment, or familial affiliation or relationship with the desired station,<sup>73</sup> we will reject attempts to use the following evidence to claim a listener is connected with the station: (1) social media connections, such as listeners friending or following a station or its personnel on Facebook, Twitter, or other social media platforms;<sup>74</sup> (2) membership in listener clubs or participation in station-run promotions, contests, and events;<sup>75</sup> (3) charitable donations to the station, such as listener contributions to a noncommercial education (NCE) station;<sup>76</sup> and (4) time contributed volunteering at a station or at a station-run event, so long as the volunteer does not hold a regular position at the station comparable to a station employee.<sup>77</sup> We find that these activities do not amount to a legal, financial, employment, or familial stake or interest in the station, but rather constitute an extension of the listener relationship. However, we clarify that advertisers are

---

<sup>68</sup> See, e.g., 47 CFR § 1.17; *Fox River Broadcasting, Inc.*, 93 FCC 2d 127, 129 (1983); *Tuscarawas Broadcasting Co.*, 4 FCC 2d 466, 468 (“... [T]he vitality of the Commission's requirement that an applicant make true, complete, and accurate representations to the Commission in its dealings with it, is . . . well established . . .”).

<sup>69</sup> *NPRM*, 33 FCC Rcd at 4738, para. 19.

<sup>70</sup> See CTI at 5 (suggesting “almost daily” for three months or more); Anderson at 3 (suggesting one hour twice a week); NABC Reply at 3 (suggesting one hour twice a month); Volken Reply at 5 (suggesting once a week); Aztec at 15 (suggesting twice a week). Cumulus suggests that “regular” be defined as at least 20 percent of the listener's total overall radio listening time. Cumulus at 7. We reject this suggestion as impractical, as it would require listeners to certify to a government agency that they have accurately tracked their total listening time and performed such a calculation.

<sup>71</sup> See LPFM Coalition at 14; REC Reply at 5.

<sup>72</sup> See, e.g., Cumulus at 7.

<sup>73</sup> *NPRM*, 33 FCC Rcd at 4738-39, paras. 19-21.

<sup>74</sup> See NAB at 7; NJBA Reply at 3, NJBA, *ex parte* filed April 25, 2019, at 3-4.

<sup>75</sup> See Wheeler at 4; Brown at 3; REC at 6; MCT at 4; Corso at 4.

<sup>76</sup> See Brown at 3.

<sup>77</sup> See REC at 6; LPFM Coalition at 12.

deemed to have a financial interest in the station, as are underwriters for NCE stations.<sup>78</sup>

20. Although some commenters opine that only unsolicited listener complaints should be acceptable,<sup>79</sup> we agree with the commenters who argue that complaints should be accepted regardless of how they arise.<sup>80</sup> Therefore, we will not prohibit broadcasters who are concerned about translator interference from alerting their listeners to possible interference, including using over-the-air announcements. Such announcements may not contain misleading or inaccurate information. Moreover, listeners may not be offered payment or any other inducement for submitting a complaint.<sup>81</sup> As proposed in the *NPRM*, we will also accept listener complaints presented in a standardized format, such as a form letter or list that the complaining station supplies to its listeners, as long as all the required elements are present.<sup>82</sup>

21. *Presumption of validity.* As proposed in the *NPRM*, we adopt a presumption of validity for any listener complaint that satisfies all the above required elements.<sup>83</sup> We find that, in conjunction with the other measures adopted herein, such a presumption will reduce the incidence of disputes over listener bona fides and streamline staff processing of translator interference cases. In accordance with this approach, we reject the suggestion that the Commission take a more active role in verifying complaints, including “vetting and questioning” listener complainants, holding hearings to establish the veracity of complaints before a translator is ordered off the air, making complaints subject to penalty of perjury,<sup>84</sup> or making complaints subject to criminal penalties under 18 U.S.C. Section 1001.<sup>85</sup> Some commenters expressed concern regarding the extent to which translator operators will be allowed to verify—and if necessary challenge—the information contained in listener complaints.<sup>86</sup> We agree that translator operators should be able to independently verify the basic information contained in each complaint. Accordingly, upon receipt of an interference claim, Commission staff will review the contents of the interference claim package. If compliant with our requirements, the staff will direct the complainant station to serve the translator operator with a non-redacted copy of the relevant listener complaints so that the translator operator can verify the basic elements of the complaint, such as the existence of the complainant, current residence at the given address, etc.<sup>87</sup> However, the burden of rebutting the

<sup>78</sup> See Changs at 2; NABC Reply at 3.

<sup>79</sup> See LPFM-AG at 2; NTA at 6 (arguing that the Commission should ban on-air complaint solicitation because “listeners genuinely affected by destructive interference will contact the station sua sponte, without being zealously prodded”).

<sup>80</sup> See Brown at 3; MCT at 4; Corso at 4; NAB at 7; NJBA Reply at 3; NAB Reply at 6.

<sup>81</sup> See Peter E. Schartel, *ex parte* filed April 29, 2019.

<sup>82</sup> *NPRM*, 33 FCC Rcd at 4738, para. 20. Because we take measures herein to clarify and codify listener complaint requirements, we do not believe it is necessary for the Commission to adopt a standardized listener complaint form as suggested by some commenters. See LPFM Coalition at 11; Coastal at 4; Monroe at 4; Kids First at 4; Araiza at 4; WSOU-FM at 4; Beaver Springs at 4; Delmar at 4.

<sup>83</sup> See para. 17, *supra*; *NPRM*, 33 FCC Rcd at 4738-39, para. 21.

<sup>84</sup> See Peter E. Schartel, *ex parte* filed April 29, 2019.

<sup>85</sup> See Aztec at 8-13

<sup>86</sup> See NAB at 6-7; Anderson at 3; ADX at 3-4; Aleluya at 3.

<sup>87</sup> See Cumulus at 7-11; NAB at 6 (both arguing that a translator licensee should be able to contact a listener complainant to be able to confirm, e.g., that the listener hasn’t moved). For this reason, we reject REC’s suggestion that we require complaining stations to request confidential treatment and redact personally identifying information contained in listener complaints before serving them on the subject translator. REC at 7. However, we will continue to consider confidentiality requests made under section 0.457 or 0.459 of the Rules. 47 CFR §§ 0.457, 0.459.

presumption of validity of each complaint, once established, will be on the translator operator.

22. *Ex parte and related issues.* We adopt the *NPRM* proposal that a listener whose complaint is sent to a station and then submitted to the Commission as part of an interference claim package filed by the affected station licensee is not a party under the *ex parte* rules because the listener has not submitted a filing with the Commission.<sup>88</sup> Likewise, when the Commission forwards a complaint originally filed directly with the Commission by an individual listener to the affected station, the listener does not become a party to any proceeding related to that listener complaint for *ex parte* purposes if the individual did not serve the relevant translator.<sup>89</sup> However, a station licensee that files an interference claim package and, after being directed to do so by Commission staff, serves it on the translator, is considered a party to the resulting proceeding, as is the translator.<sup>90</sup> All parties to a restricted complaint proceeding must be served with written presentations to the Commission and be given advance notice of and an opportunity to be present for oral presentations.<sup>91</sup> Similarly, we require translator operators to serve the complaining station with any filing or submission, including amendments to applications and STA requests, that relate to the station that is the subject of the interference claim. No commenters disagree with this interpretation of our *ex parte* rules.

23. *Additional interference claim requirements.* In addition to the required minimum number of valid listener statements as described above, a station submitting a translator interference claim package pursuant to either section 74.1203(a)(3) or 74.1204(f) must include: (1) a map plotting the specific locations of the alleged interference in relation to the 45 dBu contour of the complaining station;<sup>92</sup> (2) a statement that the complaining station is operating within its licensed parameters; (3) 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;<sup>93</sup> and (4) U/D data demonstrating that at each listener location the ratio of 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,<sup>94</sup> calculated using the Commission's standard contour prediction methodology.<sup>95</sup>

24. In the *NPRM*, the Commission proposed to adopt the map requirement (1) for section 74.1203(a)(3) actual interference claims, which already applies to section 74.1204(f) predicted interference claims.<sup>96</sup> As a consequence of our adoption in Section D, *infra*, of a 45 dBu contour limit on actionable interference complaints, requirement (2) is necessary to notify the Commission if a complaining station is operating outside its licensed parameters—including pursuant to special temporary

---

<sup>88</sup> See *NPRM*, 33 FCC Rcd at 4739, para. 21; 47 CFR § 1.1202(d)(1) (defining a “party” as “any person who files...[a] filing seeking affirmative relief”); 47 CFR § 1.1202(d)(2) (defining a “party” as “any person who files a complaint...which shows that the complainant has served it on the subject of the complaint”).

<sup>89</sup> 47 CFR § 1.1202(d)(2) (defining a “party” as “any person who files a complaint . . . which shows that the complainant has served it on the subject of the complaint”).

<sup>90</sup>*Id.*

<sup>91</sup> See 47 CFR § 1.1208; Corso at 4.

<sup>92</sup> See ADX at 4; paras. 36-40, *infra*.

<sup>93</sup> See NAB at 9.

<sup>94</sup> See 47 CFR § 74.1204(a).

<sup>95</sup> See 47 CFR § 73.313; NTA at 9-10 (suggesting that U/D data be included with any interference claim to eliminate interference that could not be caused by the subject translator).

<sup>96</sup> *NPRM*, 33 FCC Rcd at 4738, para. 19.

authority (STA).<sup>97</sup> Such operation could affect its actual versus its licensed 45 dBu signal contour and therefore alter the permissible scope of its interference claim. Regarding requirement (3), we agree with NAB that, given the streamlined procedures that are imposed by this *Report and Order*, translators and complaining stations should have the opportunity to resolve the matter privately prior to filing a formal interference claim with the Commission.<sup>98</sup> Finally, the technical showing set out in requirement (4) is already well-established for section 74.1204(f) claims and is hereby extended to section 74.1203(a)(3) in response to many commenters who question the reliability of listeners' assessment of the source of the perceived interference.<sup>99</sup> Although other methods may be used at the remediation stage to determine the source of interference,<sup>100</sup> for the purpose of determining the initial validity of a listener complaint, we find that a contour-based U/D ratio is an adequate threshold causation test to establish that the complaining listener is within a "zone of potential interference" by the subject translator station to the desired station. In addition to the U/D zone of potential interference test, our 45 dBu contour-based limitation on actionable interference complaints<sup>101</sup> will eliminate many interference complaints that may be actually due to weak, distant signals from the desired station or related issues such as multipath fading, atmospheric ducting, poor reception, or other conditions.<sup>102</sup>

25. *Time limits for interference claim packages.* We decline to impose a time limit on interference claims after a translator commences operation; however, we adopt a time limit within which the minimum number of listener complaints must be dated. In the *NPRM*, the Commission asked whether it should establish a maximum time period within which the required number of complaints must be obtained by the affected station and submitted to the Commission.<sup>103</sup> Some commenters suggest a time limit of one year after a translator commences on-air operation for an affected station to file the required minimum number of complaints.<sup>104</sup> Others oppose a time limit at all, contending that any such time limit could easily be gamed.<sup>105</sup>

26. Given the relatively relaxed standards for translator location, antenna specifications, and other technical parameters (and resulting potential for a translator station to adjust its operations after one year thereby creating new interference), we conclude that a time limitation would be too great an impingement on the general right of full-service stations to protection from interference by translator stations. Rather, we preserve the right of a full-service station to challenge a translator's operation on the basis of interference at any time if it otherwise meets the heightened requirements set out herein. However, we note that a prolonged delay in filing a translator interference claim that could have been

---

<sup>97</sup> See NTA at 6. A station operating under an STA can still submit complaints from within its licensed 45 dBu contour.

<sup>98</sup> See NAB at 9.

<sup>99</sup> See, e.g., Pueblo Comments at 17; Ronald E. Castro Comments at 2; CircuitWerks Comments at 6; ADX at 3; Radio Sharon Foundation Reply at 2; Cumulus at 11.

<sup>100</sup> See paras. 27-32, *infra*.

<sup>101</sup> See para. 35, *infra*.

<sup>102</sup> See NAB at 6.

<sup>103</sup> *NPRM*, 33 FCC Rcd at 4736, para. 16.

<sup>104</sup> See Brown at 2; WGTO at 2; Aztec at 16; Cumulus at 4; NABC Reply at 2; Braccili Reply at 2; Volken Reply at 4; Peter E. Schartel, *ex parte* filed May 1, 2019.

<sup>105</sup> Joint Commenters Reply at 9 ("Unscrupulous or inexperienced FM translator operators could simply underpower for the first year of operations to limit interference and then, once interference complaints were barred by such a time limit, crank the power up to the licensed (or above-licensed) level. Likewise, a directional antenna could be conservatively mounted for the first-year, but then aggressively adjusted once the time limit on interference complaints had passed."); see also Pueblo Reply at 3.

filed earlier, or successive claims regarding the same service area, may factor into an assessment of the credibility of the complaining station and the relative equities of the parties, particularly where such filing appears to be made for abusive or frivolous purposes. Moreover, in the *NPRM*, the Commission sought comment on whether to “establish a maximum time period within which the required number of complaints must be obtained by the affected station and/or received by the Commission.”<sup>106</sup> The establishment of a minimum number of listener complaints to be included with each translator interference claim package requires us to consider the possibility that complaining stations may attempt to aggregate listener complaints over a long period of time. To prevent this, and to avoid inaccuracy in listener complaints caused by changes such as station modifications, listeners moving, etc., we will require that the minimum number of complaints be satisfied by listener complaints dated within one year of each other, with none dated more than twelve months before the date of submission of an interference claim to the Commission. This limitation aims to strike a balance between providing adequate time for complaining stations to collect the required number of listener complaints and preventing interference claims based on stale or inaccurate listener information.

### C. Remediation Procedures

27. In this section, we clarify the appropriate remediation procedures translator operators and complaining stations should follow upon receipt of notice from the Commission that a valid and complete interference claim package has been received. First, as discussed above, a translator station may change channels to any available same-band frequency as a minor change.<sup>107</sup> Otherwise, the translator operator must follow the procedures set out in detail below. The translator operator may resolve each listener complaint either by working with a willing listener to resolve reception issues or by working with the complaining station to resolve station signal interference issues using rule-compliant suitable techniques.<sup>108</sup> Whatever approach(es) it chooses, the translator operator must submit data demonstrating that the interference has been resolved by the relevant deadline or be subject to suspension of operations or reduction of power pursuant to section 74.1203(b).<sup>109</sup>

28. *Working with willing listener complainants.* We hereby eliminate the requirement that listener complainants must cooperate with the translator operator to resolve interference and instead make listener cooperation voluntary at the discretion of the listener. In the *NPRM*, the Commission proposed to eliminate the requirement that listener complainants must cooperate with the translator operator to resolve interference.<sup>110</sup> As explained in the *NPRM* and pointed out by commenters, the current interference resolution process may promote negative interactions between translator operators and listener complainants.<sup>111</sup> For example, the current process may involve repeated entering of the listener’s residence or vehicle by representatives of the translator station to adjust or test receiver equipment. There

<sup>106</sup> *NPRM*, 33 FCC Rcd at 4736, para. 16.

<sup>107</sup> Interference will only be considered to have been resolved when the translator is licensed on the new channel. This is to prevent translator operators from filing modification applications for channels that are likely to receive section 74.1204(f) challenges—or are otherwise not viable—just to extend their remediation deadlines.

<sup>108</sup> See 47 CFR § 74.1203(b); *NPRM*, 33 FCC Rcd at 4733, para. 8 (“Translator licensees use a variety of techniques to address interference without going off the air, including reducing power, changing channels, modifying the antenna’s height or orientation, moving to a new transmitter site, or using a directional antenna.”).

<sup>109</sup> 47 CFR § 74.1203(b) (Section 74.1203(b)). The submission of an application to change channels to an available same-band frequency does not eliminate the obligation of the translator station to eliminate interference by the relevant deadline if Commission action on the application is delayed until after the deadline.

<sup>110</sup> *NPRM*, FCC Rcd at 4739, para. 22.

<sup>111</sup> *NPRM*, FCC Rcd at 4733, para. 7; REC at 5; Crawford at 3 (“In many cases, complaining listeners are hostile toward translator licensees and their representatives . . . Eliminating the complaining listener from the interference resolution process will in many cases speed resolution of the issue.”).

may also be disputes over the reliability of receiver equipment and/or excessively long and burdensome questionnaires for listeners regarding the alleged interference. REC reports that in at least one case a translator operator has threatened litigation if a complaint is not resolved.<sup>112</sup> Yet, many commenters object to the complete removal of the listener from the resolution process,<sup>113</sup> arguing instead that translator operators should be permitted to contact listeners to work out solutions such as new receivers.<sup>114</sup>

29. Upon careful review of the record, we believe it is possible to reduce listener involvement in the resolution process and avoid negative interactions with listeners while preserving translator operators' ability to work collaboratively with willing listeners in appropriate circumstances.<sup>115</sup> Toward this end, we will continue to allow translator operators to contact listeners to investigate possible reception issues and solutions. However, we will no longer mandate that each listener cooperate with interference resolution efforts, nor will we discount complaints if the listener refuses to respond to inquiries from the translator operator. Rather, we conclude that the decision to cooperate will be solely at the discretion of each listener complainant. We believe that this approach will discourage aggressive tactics that are designed to discourage the complainant rather than resolve the interference.

30. If the listener's receiving equipment is determined to be the primary cause of the problem and the listener is willing to cooperate with efforts to remediate the interference, we will continue to allow the translator operator to attempt to resolve the interference by adjusting or replacing the listener's equipment. While we have long permitted this approach, we are concerned that it not be taken to extremes. For example, the Bureau has held that providing listeners with smartphones to allow internet streaming of the desired station is not a "suitable technique" for resolving interference under section 74.1203(b).<sup>116</sup> Similarly, the Bureau has found that offering a cash payment to a complaining listener does not fulfill the translator operator's remedial obligation under section 74.1203(b).<sup>117</sup> We affirm the reasoning in both of these holdings and reiterate that section 74.1203(b) requires a translator station to remediate the complained-of interference, not merely convince a listener to withdraw a complaint by a cash payment or some other means.<sup>118</sup> Therefore, if a translator operator wishes to establish that interference has been eliminated through receiver adjustment or replacement, it must document and certify that the desired station can now be heard on the listener's receiver, i.e., that the adjustment or new

---

<sup>112</sup> REC at 19, App. A (submitting a redacted copy of a letter that it alleges is from a translator operator to a complaining LPFM listener, threatening litigation "if no resolution is reached in the next 30 days").

<sup>113</sup> Brown at 3; Cumulus at 9-10; NAB at 6; Braccili Reply at 2; Fybush at 5. We reject any arguments presented in this proceeding that changes to our rules upset business expectations established by earlier rules. The Commission's authority to promulgate new rules and apply them to current licensees is long-established. See 47 U.S.C. 154(i); *U.S. v. Storer Broad. Co.*, 351 U.S. 192, 203 (1956); *Chemical Waste Mgmt., Inc. v. EPA*, 869 F.2d 1526, 1536 (D.C. Cir. 1989). ("It is often the case that a business will undertake a certain course of conduct based on the current law, and will then find its expectations frustrated when the law changes. This has never been thought to constitute retroactive rule making....")

<sup>114</sup> See Cumulus at 7-11; Fybush at 5 (arguing that removing the listener cooperation requirement would encourage frivolous or nonexistent complaints and "leave translator operators at the mercy of some current FM receivers that are of substandard design").

<sup>115</sup> See EMF at 14 (urging the Commission to focus on the individual, subjective experience of the complaining listener).

<sup>116</sup> *Radio Power, Inc.*, Letter Order, 26 FCC Rcd 14385 (MB 2011).

<sup>117</sup> *Sun Broadcasting, Inc.*, Letter Order, Ref. No. 1800B3-ATS (MB Dec. 3, 2018), at 3-4 (File No. BLFT-20161024ADG).

<sup>118</sup> See EMF at 17 ("Solutions should only be acceptable if they make the interference go away—not if they make the listener go away...a monetary incentive to 'go away' or strongly worded letters with implied threats of legal action or other negative consequence or burden should not be permitted...").

equipment actually resolved the interference.

31. Underlying this approach is the recognition that each complaining listener “may represent only a fraction of the listeners who experience diminished service. Listeners may not even be aware of the cause of interference or that a process is available to them to resolve the issue. They may also not be sufficiently motivated to register a complaint.”<sup>119</sup> Unlike more general approaches to interference remediation—such as reducing power or changing channels—individual receiver-based interference remediation by its nature does not address interference that may also be experienced locally by other listeners. Therefore, translator operators attempting receiver-based remediation must ensure that the receiver at issue is the primary cause of the interference and follow the requirements set out in paragraph 30, *supra*.

32. *Working with complaining stations.* If the complainant’s receiver is *not* the primary cause of the perceived interference, or if the listener chooses not to be involved in the resolution process, then the translator operator and the complaining station must work together to resolve the interference complaint using suitable techniques, as proposed in the *NPRM*.<sup>120</sup> Many commenters agree with this approach.<sup>121</sup> While a few commenters support sole reliance on U/D ratios using the Commission’s standard contour prediction methodology to determine whether interference has been eliminated,<sup>122</sup> as discussed in the *NPRM*, most argue that contour-based U/D ratios should be “one option among many, not the sole solution”<sup>123</sup> and recommend various alternatives such as on-site field strength measurements,<sup>124</sup> on-off testing,<sup>125</sup> free-space loss calculations (for cases very close to transmit antennas),<sup>126</sup> adjustment or replacement of low-quality receivers,<sup>127</sup> U/D ratios based on terrain-dependent propagation studies,<sup>128</sup> etc.

33. We are persuaded by the record that we should provide flexibility regarding technical showings. It is our expectation that translator operators and complaining stations must work together to

---

<sup>119</sup> NAB at 6; *see also* Corso at 3 (“[M]any listeners will simply tune to a different outlet rather than to invest the time and effort to lodge an interference complaint...”); REC Reply at 3 (“[F]or every listener complaint that is received and placed on the record there may be more listeners who are experiencing the same or worse interference” but refrain from complaining due to factors such as lack of privacy or threats of litigation).

<sup>120</sup> *NPRM*, FCC Rcd at 4739, para. 22. Emmis seeks clarification that a translator would be permitted to demonstrate that interference does not exist or that it is not the cause of the alleged interference before being required to actively undertake remedial measures. *See* Emmis Reply at 1 (requesting clarification that a translator station may employ U/D ratio methodology to directly disprove the existence of alleged interference, without first employing remedial measures). Cumulus likewise argues that a listener complaint should not be actionable if, for example: (1) a terrain-based study shows that the translator’s signal cannot be received at the relevant location; (2) a co-channel signal of another full-service station *can* be received at the relevant location; and (3) the listener is aware merely that there is a hiss or static on the channel. Cumulus at 11-12. To the extent that Emmis and Cumulus suggest that the translator operator be allowed to submit to the Commission a unilateral showing to disprove interference at the start of the process, we reject this suggestion as unnecessary. Rather, we rely on the U/D zone of potential interference test set out in paragraph 23, *supra*, as well as our enhanced listener certifications and minimum number of listener complaints, to eliminate obvious instances where the translator could not be the source of the alleged interference. We would expect the translator station to share technical evidence of noninterference with the complaining station as part of their attempts to reach a mutually acceptable resolution of the claim. However, if both parties agree that no active remediation steps (changes to power, directionality, channel, etc.) are necessary at a particular listener location, we will accept a showing to that effect.

<sup>121</sup> *See, e.g.*, NAB at 8-9; EMF at 2, 15; NTA at 7 (proposing that the Commission accept either technical or listener-based remediation showings).

<sup>122</sup> Dayton at 1; Crawford at 3; Anderson at 2-3 (U/D ratios have been a “dependable tool for more than fifty years in full power FM allocations and is not subject to the manipulation possible in other prediction algorithms); NJBA Reply at 6 (arguing that it is unreasonable to ask listeners to sacrifice private time, stay home, etc., to resolve interference). Some commenters argue that the limitations of the Commission’s standard contour prediction

(continued....)

identify whether interference exists and to resolve listener complaints in a mutually acceptable fashion. In most circumstances, lack of interference can be demonstrated by on-off tests and/or field strength measurements at the relevant site, provided that they take place in a manner acceptable to both parties.<sup>129</sup> On-off tests also can be used to establish alternate power levels or other technical parameters for the translator station that will eliminate interference. Therefore, rather than impose specific technical processes or parameters for such testing, we require that on-off tests and/or field strength measurements be conducted in a manner acceptable to both parties.<sup>130</sup> Once agreement is reached, the parties must jointly submit the agreed-upon remediation showing to the Commission. If the parties fail to agree upon appropriate methods and technical parameters to be used for interference testing at a particular site or sites, the parties should engage a mutually acceptable third party engineer to observe or carry out the testing. Although we anticipate that the parties will generally share the cost of engaging a neutral third party, we will not mandate the terms of that agreement. Commission staff will make the final determination whether the interference has been resolved based on the information requested and received from the third party engineer. At any point in the process the parties may also agree that interference has been resolved using any mutually acceptable means; however, any contested data may not be unilaterally presented to the Commission as a remediation showing (or to dispute a remediation showing).

34. *Remediation deadlines.* We establish 90 days as the timeline to resolve claims. In the *NPRM*, the Commission sought comment on establishing an appropriate deadline for translators to resolve all properly substantiated interference complaints and submit an acceptable resolution showing or be subject to suspension of operation.<sup>131</sup> Some commenters suggest that the Commission order that the translator reduce power or suspend operations more or less immediately after receiving the minimum number of valid complaints.<sup>132</sup> NAB urges that the entire interference resolution process take no more than 90 days, with intermediate deadlines of 15 days for the Commission to send a letter of inquiry to the offending translator and 30 days for the translator to respond with a plan to resolve the interference or

(Continued from previous page) \_\_\_\_\_

methodology, which does not take into account terrain more than twelve miles from the transmitted site, make it insufficient to gauge whether actual interference exists, particularly at the outer limits of the desired station's signal. Corso at 4; EMF at 2 (arguing that "contours and theoretical ratios of undesired to desired signal strength are tools best used in connection with macro determinations on allocations and similar matters, not on questions of whether there is actual interference to particular listeners at a particular location").

<sup>123</sup> EMF at 14.

<sup>124</sup> Changs at 2; EMF at 14.

<sup>125</sup> NAB at 8.

<sup>126</sup> EMF at 14.

<sup>127</sup> Changs at 2; Henson at 4; EMF at 14; NAB at 6-8; Fitzgerald at 2.

<sup>128</sup> Cumulus at 11-12.

<sup>129</sup> See NAB at 8-9 ("NAB maintains that [on/off tests] should be based upon mutually agreeable terms of both the translator and the full-power station"); Anderson at 3 ("On-off tests are not definitive absent an impartial, qualified observer"); EMF at 16 (arguing that on/off tests "should be part of the resolution process ... with both parties present to observe the tests and see the results"); Dayton at 1 (noting that on-off tests can be "subjective"); Henson Media, Inc., *ex parte* filed April 26, 2019 ("A party on either side of the issue should not be rewarded for being stubborn and should know the FCC is requiring the parties to work together to find a solution."); see also Henson Media, Inc., *ex parte* filed on May 2, 2019.

<sup>130</sup> See NAB at 8-9 ("It is not necessary for the Commission to prescribe any specific procedures, equipment, or other criteria for conducting these tests. Instead, the parameters should be left to the business and technical discretion of the parties, with the Commission available as a backstop if any disputes arise."); *but see* Corso at 4-5.

<sup>131</sup> *NPRM*, 33 FCC Rcd at 4739-40, para. 22.

dispute the claim through a technical showing.<sup>133</sup> Failure to respond, NAB suggests, should invite a prompt Commission order to immediately eliminate the interference or immediately cease operation.<sup>134</sup>

35. We agree that 90 days should be sufficient to resolve claims of interference. However, because each complaint is fact-specific, we direct the Bureau to provide an explanation to the parties if it issues shorter or longer deadlines appropriate to the claim. As soon as review of the interference claim package is complete, the Bureau will issue a letter notifying the translator operator that the interference claim package has met our requirements. This letter must also establish any intermediate deadlines, such as a remediation plan deadline, if appropriate. We anticipate that 90 days, as suggested by NAB, will be an appropriate final remediation timeline for most situations. If *all* interference complaints have not been resolved by the remediation deadline, the Commission may order the immediate suspension of translator operations or reduction of power pursuant to section 74.1203(b).<sup>135</sup>

#### D. Contour Limit on Translator Interference Complaints

36. In this section, we set a full power FM, LPFM, FM translator, or FM booster station's 45 dBu signal strength contour as the limit to which it may claim interference to its listeners from an FM translator. In the *NPRM*, the Commission sought comment on establishing an outer limit for interference complaints.<sup>136</sup> By proposing to establish an outer limit on translator interference complaints, the Commission sought to provide translator licensees with additional clarity and certainty regarding their investments and to protect radio listeners from a loss of service due to a small number of interference complaints on the outer fringes of the complaining station's listenable coverage area.<sup>137</sup> Section 74.1204(f) prohibits translator interference to a "regularly used" broadcast signal, and section 74.1203(a)(3) prohibits interference with another station's "reception by the public."<sup>138</sup> The Commission sought comment on the 54 dBu contour as the limit beyond which a station could have no reasonable expectation of a reliable signal to reach its listeners.<sup>139</sup>

37. Some commenters support a 54 dBu contour limit,<sup>140</sup> while a few advocate for a 60 dBu contour limit.<sup>141</sup> The majority of commenters, however, provide extensive evidence from markets nationwide to support their contention that full-service stations have substantial listenership outside the 54 dBu signal strength contour—listenership that would be at risk if interference complaints outside this limit were not considered actionable.<sup>142</sup> A group of commenters (Joint Commenters)<sup>143</sup> conducted a study

(Continued from previous page)

<sup>132</sup> See REC at 8-9; NTA at 7-10; Lakes Media at 1; Pueblo at 10.

<sup>133</sup> NAB at 9-10; *see also* Henson at 4.

<sup>134</sup> NAB at 10.

<sup>135</sup> Notwithstanding the establishment of a remediation deadline by letter, the Bureau may order the translator station to suspend service or reduce power at any time due to interference. *See* 47 CFR § 74.1203.

<sup>136</sup> *NPRM*, 33 FCC Rcd at 4742, para. 27. In doing so, the Commission rejected proposals to set this limit at the existing protected contour and did not seek comment on a proposal to distinguish between fill-in and other area translators in this context. *NPRM*, 33 FCC Rcd at 4741, paras. 25-26.

<sup>137</sup> *NPRM*, 33 FCC Rcd at 4741-42, para. 27.

<sup>138</sup> *NPRM*, 33 FCC Rcd at 4742, para. 27.

<sup>139</sup> *NPRM*, 33 FCC Rcd at 4742, para. 28.

<sup>140</sup> Henson at 3; MCT at 4; ADX at 3; Cumulus at 4; Alেলাya at 2-3; Dorfner at 1; Dayton at 1; Fitzgerald at 2; Anderson at 2; Cromwell Group at 2; BCI Reply at 2.

<sup>141</sup> Aztec Reply at 2; EME at 1; Anderson at 3; NABC Reply at 3; LPFM Advocacy Group at 3.

<sup>142</sup> *See* NJBA at 3-5 (alleging that over 50% of listening occurs outside stations' 54 dBu contours and that viability of full power stations in New Jersey would be "seriously jeopardized" by a 54 dBu contour limit); NJBA, *ex parte* (continued....)

of Nielsen listenership data for 43 Metro markets, reporting that the stations analyzed had an average of 25,872 listeners each outside the station's 54 dBu contour, or an average of 13.4% of each station's listeners.<sup>144</sup> Similar listenership data provided by EMF for fifteen of its more than 300 full power NCE stations appears to be consistent with that of the Joint Commenters.<sup>145</sup>

38. In addition to providing empirical evidence of listenership outside the 54 dBu contour, commenters raise various policy objections to the imposition of a contour limit for translator interference complaints.<sup>146</sup> For example, some commenters note that broadcasters face competition from Internet-based services and many have financial difficulties, which would be compounded by the loss of listeners outside the 54 dBu contour.<sup>147</sup> Pueblo and Grant County argue that full-service stations are "totally dependent on one single signal," whereas translators are a supplemental service whose signal is also broadcast on the primary station.<sup>148</sup> The Joint Commenters urge that a contour limit be considered only after assessing the impact of the other measures proposed in the *NPRM*.<sup>149</sup> Other commenters contend that removing protections for full-service stations outside the 54 dBu contour would result in increased congestion and interference overall in the FM band.<sup>150</sup> A few commenters claim that the proposed limit would be arbitrary<sup>151</sup> or that "no receiver tests or standards-setting bodies would support such a high signal strength threshold."<sup>152</sup> A number of commenters urge that full-service station public service obligations—such as the reception and monitoring of EAS alerts, providing local news and other information, and diversity/equal opportunity—should not be compromised by reduced protection from translator interference.<sup>153</sup> REC asserts that LPFM stations are more likely to have listeners outside their protected service contours and points out that LPFM stations can overlap into the interfering contours of other stations, making them vulnerable to interference that is not actionable.<sup>154</sup> Moreover, according to REC, the "unique nature of LPFM programming, the socioeconomic status of the audience that some LPFM stations reach as well as due to the fact that not all LPFM stations are streaming their content" means that translators should not be allowed to cause interference to LPFM stations at any signal

(Continued from previous page)

filed April 25, 2019, at 4; EMF at 2, Exh. 1 (providing listenership data from 15 stations to support its argument that use of the 54 dBu contour limit "could result in a loss of ten to twenty percent" of listeners); New York Public Radio at 2-3 (providing results of a study indicating that thousands of its listeners would lose service and stating that "the 54 dBu contour encompasses far too limited an area to protect significant numbers of WNYC-FM's listeners from unwanted interference. Indeed, for Class B stations like WNYC-FM, drawing the line at the 54 dBu contour would provide no additional interference protection beyond the station's protected contour"); Crawford at 4 (stating that a "targeted listener survey" showed that 92 percent of respondents regularly listen outside the desired station's 54 dBu contour); Brown at 4 (arguing that a 54 dBu limit would be "highly destructive" in markets such as New Jersey, Massachusetts, and Maryland); WJFD-FM at 3-6 (documenting a "significant listener base" outside its 54 dBu contour, including "determined listeners" of Portuguese language content in communities outside the 38 dBu contour); Pueblo at 15-16 (describing a number of recent translator interference disputes and arguing that a 48 dBu limit would be nearly as destructive as a 54 dBu limit); Coastal at 1 ("In this instance, where the local economy is largely fueled by seasonal beach tourism, the loss of fringe listeners and advertising revenue [beyond the 54 dBu contour] would be devastating"); Klaus at 1; Kids First at 1; Araiza at 1; WSOU-FM at 1; Beaver Springs at 1; Grant County at 4-5; Delmar at 1; Seaman at 1; Anderson at 1 ("Any current radio for home or vehicle use will receive signals at levels into the areas with signal levels well below the 54 dB level"); Blue Ridge at 2-3; CCCM at 2; Plymouth Rock at 3-4; Corso at 5; Radio 74 Internationale at 2 (stating that its station is dependent on mobile listeners outside 54 dBu contour); LPFM Coalition at 16; Sibert at 6.

<sup>143</sup> The Joint Commenters consist of Beasley Media Group, Educational Media Foundation, Cox Media Group, Gradick Communications, iHeart Communications, Neuhoff, Radio One Licenses/Urban One, and Withers Broadcasting Companies.

<sup>144</sup> Joint Commenters at 6-7.

<sup>145</sup> EMF, Exh. 1. EMF does not include listener numbers as a percentage of total station listeners and provides listener numbers only for the 54, 48, 42, and 39 dBu contours.

strength.<sup>155</sup>

39. Many commenters propose alternatives to the 54 dBU contour limit. Such recommendations range from a low of the 34 dBU contour<sup>156</sup> to a high of the 60 dBU contour, with the median recommended contour in the mid-40 dBU range.<sup>157</sup> Nielsen CUME Persons data provided by the Joint Commenters indicates that average radio listenership, whether presented as a number of listeners or a percentage of total station listeners, falls off steeply beyond the 60 dBU contour, at a rate of more than a percentage point per each dBU contour between the 60 and 51 dBU contours (from 24.4 to 9.1 percent of total listeners).<sup>158</sup> Between the 51 and 48 dBU contours, the drop-off in listeners occurs at approximately a 1:1 gradient (from 9.1 to 6.2 percent of total listeners). After the 48 dBU contour, the gradient starts to flatten out, with listenership decreasing from 6.2 to 4 percent between the 48 and 45 dBU contours, from 4 to 2.6 percent between the 45 and 42 dBU contours, and so on, eventually falling below one percent of total listeners at the 35 dBU contour.

40. The record indicates that a significant amount of FM listening occurs beyond the average 54 dBU contour and that setting a limit on actionable complaints at this signal strength would be economically damaging to many broadcasters.<sup>159</sup> However, the record also suggests that an outer contour limit would provide certainty to translators and prevent interference complaints based on listenership at the outer fringes of the complaining station's listenable coverage area. After review of the data provided in the record, we conclude that setting a complaint limit at the 45 dBU contour best balances full-service, secondary service, and listener interests by providing a contour limit that encompasses the bulk of full-service core listenership while limiting complaints at the margins of listenable coverage. Specifically, the Nielsen data presented by the Joint Commenters shows that beyond the 45 dBU contour, the average listener percentage consistently drops to four percent of the station total. These low listener numbers beyond the 45 dBU contour indicate that a desired station's signal at that distance is generally not strong enough to reliably attract a significant listening audience. In addition, not all or even most of the listeners outside the station's 45 dBU contour would be subjected to interference by a specific translator.<sup>160</sup>

(Continued from previous page)

<sup>146</sup> Some commenters assert that the imposition of a contour limit on translator interference complaints could actually imperil existing translators. See Charles M. Anderson, *ex parte* filed May 1, 2019; Bayard H. ("Bud") Walters and Clarence E. ("Ed") Henson, *ex parte* filed March 1, 2019; Henson Media, Inc., *ex parte* filed May 2, 2019. We emphasize that under the current rules, a complaining station has *no* geographic limitation on listener complaints.

<sup>147</sup> Grant County at 1; EMF at 9; NJBA at 5; Corso at 3.

<sup>148</sup> Pueblo at 27; Grant County at 2 ("Translators, by statute, rebroadcast programs available on other services—AM stations, FM stations or FM HD channels. The current NPRM, which would modify the rules in favor of translators, will therefore cut existing listeners off from unique, non-duplicated programs in favor of facilities that are simply rebroadcasting programming available elsewhere on AM or FM.")

<sup>149</sup> Joint Commenters at 9. As discussed at paras. 40, 45, *supra*, we believe that an outer contour limit, which was a key proposal in the *NPRM*, is the most effective measure for protecting translator stations from specious interference complaints while preserving the complaining station's core listenership.

<sup>150</sup> See, e.g., Joint Commenters at 8 (arguing that unmediated interference outside the 43 dBU limit "not only would hurt current listeners, but also, by creating more interference on the FM band, would help drive those established listeners to non-broadcast venues"); Monroe at 1 ("[E]fforts to revitalize the AM radio service should not concomitantly degrade the FM radio service"); Grant County at 7-8 (arguing that it is against "free market ideals" to prop up AM stations at the expense of existing and still viable FM investments in an "increasingly cluttered and interference prone band"); Seaman at 1 ("[A 54 dBU limit will] also result in greatly expanded areas where two or more co-channel signals will be interfering with each other...result[ing] in fewer signals that can be received without interference.").

<sup>151</sup> EMF at 6; CCCM at 2; New York Public Radio at 5.

Significantly, the data indicates that although at the 48 dBu contour the gradient is still roughly 1:1, the number of listeners begins to decrease at a much lower rate at each contour level after that, with the 45 dBu contour being the next contour level for which we have data. Therefore, the 45 dBu contour represents a point of diminishing returns when balancing conserving full-service listenership and providing certainty for translator stations. Finally, this contour limit is consistent with the mid-40 dBu range median of the various contour limits put forth by other commenters. For these reasons, we adopt the 45 dBu contour as the outer limit beyond which a listener complaint will not be considered actionable and amend Sections 74.1203(a)(3) and 74.1204(f) accordingly.<sup>161</sup> Because the 45 dBu contour limit is determined based on the strength of the complaining station's signal and thus proportionate to the size of the station's coverage area, we are not persuaded that it is necessary to adopt a more restrictive standard to enhance protection for LPFM stations.<sup>162</sup>

41. *Terrain-based propagation modeling.* We disagree with commenters that urge the Commission to allow the proposed outer contour limit for listener complaints to be measured using Longley-Rice or another terrain-based propagation modeling system rather than the Commission's standard contour prediction methodology.<sup>163</sup> Currently, the Commission permits the use of Longley-Rice only in limited circumstances, such as where the terrain departs widely from average elevation or roughness.<sup>164</sup> Consistent with our longstanding practice for the audio services, we will not accept Longley-Rice or other terrain-based modeling in this context.<sup>165</sup> However, while we decline to allow terrain-based propagation modeling as an alternative method of determining the extent of a station's 45 dBu contour, we believe that our adoption of a more generous outer contour limit than the one proposed in the *NPRM*, coupled with the waiver policy set out in paragraph 44, *infra*, for those limited cases where stations provide significant service to communities outside their 45 dBu contour, will adequately protect stations from significant audience loss due to translator interference at the outer edges of their coverage areas.

(Continued from previous page) \_\_\_\_\_

<sup>162</sup> Pueblo at 28; Grant County at 7-8.

<sup>163</sup> Plymouth Rock at 5; NJBA at 5; Corso at 3.

<sup>164</sup> REC at 10.

<sup>165</sup> REC Reply at 7.

<sup>166</sup> Pueblo at 4, 29-30.

<sup>167</sup> See Joint Commenters Reply at 12 (42 dBu using the Commission's standard contour prediction methodology); EMF at 11 (39 dBu or lower); Plymouth Rock at 5 (40 dBu using terrain-based propagation modeling); NJBA Reply at 4 (39-40 dBu for co-channel interference claims); WJFD-FM (34 dBu); NTA at 9 (6 dB buffer beyond protected contour); Radio 74 Internationale at 3 (45 dBu with option to use terrain-based propagation modeling); Pueblo Reply at 4-11 (48 dBu if measured by terrain-based propagation modeling, otherwise, 43 dBu as measured by the Commission's standard contour prediction methodology); Anderson at 2; NABC Reply at 4 (universal 6 dB buffer beyond protected contour); Henson *ex parte* filed April 26, 2019 (48 dBu); Peter E. Schartel, *ex parte* filed April 29, 2019 (50 dBu).

<sup>168</sup> Joint Commenters at 6-7. This data is based on Nielsen CUME Persons data, which it defines as the "total number of *different* persons who tune to a radio station during the course of a daypart for at least five minutes." The Nielsen Company, "Terms for the Trade," [http://www.arbitron.com/ad\\_agencies/tradeterms.htm](http://www.arbitron.com/ad_agencies/tradeterms.htm) (last visited April 29, 2019). One commenter, Anderson, criticized the Nielsen data presented by the Joint Commenters as "approximate at best and probably misleading," given its reliance on listeners' home addresses and zip code centroids. See Charles M. Anderson, *ex parte* filed May 1, 2019, at 3. However, the Joint Commenters explain that there is a close correlation between at-home and away listening and that the home address data serves as the "best current measure available as to radio listening at various contour strengths." Joint Commenters Comments at 5. We note that Anderson does not suggest a preferable method for approximating nationwide listenership at various signal strength contours and agree with the Joint Commenters that the data presented in the record is an adequate basis for our listenership analysis.

42. *Adjacent channel protection.* Likewise, we decline to modify our rules to distinguish between co-channel, 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> adjacent channels for the purposes of translator interference protection, as suggested by some commenters.<sup>166</sup> Recognizing that co-channel interference is the most likely to occur, and that 2<sup>nd</sup>- and 3<sup>rd</sup>-adjacent channel interference is rare, we are not persuaded that the outer contour limit established herein, which is based on the listenability of the desired station, should vary according to channel proximity. Therefore, we decline at this time to establish separate contour limits on translator interference complaints for co-channel and Adjacent channel stations or to prohibit complaints regarding Adjacent channel interference. Similarly, we conclude that the record at this time does not support limiting section 74.1204(f) to co-channel predicted interference only.<sup>167</sup> Objections based on Adjacent channel predicted interference are fewer than co-channel objections, but we see no reason to prohibit them entirely if an appropriate showing is made that satisfies the requirements set out herein.

43. *Zones I, I-A, and II.*<sup>168</sup> We affirm the tentative conclusion in the *NPRM* that the greater contour protections afforded to Class B and Class B1 in the non-reserved band are based on allocations concerns regarding populous service areas that do not affect our analysis regarding actionable translator interference complaints.<sup>169</sup> The listenership information submitted in the record, upon which we based the 45 dBU contour limit, compiles data from markets located in all Zones. Moreover, the 45 dBU contour limit is well beyond the protected service contour of any station, including Class B and B1 stations.<sup>170</sup> For these reasons, we conclude that we will not further complicate the complaint process by adopting different contour limits for different Zones or station classes.

44. *Waiver requests.* We will consider requests for waiver of the 45 dBU contour limit where the requestor demonstrates the existence of a sizable community of listeners outside the 45 dBU contour limit. We recognize that in certain circumstances a radio station may serve a community outside its 45 dBU contour with programming that by its nature attracts “determined listeners”—listeners who may tolerate poor reception (or purchase a higher quality antenna) to receive the desired station.<sup>171</sup> Although

(Continued from previous page) \_\_\_\_\_

<sup>159</sup> We disagree with commenters suggesting that the record lacks sufficient data to analyze the effect of a contour limit on translator interference complaints. See Charles M. Anderson, *ex parte* filed May 1, 2019; NJBA, *ex parte* filed April 30, 2019. Rather, we find that the proposals raised in the *NPRM* have received a thorough and thoughtful response from industry stakeholders, including substantial empirical data.

<sup>160</sup> See Anderson at 3.

<sup>161</sup> See Appendix B. We reject REC’s suggestion that we limit complaints submitted by grandfathered “super-power” Class B stations to the 45 dBU contour the station would have if it were operating at its class maximum rather than the larger 45 dBU contour authorized by its license. See REC Networks, *ex parte* filed on April 24, 2019. We decline to use this proceeding as a means of reducing the protected service area of such stations. Rather, grandfathered Class B “super-power” stations, if operating within their licensed parameters, may file complaints of interference occurring within their licensed 45 dBU contour. See EMF, Bonneville International Corporation, and iHeart Communications, Inc., as debtor-in-possession, *ex parte* filed April 30, 2019, at 2 (“Protecting these super-power Class B stations to something less than their 45 dBU contour would result in loss of service to the listening public from these stations.”) Heftel raises a concern that a station operating with a service area that exceeds its class maximum pursuant to a waiver might also be restricted to filing complaints from within the class maximum 45 dBU contour. Heftel Broadcasting Company LLC, *ex parte* filed May 1, 2019. We clarify that such a station, if operating according to its licensed parameters, is also entitled to protection from interference within its licensed 45 dBU contour, calculated according to the Commission’s standard contour prediction methodology.

<sup>162</sup> See para. 39, *supra*.

<sup>163</sup> EMF at 10 (“FCC contours have been appropriately used for low-resolution, large scale allocation-related purposes,” but “cannot accurately predict high-resolution, small scale relationships between signals, such as would be found in a typical interference complaint scenario where smaller clusters of listeners or a few neighborhoods are impacted...at the Class B contour distance of 65 kilometers, the 54 dBU contour is located 49 kilometers beyond the

(continued....)

often formats are duplicated in different markets,<sup>172</sup> there is nonetheless evidence on the record that, in some markets, listeners may rely on programming that is not available locally.<sup>173</sup> We are persuaded by comments advocating a high burden of proof of listenership outside the 45 dBu contour that such requests must include at least 20 complaints from listeners outside the 45 dBu contour of the desired station in lieu of—or, optionally, in addition to—the required number of complaints within the 45 dBu contour.<sup>174</sup> We will also take into account other relevant factors such as: (1) whether geographic features or power/directionality enhance reception at the relevant listener locations (supported if possible by field strength testing); and (2) how established the listener expectation of service is—i.e., how long the desired station has served the relevant communit(ies). As with all waivers, each request will be considered on a case-by-case basis and must demonstrate special circumstances.<sup>175</sup>

45. *Secondary status.* The rule changes we adopt herein do not alter the secondary status of translator stations.<sup>176</sup> Rather, these rules will help to better define what constitutes an actionable interference claim and the process for resolving claims. The actions taken herein are designed to protect translator stations from specious interference complaints while preserving their fundamental characteristic as a secondary service.<sup>177</sup> Specifically, nothing in this *Report and Order* changes our long-standing norms that secondary service stations are not entitled to protection from full-service stations and that full-service stations are entitled to protection from predicted and actual interference by secondary services. As always, no translator will have a “protected, guaranteed coverage area”<sup>178</sup> Rather, if a primary station chooses to relocate, or modifies its facilities in a way that causes interference to or receives interference from an existing translator station, the translator operator must either accept the interference or, if necessary, modify its facilities or go off air to avoid causing or receiving interference. Likewise, our establishment of a required minimum number of listener complaints and other requirements for filing

(Continued from previous page)

last considered terrain—meaning 80% of the terrain between transmitter and class contour distance is ignored”); (CTI at 7; REC at 12; Pueblo at 17-21 (arguing that the Commission’s standard contour prediction methodology is fine for allocations purposes but “draconian, inaccurate, and overly harsh” in the interference remediation context); Grant County at 5-6 (arguing that Longley-Rice is “far superior in terms of accuracy”); Blue Ridge at 3-7 (arguing that the Commission’s standard contour prediction methodology is particularly inaccurate “at the extremes of FM facility coverage” as it takes into account only terrain near the transmitter site); Pueblo Reply at 4-11.

<sup>164</sup> See 47 CFR § 73.313(e)-(j); EMF at 10; Pueblo Reply at 4-11.

<sup>165</sup> Volken Reply at 5 (“It has been the Commission’s policy in the past to preclude use of the Longley-Rice model for re-calculating the service area of an FM station from that determined using the methodology of section 73.313 of the Rules.”).

<sup>166</sup> See Cromwell Group at 2 (suggesting a 54 dBu contour limit for co-channel, less for 1<sup>st</sup>-adjacent, none for 2<sup>nd</sup>- and 3<sup>rd</sup>- adjacent); Anderson at 2 (suggesting 60 dBu as the outer contour limit for 2<sup>nd</sup> and 3<sup>rd</sup> adjacent channels); EMF at 12 (“The allocation rules clearly demonstrate the reality that co-channel interference is by far the most difficult to resolve; first adjacent interference is still a challenge, but easier than co-channel; and second- and third-adjacent are increasingly easier to resolve...Proposing a single contour value below which translator interference is disregarded ignores the realities of channel relationships...EMF has experienced co-channel interference complaints from regular listeners of its stations where Longley-Rice methods show localized signal strengths as low as 20 to 30 dBu.”); NJBA Reply at 6 (proposing a 40 dBu contour limit for co-channel, 40 dBu contour limit for 1<sup>st</sup>-adjacent, a 45 dBu contour limit for 2<sup>nd</sup>-adjacent, and a 54 dBu contour limit for 3<sup>rd</sup>-adjacent); NJBA, *ex parte* filed April 25, 2019 at 5-6.

<sup>167</sup> See Volken at 2 (arguing that 74.1204(f) should be limited to co-channel predicted interference only: “where the proposed FM translator would already provide proper contour protection to an FM station, modern FM receiver design makes it quite unlikely there will be actual first-adjacent-channel interference to listeners of the FM station outside the FM station’s protected contour ... it is not appropriate to simply dismiss the translator application on the basis of such hypothetical first-adjacent-channel interference ... the FM translator applicant should be given the opportunity to construct the translator facilities and then address whatever challenges might appear in the way of

(continued....)

interference complaints is designed to clarify the information needed to establish a valid claim and to limit unsupported interference complaints.

46. Our actions herein are consistent with Commission precedent setting clear limitations and boundaries on secondary service interference claims. Under the LPFM service rules, for example, a full power station is only protected from LPFM interference to its 70 dBu contour.<sup>179</sup> This limitation is designed to promote a “stable and enduring” LPFM service.<sup>180</sup> For the same reason, the measures we take herein provide certainty and clarity for translator stations without eliminating the right of primary stations to be protected from harmful interference to their core listenership.

47. *LCRA*. In response to concerns expressed by LPFM advocates,<sup>181</sup> we clarify that establishment of an outer contour limit does not conflict with LCRA Section 5(3), which requires that when licensing new translator stations, the Commission must ensure that translator, booster, and LPFM stations “remain equal in status and secondary to existing and modified full-service FM stations.”<sup>182</sup> It is well established that the LCRA does not require identical regulation of each secondary service,<sup>183</sup> and in any case, because the LPFM service rules contain a similar contour-based restriction on interference complaints, the establishment of an outer contour limit on translator interference complaints brings the translator rules into closer harmony with the LPFM rules.

48. *Applying the outer contour limit to sections 74.1203 and 74.1204*. We apply the 45 dBu outer contour limit established herein to both actual interference claims under section 74.1203(a)(3) and predicted interference claims under section 74.1204(f). In the *NPRM*, the Commission proposed to reduce the incidence of actual interference complaints by increasing the scope of complaints that can be preemptively brought under section 74.1204(f), before a translator is licensed.<sup>184</sup> Commenters support this proposal,<sup>185</sup> and we therefore adopt it and amend section 74.1204(f) to allow a complaining station to submit valid listener complaints from anywhere within its predicted 45 dBu contour rather than, as under our current rules, only from within the relevant translator’s “predicted 1 mV/v (60 dBu) contour.”<sup>186</sup> By

(Continued from previous page) \_\_\_\_\_  
actual interference.”).

<sup>168</sup> Zone I is a large area in the northeastern portion of the United States, containing the District of Columbia, the states of Indiana, Illinois, Pennsylvania, Ohio, West Virginia, Maryland, Delaware, New Jersey, Rhode Island, Massachusetts, Connecticut, and portions of Michigan, Wisconsin, New York, Maine, New Hampshire, Vermont and Virginia. Zone I-A contains Puerto Rico, the U.S. Virgin Islands, and all but the northernmost portion of California. Zone II contains Alaska, Hawaii, and the rest of the continental United States not in Zones I and I-A.

<sup>169</sup> *NPRM*, FCC Rcd at 4742, para 28; *see, e.g., Harvit Broadcasting Corp.*, Initial Decision, 55 FCC 2d 318, 321, para. 8 (ALJ, 1974) (“Class C stations are ‘designed to render service to a community, city, or town, and large surrounding area’ . . . Class B stations are ‘designed to render service to a sizable community, city or town, or to the principal city or cities of an urbanized area, and to the surrounding area’”) (internal citations omitted).

<sup>170</sup> Plymouth Rock at 6 (arguing that it would be “fundamentally unfair” to limit Class B and B1 stations to only their protected signal contour while other classes of stations are protected beyond that contour).

<sup>171</sup> *See Grant County* at 3 (“It is an axiom that the more unusual or unique a station is, the more likely it is to have listeners at a significant distance from its primary contour.”); CTI at 2-3 (A 20-complaint minimum is “based on the reality that a station’s listenable signal is, in part, subject to the listener’s desire for a specific programming and not necessarily because the signal is one that another listener in the same geographic area may say is truly listenable; in other words, listenable signal quality is totally subjective.”); REC at 10 (arguing that LPFM stations are more likely to have “determined listeners” outside their licensed service contours).

<sup>172</sup> *See Radio Sharon Foundation Reply* at 5 (“Formats are now heavily duplicated by local stations in all major cities. . . It is hard to imagine a case, in a top 100 market where a distant signal would be so unique so as to compel listeners to tune to a weak, out of market signal.”).

<sup>173</sup> *See, e.g., WJFD-FM* at 3-6 (documenting listenership of its Portuguese language programming, including news (continued....))

modifying the scope of predicted interference claims under section 74.1204(f) to more closely reflect post-construction permit grant actual interference requirements, we anticipate that more potential conflicts can be resolved before applicants are fully invested in the proposed facility and while they have more options available for resolving the issue. As mentioned, the interference resolution process can be lengthy and contentious, and we agree that “the damage is done in fairly short order after the translator signs on—those existing listeners displaced by the translator interference often tune elsewhere and may not ever return.”<sup>187</sup> A proposed translator may “pass the test” provided by section 74.1204(f) but still cause actual interference after operation commences.<sup>188</sup> We believe that harmonizing these two rule provisions will encourage translator applicants and their engineers to propose facilities that are more viable in the long term.

#### E. Pending Proceedings

49. Applications or complaints that have not been acted upon as of the effective date of the rules adopted in this *Report and Order* will be decided based on the new rules.<sup>189</sup> If necessary, parties will be given an opportunity to submit supplemental materials to address the revised rules adopted herein.

#### F. Non-Substantive Updates

50. As was proposed in the *NPRM*, we delete the two clauses enumerating services in sections 74.1203(a)(3) and 74.1204(f) of the Rules, and state instead that the relevant rules apply to all full-service stations and previously authorized secondary service stations.<sup>190</sup> FM translators must not cause either predicted or actual interference to any other broadcast station, which includes previously authorized secondary services.<sup>191</sup> However, the current text of section 74.1204(f) states that the rule

(Continued from previous page) \_\_\_\_\_  
and events unique to the New England Portuguese community as well as news from Portugal, Azores, Madeira, Brazil, and Cabo Verde, to communities at or beyond its 38 dBu contour).

<sup>174</sup> See EMF at 16 (“Interference should be prohibited where it can be shown that there is in fact an area where there are multiple listeners of a particular station whose use of that station is precluded by the new translator—not by the one station super-fan possibly with an expensive ultra-high gain antenna clinging to a distant signal.”); WGTO at 2 (“Nor should we allow the occasional ‘DX’ radio buff the ability to silence a local translator because of the desire to listen to a full FM at extreme distance.”); NPR at 7; CCM at 3 (suggesting that a greater number of complaints, such as ten, be required outside the contour limit); WJFD-FM at 6-7 (arguing for an exception where, for example, 12 listener complaints are received outside the contour limit); Joint Commenters Reply at 12 (arguing for a higher burden of proof, such as a greater number of listener complaints, to be required for interference resolution outside the contour limit).

<sup>175</sup> See *NetworkIP, LLC v. FCC*, 548 F.3d 116, 125-128 (D.C. Cir. 2008) (citing *Northeast Cellular Telephone Co.*, 897 F.2d 1164, 1166 (1990)). Henson recommends that we eliminate these waiver guidelines; however, it does not suggest alternative criteria. See Henson *ex parte* filed April 26, 2019. To the extent that Henson may be suggesting that we not entertain requests for waiver of the 45 dBu contour limit, we note that section 1.3 of the Rules already provides for such waivers. 47 CFR § 1.3.

<sup>176</sup> See Pueblo at 27; EMF at 2; New York Public Radio at 5; Plymouth Rock at 6 (all expressing concern regarding the secondary status of translators).

<sup>177</sup> 1970 *Translator Order*, 20 RR 2d 1538, para. 3; 1990 *Translator Order*, 5 FCC Rcd at 7230, para. 130.

<sup>178</sup> See Grant County at 1-3. This principle is also discussed in the context of time limits on translator interference complaints at paragraph 26, *supra*.

<sup>179</sup> See 47 CFR § 73.809; *Creation of a Low Power Radio Service*, Third Report and Order, 22 FCC Rcd 21912, 21936, para. 58 (2007) (*LPFM Third Report and Order*).

<sup>180</sup> See *Creation of Low Power FM Service*, Report and Order, 15 FCC Rcd 2205, 2229-32 (2000) (limiting interference remediation requirements to promote a “stable and enduring” LPFM service); Radio Sharon Foundation Reply at 4.

applies to any authorized co-channel or Adjacent station, “including Class D (secondary) noncommercial educational FM stations.” This language is potentially confusing, because it specifies Class D stations but does not mention any other secondary services. Similarly, the text of section 73.1203(a)(3) states that the rule applies to “any authorized broadcast station,” including “TV Channel 6 stations, Class D (secondary) noncommercial educational FM stations, and previously authorized and operating FM translators and FM booster stations.” This list is also misleadingly incomplete, because it does not include other secondary services, such as LPFM. The only commenters to address this issue supported this clarification, and we therefore adopt it.<sup>192</sup>

#### IV. CONCLUSION

51. In this Report and Order, we provide additional flexibility for translator stations to change channels in response to interference and clarify and strengthen the procedures relating to translator interference complaints. These measures are designed to reduce and streamline translator interference-related disputes and decrease the likelihood that translator operations be suspended due to interference complaints. As discussed above, we determine that these actions are in the public interest and will balance the needs of both translator and full-service licensees while preserving the technical integrity of the FM band.

#### V. PROCEDURAL MATTERS

##### A. Regulatory Flexibility Act

52. As required by the Regulatory Flexibility Act of 1980 (RFA),<sup>193</sup> an Initial Regulatory Flexibility Certification was incorporated into the *NPRM*.<sup>194</sup> Pursuant to the Regulatory Flexibility Act of 1980, as amended,<sup>195</sup> the Commission’s Final Regulatory Flexibility Certification relating to this Report

(Continued from previous page) \_\_\_\_\_

<sup>181</sup> NJBA suggests that our adoption of the 45 dBu contour limit on translator interference complaints may conflict with LCRA section 7(6), which allows stations in New Jersey to use the translator interference complaint and remediation procedures set out in section 74.1203 of the Rules to address interference by LPFM stations. NJBA, *ex parte* filed April 30, 2019. Our changes to section 74.1203 herein will not affect the operation of LCRA section 7(6) and the relevant translator interference procedures referenced by NJBA because that provision applies section 74.1203 “in effect on the date of enactment of this Act” to LPFM stations. On the other hand, Section 7(6) does not prohibit—and in fact expressly anticipates—later changes to the translator interference regime under section 74.1203.

<sup>182</sup> LCRA, Sec. 5; *see also* REC at 12, 14-16; LPFM Advocacy Group at 2. As discussed in paragraph 9, *supra*, Section 5 of the LCRA does not apply to applications to modify existing facilities.

<sup>183</sup> *Creation of a Low Power Radio Service*, Fifth Order on Reconsideration and Sixth Report and Order, 27 FCC Rcd 15402, 15426 n.139 (2012) (“We find nothing in the LCRA or its legislative history to suggest that Congress intended the provision that FM translators and LPFM stations remain “equal in status” to require the Commission to adopt identical rules for the two services.”); *see also* *Creation of a Low Power Radio Service*, Fourth Report and Order and Third Order on Reconsideration, 27 FCC Rcd 3364, 3372, para. 18 (2012) (emphasizing the equal but differing functions of the FM translator and LPFM services).

<sup>184</sup> *NPRM*, 33 FCC Rcd at 4743, para. 29.

<sup>185</sup> Brown at 4; Volken at 5 (both supporting the proposal).

<sup>186</sup> 47 CFR § 74.1204(f).

<sup>187</sup> Crawford at 2.

and Order is attached as Appendix C.

**B. Paperwork Reduction Act of 1995**

53. This Report and Order contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. The requirements will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.

54. In this Report and Order, we adopt new rules relating to the translator interference complaint process. We have assessed the effects of the new rules on small business concerns. We find that the streamlined rules and procedures adopted here will minimize the information collection burden on affected licensees, including small businesses.

**VI. ORDERING CLAUSES**

55. Accordingly, **IT IS ORDERED** that, pursuant to the authority contained in Sections 1, 4(i), 4(j), 301, 303, 307, 308, 309, 316, and 319 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 154(j), 301, 303, 307, 308, 309, 316, and 319, this Report and Order **IS ADOPTED** and **WILL BECOME EFFECTIVE** 60 days after publication in the Federal Register.

56. **IT IS FURTHER ORDERED** that Part 74 of the Commission's Rules **IS AMENDED** as set forth in Appendix B and such rule amendments shall be effective 60 days after publication in the Federal Register, except for Sections 74.1201(k) and amendments to Sections 74.1203(a)(3) and 74.1204(f), which contain new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act and **WILL BECOME EFFECTIVE** after the Commission publishes a notice in the Federal Register announcing such approval and the relevant effective date.

57. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of this Report and Order, including the Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

(Continued from previous page) \_\_\_\_\_

<sup>188</sup> *See* Crawford at 2.

<sup>189</sup> *See Melcher v. FCC*, 134 F.3d 1143, 1165 (D.C. Cir. 1998); *Chadmoore Commc'ns, Inc. v. FCC*, 113 F.3d 235, 241 (D.C. Cir. 1997) (citing *Hispanic Inf. & Telecomm. Network, Inc. v. FCC*, 865 F.2d 1289, 1294-95 (D.C. Cir. 1989) ("The filing of an application creates no vested right to a hearing; if the substantive standards change so that the applicant is no longer qualified, the application may be dismissed.")).

<sup>190</sup> *NPRM*, 33 FCC Rcd at 4743, para. 30; *see* Appendix B.

<sup>191</sup> *See* 47 CFR §§ 74.1203(a)-(d); 74.1204(f).

<sup>192</sup> Bishop at 1; Fybush at 7.

<sup>193</sup> *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601, *et. seq.*, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

<sup>194</sup> *NPRM*, 33 FCC Rcd at 4744, para. 33, App. A.

<sup>195</sup> *See* 5 U.S.C. § 604.

58. **IT IS FURTHER ORDERED** that the Commission **SHALL SEND** a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

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

**Comments**

ADX Communications of Pensacola  
Alan Bishop  
Aleluya Broadcasting Network  
April Glenn  
Araiza Revival Ministries, Inc.  
Aztec Capital Partners, Inc.  
Barry Magrill  
Beasley Media Group, LLC, Cox Media Group, LLC, Gradick Communications, LLC,  
iHeartCommunications, Inc., Neuhoff Corp., Radio One Licenses, LLC, Urban One, Inc., Withers  
Broadcasting Companies (Joint Commenters)  
Beaver Springs Faith Baptist Church, Inc.  
Bill Turner  
Blue Ridge Broadcasting Corporation  
Calvary Chapel of Costa Mesa, Inc.  
Charles M. Anderson  
Coastal Broadcasting Systems, Inc.  
Cohen, Dippell and Everist, P.C.  
Communications Technologies, Inc.  
Crawford Broadcasting Company  
Cromwell Group, Inc.  
Cumulus Media Inc.  
Delmar Communications, Inc.  
Delner J. Dayton  
Educational Media Foundation  
EME Communications  
Eric Funk  
Fred W. Volken  
Grant County Broadcasters, Inc.  
Henson Media, Inc.  
Jaemin Chang and Hyunjoo Chang  
Jeff Sibert  
Jon Hall  
Julian Adamaitis, Sound Engineering  
Kevin M. Fitzgerald  
Kids First, Incorporated  
Las Vegas Public Radio Inc. / KIOF-LP 97.9 FM  
Lawrence M. Miller  
Les S. Rayburn  
Linda C. Corso  
LPFM-AG  
Matthew Braccili  
Matthew Dorfner  
Monroe Public Access Cable Television, Inc.  
Mountain Community Translators, LLC  
National Association of Broadcasters

National Public Radio, Inc.  
National Translator Association  
New Jersey Broadcasters Association  
New York Public Radio  
Press Communications, LLC  
Pueblo Broadcasting Group LLC  
Radio 74 Internationale  
Robert Klaus, William Klaus  
Robert Seaman  
Sam Brown  
Scott Fybush  
Suzanne D. Henderson  
T Z Sawyer Technical Consultants  
THE LPFM COALITION  
WGTO radio  
Wheeler Broadcast Consulting  
WJFD-FM, Inc.  
WSOU-FM  
Xperi Corporation

#### **Reply Comments**

Alan Bishop  
Aztec Capital Partners, Inc.  
Barry Magrill  
Beasley Media Group, LLC, Cox Media Group, LLC, Gradick Communications, LLC,  
iHeartCommunications, Inc., Neuhoff Corp., Radio One Licenses, LLC, Urban One, Inc., Withers  
Broadcasting Companies (Joint Commenters)  
Bloomberg Communications, Inc.  
Cohen, Dippell and Everist, P.C.  
Educational Media Foundation  
Emmis Communications Corporation  
Fred W. Volken  
Jaemin Chang and Hyunjoo Chang  
LPFM Coalition  
Matthew Braccili  
National Association of Broadcasters  
New Jersey Broadcasters Association  
North American Broadcasting Company, Inc.  
Plymouth Rock Broadcasting Co., Inc.  
Press Communications, LLC  
Pueblo Broadcasting Group LLC  
Radio Sharon Foundation  
REC Networks

**APPENDIX B****Final Rule Changes**

Part 74 of Chapter 5 of Title 47 of the Code of Federal Regulations is amended as follows:

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

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

2. Add new paragraph (k) of Section 74.1201 to read as follows:

**§ 74.1201 Definitions.**

\* \* \* \* \*

(k) Listener complaint. A statement that is signed and dated by the listener and contains the following information: (1) the complainant's full name, address, and phone number; (2) a clear, concise, and accurate description of the location where interference is alleged or predicted to occur; (3) a statement that the complainant listens over-the-air to the desired station at least twice a month; and (4) a statement that the complainant has no legal, financial, employment, or familial affiliation or relationship with the desired station.

3. Revise paragraph (a)(1) of Section 74.1233 to read as follows:

**§ 74.1233 Processing FM translator and booster station applications.**

- (a) Applications for FM translator and booster stations are divided into two groups:

(1) In the first group are applications for new stations or for major changes in the facilities of authorized stations. For FM translator stations, a major change is (i) any change in frequency (output channel) except (A) changes to first, second or third adjacent channels, or intermediate frequency channels; or (B) upon a showing of interference to or from any other broadcast station, remedial changes to any same-band frequency; or (ii) any change in antenna location where the station would not continue to provide 1 mV/m service to some portion of its previously authorized 1 mV/m service area. In addition, any change in frequency relocating an unbuilt station from the non-reserved band to the reserved band, or from the reserved band to the non-reserved band, will be considered major. All other changes will be considered minor. All major changes are subject to the provisions of §§ 73.3580 and 1.1104 of this chapter pertaining to major changes.

4. Revise paragraphs (a)(3) and (b) of Section 74.1203 to read as follows:

**§ 74.1203 Interference.**

(a) An authorized FM translator or booster station will not be permitted to continue to operate if it causes any actual interference to:

\* \* \* \* \*

(3) The direct reception by the public of the off-the-air signals of any full-service station or previously authorized secondary station. Interference will be considered to occur whenever reception of a regularly used signal is impaired by the signals radiated by the FM translator or booster station, regardless of the channel on which the protected signal is transmitted; except that no listener complaint will be considered actionable if the alleged interference occurs outside the desired station's 45 dBu contour. Interference is demonstrated by: (1) the required minimum number of valid listener complaints as determined using Table 1 of this section and defined in § 74.1201(k) of the part; (2) a map plotting the specific location of the alleged interference in relation to the complaining station's 45 dBu 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 Commission's standard contour prediction methodology set out in § 73.313.

Table 1.

Population within Protected Contour	Minimum Listener Complaints Required for Interference Claim
1-199,999	6
200,000-299,999	7
300,000-399,999	8
400,000-499,999	9
500,000-999,999	10
1,000,000-1,499,999	15
1,500,000-1,999,999	20
2,000,000 or more	25
LPFM stations with fewer than 5,000	3

(b) If interference cannot be properly eliminated by the application of suitable techniques, operation of the offending FM translator or booster station shall be suspended and shall not be resumed until the interference has been eliminated. Short test transmissions may be made during the period of suspended operation to check the efficacy of remedial measures.

Revise paragraph (f) of Section 74.1204 to read as follows:

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

\* \* \* \* \*

(f) An application for an FM translator station will not be accepted for filing 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 dBu 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 of § 74.1203(a)(3) and defined in § 74.1201(k) of the part; (2) a map plotting the specific location of the alleged interference in relation to the complaining station's 45 dBu 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 Commission's standard contour prediction methodology set out in § 73.313.

## 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 *Notice of Proposed Rule Making (NPRM)* to this proceeding.<sup>2</sup> The Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. The Commission received no comments on the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.<sup>3</sup>

**A. Need For, and Objectives of, the Report and Order**

2. This *Report and Order* adopts several rule changes that are intended to reduce expensive, time-consuming, and unnecessary conflict between radio stations by strengthening and clarifying the procedures governing translator interference remediation. Importantly, the new rules provide additional flexibility to translator operators by allowing them to mitigate interference by moving to any available same-band channel as a minor change. Currently, translator stations are restricted to first-, second-, and third-adjacent and IF-frequency channel changes using a minor change application. This rule change will provide a relatively low-cost way for translator stations to resolve interference with little or no reduction in service area. This method of remediating interference is optional and is one of several possible suitable techniques, which also include measures such as reducing power and changing directionality.

3. In the *Report and Order*, the Commission also establishes requirements for stations submitting an interference claim to the Commission. Specifically, it requires complaining stations to obtain a minimum number of statements from their listeners alleging interference. This minimum number is proportionate to the total population covered by the complaining station's protected contour. To prevent the complaining station from aggregating complaints over a long period of time, and to avoid inaccuracy in listener complaints caused by changes such as station modifications, listeners moving, etc., the minimum number of complaints must be dated within one year of each other with none dated more than twelve months before the date of submission of an interference claim to the Commission.

4. Each listener complaint must be signed and dated by the listener and contain the following information: (1) the complainant's full name, address, and phone number; (2) a clear, concise, and accurate description of the location where the interference is alleged to occur; (3) to demonstrate that the complainant is a regular listener, a statement that the complainant listens to the desired station using an over-the-air signal at least twice a month; and (4) to demonstrate that the complainant is disinterested, a statement that the complainant has no legal, financial, employment, or familial affiliation with the desired station. If these requirements are met, the Commission will presume that the listener complaint is valid. The Commission anticipates that these enhanced listener complaint requirements will significantly reduce challenges to a listener's bona fides and thus simplify and streamline translator interference proceedings.

5. To further avoid conflict over listener bona fides, the Commission states that it will not accept the following as evidence that a listener is impermissibly affiliated with the complaining station: (1) social media connections, such as listeners friending or following a station or its personnel on Facebook, Twitter, or other social media platforms; (2) membership in listener clubs or participation in station-run promotions, contests, and events; (3) charitable donations to the station, such as listener

---

<sup>1</sup> See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 (CWAAA).

<sup>2</sup> 33 FCC Rcd 4729, 4747-4749 (2018).

<sup>3</sup> See 5 U.S.C. § 604.

contributions to a noncommercial education (NCE) station; and (4) time contributed volunteering at a station or at a station-run event, so long as the volunteer does not hold a regular position at the station comparable to a station employee. Advertisers are deemed to have a financial interest in the station, as are underwriters for NCE stations.

6. In addition to the required minimum number of valid listener statements, a station submitting a translator interference claim package pursuant to either Section 74.1203(a)(3) or 74.1204(f) of the Rules<sup>4</sup> must include: (1) a map plotting the specific locations of the alleged interference in relation to the 45 dBU contour of the complaining station, (2) a statement that the complaining station is operating within its licensed parameters, (3) 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 (4) U/D data demonstrating that at each listener location the ratio of 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 Commission's standard contour prediction methodology. The goal of requirement (4) is to establish an adequate threshold causation test to establish that the complaining listener is within a "zone of potential interference" by the subject translator station to the desired station.

7. The Commission clarifies the *ex parte* status of listeners by establishing that a listener whose complaint is sent to a station and then submitted to the Commission as part of an interference claim package filed by the affected station licensee is not a party under the *ex parte* rules because the listener has not submitted a filing with the Commission. Likewise, when the Commission forwards a complaint originally filed directly with the Commission by an individual listener to the affected station, the listener does not become a party to any proceeding related to that listener complaint for *ex parte* purposes if the individual did not serve the relevant translator. However, a station licensee that files an interference claim package and, after being directed to do so by Commission staff, serves it on the translator, is considered a party to the resulting proceeding, as is the translator. All parties to a restricted complaint proceeding must be served with written presentations to the Commission and be given advance notice of and an opportunity to be present for oral presentations. Similarly, we require translator operators to serve the complaining station with any filing or submission, including amendments to applications and STA requests, that relate to the station that is the subject of the interference complaint.

8. Recognizing the real and significant harm that can be caused by prolonged translator interference, the Commission establishes remediation procedures and deadlines to ensure that interference disputes are timely resolved. As soon as Commission review of the interference claim package is complete, it will issue a letter notifying the translator operator that the interference claim package has met its requirements and setting a deadline for remediation. This letter will also establish any intermediate deadlines, such as a remediation plan submission deadline, if appropriate. Although specific deadlines will be determined on a case-by-case basis, the Commission anticipates that 90 days will be an appropriate final remediation timeline for most situations. If *all* interference complaints have not been resolved by the remediation deadline, the Commission may order the immediate suspension of translator operations or reduction of power pursuant to Section 74.1203(b).<sup>5</sup>

9. In the *Report and Order*, the Commission outlines two main paths for resolving interference if the translator decides to continue operation on its original channel. First, a translator operator may resolve each listener complaint either by working with a willing listener to resolve reception issues. Second, the translator operator may work with the complaining station to resolve station signal interference issues using rule-compliant suitable techniques.

<sup>4</sup> 47 CFR §§ 74.1203(a)(3), 74.1204(f).

<sup>5</sup> See 47 CFR § 74.1203(b).

10. If working directly with a listener, the Commission clarifies the procedures that must be followed. To reduce negative interactions between translator operators and listener complainants, the Commission states that the listener is not obligated to participate in the remediation process. If the listener agrees, the translator operator may attempt to resolve the interference by adjusting or replacing the listener's receiving equipment. However, such measures cannot merely convince a listener to withdraw a complaint in exchange for a cash payment or some other non-technical means. Rather, the translator operator must document and certify that the desired station can now be heard on the listener's receiver, i.e., that the adjustment or new equipment actually resolved the interference.

11. If the complainant's receiver is *not* the primary cause of the perceived interference, or if the listener chooses not to be involved in the resolution process, then the translator operator and the complaining station must work together to resolve the interference complaint using suitable techniques. The Commission provides flexibility to the two parties to determine the testing parameters for demonstrating that the interference has been resolved (for example, on-off testing or field strength measurements). If no agreement is reached on mutually acceptable tests, the parties should engage a mutually acceptable third party engineer to observe or carry out the testing. Although we anticipate that the parties will generally share the cost of engaging a neutral third party, we will not mandate the terms of that agreement. Commission staff will make the final determination whether the interference has been resolved based on the information requested and received from the third party engineer. At any point in the process, the parties may also agree that interference has been resolved using any mutually acceptable means; however, any contested data may not be unilaterally presented to the Commission as a remediation showing (or to dispute a remediation showing). Once agreement is reached, the parties must jointly submit the agreed-upon remediation showing to the Commission.

12. Finally, the Commission establishes a signal strength within which most of an FM station's listeners are located and beyond which a station may not claim interference from an FM translator. Based on listenership data provided by commenters, the Commission concludes that setting a complaint limit at the 45 dBu contour best balances full-service, secondary service, and listener interests by providing a contour limit that encompasses the bulk of full-service core listenership while limiting complaints at the margins of listenable coverage station listenership. At the 45 dBu signal strength contour, listenership consistently drops to four percent of the station total, indicating that the station's signal at that distance is generally not strong enough to reliably attract a significant listening audience. In addition, beyond the 45 dBu contour, the number of listeners begins to decrease at a much lower rate. Therefore, the 45 dBu contour represents a point of diminishing returns when balancing conserving full-service listenership and providing certainty for translator stations. Finally, this contour limit is consistent with the mid-40 dBu range median of the various contour limits put forth by commenters. For these reasons, the Commission adopts the 45 dBu contour as the outer limit beyond which a listener complaint will not be considered actionable.

13. The Commission adopts certain non-substantive updates to the relevant rules to clarify that the interference protections of Sections 73.1203(a)(3) and 74.1204(f) apply to all full-service stations and previously-authorized secondary service stations.

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

14. There were no comments to the IRFA filed.

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

15. 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>6</sup> The Chief Counsel did not file any comments in response to the proposed rule in this proceeding.

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

16. The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the rules adopted herein.<sup>7</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>8</sup> In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.<sup>9</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 Small Business Administration (SBA).<sup>10</sup>

17. **RADIO STATIONS.** Radio stations are an Economic Census category that “comprises establishments primarily engaged in broadcasting aural programs by radio to the public.”<sup>11</sup> Programming may originate in their own studio, from an affiliated network, or from external sources.”<sup>12</sup> The SBA has established a small business size standard for this category as firms having \$38.5 million or less in annual receipts.<sup>13</sup> Economic Census data for 2012 shows that 2,849 radio station firms operated during that year.<sup>14</sup> Of that number, 2,806 operated with annual receipts of less than \$25 million per year, 17 with annual receipts between \$25 million and \$49,999,999 million and 26 with annual receipts of \$50 million or more.<sup>15</sup> Therefore, based on the SBA’s size standard the majority of such entities are small entities.

18. According to BIA/Kelsey Publications, Inc.’s Media Access Pro Database, on March 30, 2018, 10,859 (or about 99.94 percent) of the then total number of FM radio stations (10,865); 4,629 (or about 99.94 percent) of the then total number of AM radio stations (4,632); and all of the 7,238 total FM translator stations (100 percent) had revenues of \$38.5 million or less for the year ending 2017, and thus qualify as small entities under the SBA definition. Therefore, the majority of such entities are small entities. We note, however, that, in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations<sup>16</sup> must be included. Our estimate, therefore, likely

<sup>6</sup> 5 U.S.C. § 604(a)(3).

<sup>7</sup> *Id.* § 603(b)(3).

<sup>8</sup> *Id.* § 601(6).

<sup>9</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>10</sup> 15 U.S.C. § 632.

<sup>11</sup> The subject rules and policies will apply to FM translator stations as well as any FM radio broadcasting stations that are receiving interference from or causing interference to a translator station.

<sup>12</sup> U.S. Census Bureau, 2012 NAICS Definitions, “515112 Radio Stations,” <https://www.census.gov/cgi-bin/sssd/naics/naicsrch?input=515112&search=2017+NAICS+Search&search=2017>.

<sup>13</sup> 13 CFR § 121.201, NAICS code 515112 Radio Stations.

<sup>14</sup> U.S. Census Bureau, Table No. EC1251SSSZ4, *Information: Subject Series - Establishment and Firm Size: Receipts Size of Firms for the United States: 2012* (515112 Radio Stations) [https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012\\_US/51SSSZ4/naics~515112|515120](https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012_US/51SSSZ4/naics~515112|515120).

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

<sup>16</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 § 121.103(a)(1).

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.

19. Moreover, as noted above, an element of the definition of “small business” is that the entity not be dominant in its field of operation. The Commission is unable at this time to define or quantify the criteria that would establish whether a specific radio station is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply does not exclude any radio station from the definition of a small business on this basis and therefore may be over-inclusive to that extent. Also, as noted, an additional element of the definition of “small business” is that the entity must be independently owned and operated. The Commission notes that it is difficult at times to assess these criteria in the context of media entities and the estimates of small businesses to which they apply may be over-inclusive to this extent.

**E. Description of Projected Reporting, Record Keeping and Other Compliance Requirements**

20. The rules changes adopted in the *Report and Order* set out the following standardized required contents for any FM translator interference claim package that is submitted to the Commission: (1) a minimum number of listener complaints, (2) a map plotting the specific location of the alleged interference in relation to the complaining station’s 45 dBu 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 Commission’s standard contour prediction methodology.

21. Each listener statement submitted as part of an interference claim package must be signed by the listener and include: (1) the complainant’s full name, address, and phone number; (2) a clear, concise, and accurate description of the location where interference is alleged or predicted to occur; (3) a statement that the complainant listens over-the-air to the desired station at least twice a month; and (4) a statement that the complainant has no legal, financial, employment, or familial affiliation or relationship with the desired station.

22. As part of the interference remediation process, FM translator operators that choose listener-based remediation must document and submit a showing that changes to the listener’s receiving equipment actually resolved the interference complained of. If the translator operator chooses to remediate interference through cooperative technical measures with the complaining station, it must submit to the Commission a simple engineering showing, such as data from on-off testing or field strength measurements, to demonstrate that the interference at each complaining listener location has been resolved. Alternatively, if the translator opts to change channels to resolve interference issues, it must submit a standard modification construction permit application with a showing of mitigation of interference at the requested frequency.

**F. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered**

23. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather

than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>17</sup>

24. Because so many broadcast stations are classified as small entities, the rules adopted herein, which are meant to broadly benefit both full service and FM translator operators, are anticipated to benefit many small entities by avoiding prolonged interference disputes. These standardized requirements will help permittees and licensees to resolve disputes privately or in an objective, engineering-based fashion while reducing recourse to expensive legal disputes over listener bona fides. The minimum number of listener complaints adopted herein is proportionately scaled to the size of the population served by the complaining station. In choosing this approach, the Commission rejected a universal six listener minimum in favor of this more tailored approach that takes into account the population of the affected station. This approach also streamlines the remediation process for smaller entities, as licensees with less heavily populated areas will be required to resolve fewer listener interference complaints than stations with a larger population.

25. Report to Congress: The Commission will send a copy of this *Report and Order*, including this FRFA, in a report to Congress and the Government Accountability Office pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.<sup>18</sup> In addition, the Commission will send a copy of the *Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*.<sup>19</sup>

---

<sup>17</sup> 5 U.S.C. § 603(c)(1)-(c)(4)

<sup>18</sup> See *id.* § 801(a)(1)(A).

<sup>19</sup> See *id.* § 604(b).

**STATEMENT OF  
CHAIRMAN AJIT PAI**

Re: *Amendment of Part 74 of the Commission's Rules Regarding FM Translator Interference*, MB Docket No. 19-40.

The concept of interference can cause significant controversy in the sports world. For example, most Louisianans were outraged earlier this year when officials failed to call pass interference near the end of regulation in the NFC Championship Game, likely denying the New Orleans Saints a spot in the Super Bowl. And last weekend, the Kentucky Derby set off a vigorous debate when the horse that crossed the finish line first was disqualified over alleged interference with other horses, in violation of the Commonwealth's horse racing regulations.<sup>1</sup>

These incidents demonstrate the importance of having clear rules for defining interference and the right procedures for resolving interference claims.

What's true for sports is true for spectrum. And so today, we simplify the process for resolving complaints regarding interference caused by FM translators. FM translators are an increasingly important resource for broadcasters. Indeed, our successful AM revitalization initiative has already resulted in hundreds of new FM translators starting up. AM broadcasters around the country have told me that the chance to get FM translators has allowed them to improve their programming, expand their listenership, and stabilize their financial position.

But with more translators on the air has come an uptick in interference complaints from primary FM stations. So last May, we set out to review the interference complaint process. And today, after a lot of hard work and consultation with stakeholders, we give everyone more certainty by streamlining and clarifying the process for resolving complaints. Success here is simple: We want to receive fewer meritless complaints and make those we do get easier to resolve.

Today's *Report and Order* accomplishes that goal by carefully balancing the interests of primary FM stations and translators. Most important, it gives translators the flexibility to move to any open same-band channel to resolve interference claims. It also standardizes the information that must be provided in complaints and establishes a minimum number of listener statements that must accompany complaints. Finally, it sets a contour limit for actionable complaints while providing for a waiver process in unusual circumstances.

Resolving FM interference may not be as glamorous or fashionable as resolving interference in the NFL or the Kentucky Derby, but the staff in our Media Bureau nonetheless handled this difficult matter with skill and aplomb. I want to thank James Bradshaw, Michelle Carey, Robert Gates, Christine Goepf, Tom Horan, Holly Saurer, Lisa Scanlan, and Albert Shuldiner from the Media Bureau and David Konczal from the Office of General Counsel for their work on this item.

---

<sup>1</sup> I am not making this up. See 810 Ky. Admin. Regs. 1:016 (2019). Cf. Charles Dickens, *Bleak House*, Ch. Xxxix (1853) ("The one great principle of the English law is, to make business for itself.")

**STATEMENT OF  
COMMISSIONER MICHAEL O'RIELLY**

Re: *Amendment of Part 74 of the Commission's Rules Regarding FM Translator Interference*, MB Docket No. 19-40.

As the number of FM translators has grown substantially following the tremendous efforts to revitalize AM radio stations under Chairman Pai's leadership, some concerns have been expressed over a potential increase in the number of interference complaints filed at the Commission as a result. This Order strikes a thoughtful and careful balance in responding to the needs of the parties who are seeking to resolve complaints efficiently and effectively. Today we also inject more certainty into the process by establishing reasonable time limits for resolving complaints and general complaint thresholds necessary to generate action.

I would like to specifically thank the Chairman and Bureau staff for working with me to tighten the remediation deadline process. By establishing a fixed "contour" for the timeline needed to resolve complaints, we add an even higher level of predictability to the process. While we expect many interference complaints will be resolved through relatively simple remedies, including the option to change channels by filing for minor modifications, some will require a more extensive process. For those that are more complex, we preserve the Bureau's authority to extend the timeline at their discretion with an accompanying explanation documented in their correspondence with the parties. I have argued extensively for the need to create consistency in our processes, including acting in a timely manner, and the same should hold true for the private parties who are tasked by the Commission with resolving interference complaints. This Order achieves the goal of streamlining Commission processes and making them fair and reliable. I approve.

**STATEMENT OF  
COMMISSIONER BRENDAN CARR**

Re: *Amendment of Part 74 of the Commission's Rules Regarding FM Translator Interference*, MB Docket No. 19-40.

Over the past few years, we've seen a substantial uptick in the use of FM translators—these are radio stations that rebroadcast the signal of an AM or FM station. In fact, the FCC has authorized over 1,700 new FM translator stations since the end of 2017, and roughly 500 of those are already online. This is great news for listeners because translators can overcome the technical challenges facing the AM band while expanding coverage in rural and remote parts of the country. But this success presents a new challenge—managing the potential for increased interference between translators and full-power stations.

Under our current rules, a single interference complaint can lead to lengthy and expensive disputes, threats of litigation against both stations and listeners, and translators going dark. Broadcasters large and small agree that our current process is frustrating, at best, and has led bad actors to game the system. So I'm glad that today's Order implements a better system for handling interference disputes. The process we adopt today will encourage the good-faith resolution of interference issues by allowing translators to move to any available frequency and by requiring threshold showings from those claiming harmful interference. This will provide the regulatory certainty needed to encourage continued investment in translators while protecting full-power stations from interference.

I want to thank the Media Bureau for its work on this item. It has my support.

**STATEMENT OF  
COMMISSIONER GEOFFREY STARKS**

Re: *Amendment of Part 74 of the Commission's Rules Regarding FM Translator Interference*, MB Docket No. 19-40.

Licensing use of the public airwaves and mitigating interference between operators are responsibilities that this Commission was founded upon. After all, these airwaves are a scarce and valuable public resource that allow us to communicate with one another wherever we may be—through broadcasting, radio communications, mobile wireless service, and more—and interference can cause grave problems for listeners and stations alike.

When it comes to radio, we have our work cut out for us. Commercial radio broadcasting launched in the U.S. in 1920 with a handful of stations across the country. Today, nearly 100 years later, AM/FM radio reaches 93 percent of us every week—greater reach than any other communications technology. Each week, hundreds of millions of Americans tune in to radio signals broadcast by more than 25,000 AM, FM, LPFM stations or translators. This impressive blanket of broadcasting allows communities across the country to access news, information, and entertainment, and receive critical emergency alerts in times of trouble. The success of our broadcasting system is due in no small measure to underappreciated advances in technology and vigilant licensing and engineering work by this Commission.

New technology or new policies can bring new opportunities but also new challenges. Here we grapple with how to handle interference concerns related to a recent influx of translators. Although translators receive only secondary protection, they are crucial parts of our radio landscape that allow signals to reach distant communities and navigate tricky terrain. This item considers the robust record to try to balance interference concerns with the need for both stations and translators to continue to provide service to listeners. While we must remain vigilant and ensure that these rules work as intended, I believe that this item largely succeeds in finding such a balance and I support it.

Many thanks to the talented staff of the Media Bureau for your hard work on this item.