

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

In the Matter of	)	
	)	
Closed Captioning of Video Programming	)	CG Docket No. 05-231
	)	
Telecommunications for the Deaf and Hard of	)	
Hearing, Inc. Petition for Rulemaking	)	
	)	
Telecommunications for the Deaf and Hard of	)	RM-11848
Hearing, Inc. et al. Petition for Declaratory	)	
Ruling and/or Ruling Making on Live	)	
Closed Captioning Quality Metrics and the	)	
Use of Automated Speech Recognition	)	
Technologies	)	

**REPLY COMMENTS OF  
NCTA – THE INTERNET & TELEVISION ASSOCIATION**

NCTA – The Internet & Television Association (“NCTA”) submits these reply comments in response to the comments filed regarding the petition for declaratory ruling and petition for rulemaking (“Petition”) filed by Telecommunications for the Deaf and Hard of Hearing, Inc. et al. (“Petitioners”).<sup>1</sup>

**I. RECONSIDERATION OF THE COMMISSION’S EXISTING RULES IS UNWARRANTED**

As initial comments from NCTA and others make clear, video programmers and cable operators are committed to providing all of their viewers with premium content accompanied by high-quality closed captions.<sup>2</sup> The cable industry will continue to work with hard of hearing

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<sup>1</sup> Telecommunications for the Deaf and Hard of Hearing, Inc. et al., Petition for Declaratory Ruling and/or Rulemaking on Live Closed Captioning Quality Metrics and the Use of Automatic Speech Recognition Technologies, CG Docket No. 05-231 (filed July 31, 2019) (“Petition”).

<sup>2</sup> See, e.g., Comments of NCTA – The Internet & Television Association, CG Docket No. 05-231, at 5-7 (filed Oct. 15, 2019) (“NCTA Comments”); Opposition to Petition for Rulemaking of the National Association of Broadcasters, CG Docket No. 05-231, at 3 (filed Oct. 15, 2019) (“NAB Opposition”).

advocates and other stakeholders to improve the experience of deaf and hard of hearing viewers.<sup>3</sup>

A broad array of commenters, however, highlight the reality that it is nearly impossible to achieve perfection in live captioning; technological limitations and human error are inherent to the very nature of live captioning.<sup>4</sup> The Commission’s existing caption quality rules account for these limitations and, as NCTA and others detail, the rules strike an appropriate balance between the need for consistency in caption quality and the risk that overly prescriptive requirements would hamper growth and innovation.<sup>5</sup> The record in this proceeding provides no compelling reason to modify the rules at this time.

In fact, the weight of the comments demonstrates that the current rules are working as intended. The record clearly indicates that consumer complaints—the most practical way to assess compliance with the rules<sup>6</sup>—are decreasing.<sup>7</sup> The comments filed by advocacy groups in this proceeding do not claim otherwise. Instead, these groups point to anecdotal information to argue that the Commission’s rules are not working. This anecdotal information was gleaned from an informal survey conducted by the Hearing Loss Association of America (“HLAA”), which asked its own members to share feedback about their *perceptions* of local news

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<sup>3</sup> See *id.*; cf. NAB Opposition at 5; Comments of Meredith Corporation, CG Docket No. 05-231, at 2 (filed Oct. 15, 2019) (“Meredith Comments”).

<sup>4</sup> See NCTA Comments at 7-8; NAB Opposition at 7, 10-11; Meredith Comments at 1-2; Comments of Ai-Media Inc., CG Docket No. 05-231, at 5 (“Ai-Media Comments”) (stating that “errors in live captioning are inevitable”); Comments of VITAC, CG Docket No. 05-231, at 3 (filed Oct. 7, 2019) (“VITAC Comments”) (acknowledging that both human and ASR captioning contain missing words); Comments of AppTek, CG Docket No. 05-231, at 4-5 (filed Oct. 15, 2019) (“AppTek Comments”).

<sup>5</sup> See, e.g., NCTA Comments at 3-5; NAB Opposition at 9 (“[T]he captioning rules are guided by Congress’s directive to provide access to video programming through captions without unduly burdening VPDs and others charged with providing captions. The Commission rejected metrics as more burdensome, yet less effective than the quality standards and best practices it adopted. Nothing in the Petition justifies a policy reversal.”).

<sup>6</sup> See *Closed Captioning of Video Programming; Telecommunications for the Deaf and Hard of Hearing, Inc. Petition for Rulemaking*, Report and Order, Declaratory Ruling, and Further Notice of Rulemaking, 29 FCC Rcd. 2221, 2263 ¶ 66 (2014) (“2014 Report and Order”).

<sup>7</sup> See NAB Opposition at 7; NCTA Comments at 8-9.

captioning.<sup>8</sup> While HLAA’s effort may reveal some insight about individual instances of consumer frustration, the survey contains several critical flaws that render it an insufficient and inappropriate basis on which to base complex regulatory policy decisions.<sup>9</sup> Among other things, the survey does not purport to reflect a statistically valid sample of viewers, nor does it evaluate captions across a wide range of programming types. Instead, it is limited to HLAA members who chose to answer questions solely about one particular type of programming—local news.<sup>10</sup> Another deficiency of the survey is the lack of clarity on whether the content at issue was subject to, or exempt from, the Commission’s closed captioning rules.<sup>11</sup>

Moreover, although Petitioners ask the Commission to impose objective quality metrics, the record provides no practical or actionable metric for the Commission to consider at this time. Advocacy groups cite a study underway by the Twenty-First Century Captioning Disability and Rehabilitation Research Project (“DRRP”), which purportedly is developing specific metrics for caption quality. But as DRRP acknowledges and NAB and others highlight, the DRRP study will take years to complete; until then, any discussion of metrics is both premature and unnecessary.<sup>12</sup>

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<sup>8</sup> See Petition at 10-12; Comments of Twenty-First Century Captioning Disability and Rehabilitation Research Project (Captioning DRRP), CG Docket No. 05-231 (Filed Oct. 15, 2019) (“DRRP Comments”).

<sup>9</sup> Members of an advisory group for the Project Television Access, a Dicapta Foundation project, also argue that caption quality for live programming is poor. This claim is completely unsupported. See Comments from Members of The Dicapta Advisory Group for the Project Television Access, CG Docket No. 05-231 (filed Sept. 17, 2019).

<sup>10</sup> See also NAB Opposition at 6.

<sup>11</sup> See, e.g., Petition at Appendix A (showing that the question regarding which stations respondents watch for local news was skipped by 205 respondents); DRRP Comments at 13 (noting that many respondents’ perception of caption quality depended on the time of day and the station they watched); cf. 47 C.F.R. § 79.1(d) (which provides thirteen exemptions for certain programs and providers, including programming that is distributed between 2 a.m. and 6 a.m. and programming on new networks).

<sup>12</sup> See Petition at 15; NAB Opposition at 12; NCTA Comments at 5. A few commenters suggest the use of the NER model for assessing caption quality; this is a method utilized in Canada and the United Kingdom that focuses on a captioning error’s impact on a viewer’s comprehension of the ideas presented. See Ai- Media Comments; Comments of Pablo Romero-Fresco, CG Docket No. 05-231 (filed Oct. 15, 2019). This method likely would not advance the Commission’s goal for captioning to “convey the aural content of the program in a

In short, the record underscores that the Commission’s current path remains the correct one. The Commission therefore should decline Petitioners’ request for further inquiries and rulemakings and instead continue to encourage industry and advocates to collaborate through the Commission’s Disability Advisory Committee (“DAC”) and other stakeholder groups.<sup>13</sup>

## **II. THE COMMISSION SHOULD DECLINE TO ADOPT STANDARDS FOR AUTOMATIC SPEECH RECOGNITION TECHNOLOGIES**

Although commenters note that automatic speech recognition (“ASR”) is still developing, many agree that it can improve the quality of captioning for live programming.<sup>14</sup> ASR has the ability to improve accuracy, synchronicity, and completeness and, because it is based on machine learning, the technology will continue to improve as its use is expanded.<sup>15</sup> While some commenters urge the Commission to implement new standards for ASR,<sup>16</sup> that would be premature. As NCTA explains in its opening comments, ASR remains a nascent technology that

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manner equivalent to the aural track” to the extent possible. 2014 Report and Order ¶ 42. Notably, Petitioners themselves do not advocate for the NER model and instead urge the Commission to adopt new, as-yet undefined metrics more closely tied to verbatim accuracy. It also should be noted that the United States has a different approach to regulating video programming as compared to countries that utilize the NER model, and American programmers create substantially more video content than other countries. *See e.g.* Frederick Blichert, *Canadian TV Is Popular, Thanks to America*, Vice (July 12, 2019), [https://www.vice.com/en\\_ca/article/evy3bk/canadian-tv-is-popular-thanks-to-america](https://www.vice.com/en_ca/article/evy3bk/canadian-tv-is-popular-thanks-to-america). *Compare* FCC News Release, Broadcast Station Totals as of September 30, 2019 (Oct. 2, 2019), <https://docs.fcc.gov/public/attachments/DOC-359976A1.pdf>, with Canadian Radio-television and Telecommunications Commission, *Communications Monitoring Report 2018*, at 224, <https://crtc.gc.ca/pubs/cmr2018-en.pdf>, and Ofcom, Media Nations: UK 2018 at 27 (July 18, 2018), [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0014/116006/media-nations-2018-uk.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0014/116006/media-nations-2018-uk.pdf).

<sup>13</sup> *See* NCTA Comments at 6 (noting that DAC is currently examining the use of enhanced Electronic Newsroom Technique for live captioning).

<sup>14</sup> *See* Apptek Comments at 6-8; VITAC Comments at 1-2 (discussing the benefits of supervised versus unsupervised ASR); NAB Opposition at 13-14; NCTA Comments at 10-11.

<sup>15</sup> *See, e.g.*, NCTA Comments at 10-11; Apptek Comments at 6-7 (explaining that ASR continues to make great strides in reducing errors and broadening the functionality of the service).

<sup>16</sup> *See* Apptek Comments at 9; VITAC Comments. *See also* Comments of The Clear2Connect Coalition, CG Docket No. 05-231, at 9 (filed Sept. 25, 2019) (“Clear2Connect Comments”) (when drawing a parallel from closed caption quality on television to the organization’s main concern, which centers on ASR standards for IP CTS, Clear2Connect stated “... quality standards must be in place *before* major changes in technologies occur.”). As discussed above, the Commission has already created standards that are able to ensure quality regardless of the caption method employed.

is not yet widely deployed.<sup>17</sup> Equally important, new regulations are unnecessary. As the Commission has stated and the record once again illustrates, the existing captioning rules provide flexibility to accommodate new technologies while also ensuring caption quality, and the Commission's robust complaint process also helps programmers and cable operators identify areas for further improvement.<sup>18</sup> Together, the Commission's current rules help encourage the development of new technologies that may in time resolve some of the challenges of live program captioning. The Commission should not impede this progress by imposing premature or unnecessary new requirements on emerging caption solutions.

### **III. CONCLUSION**

The record in this proceeding makes clear that the Commission's existing caption quality rules are working as intended, ensuring that video programming is accessible to deaf and hard of hearing viewers while avoiding burdensome regulatory requirements that would inhibit growth and innovation. The Commission therefore should decline Petitioners' requests to (i) initiate a notice of inquiry and subsequent rulemaking to develop technology-neutral caption quality metrics; and (ii) issue a declaratory ruling and/or expedited rule change on the use of automatic speech recognition technologies.

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<sup>17</sup> See NCTA Comments at 10-11.

<sup>18</sup> See 2014 Report and Order ¶ 42 (addressing the applicability of the quality standards to various captioning methodologies and stating that the Commission's "overall objective is to ensure that closed captions convey a program's content so that the program is fully accessible to viewers. To this end, whatever method is used to provide real-time captioning, we will address complaints by considering, on a case-by-case basis. . . . Our ultimate goal is to ensure better captioning quality without unduly burdening VPDs and programming providers. We believe that the approach we adopt strikes this balance."). The Commission's current rules already set an "objective 'North Star' on how caption quality should be assessed" regardless of technology. See Ai-Media Comments at 3; see also NCTA Comments at 10; NAB Opposition at 14.

Respectfully submitted,

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