

has become clear that additional mechanisms are required in order to ensure adherence to the recently enacted rules, including considerable penalties for noncompliance with these rules. The FCC must be willing to expand on its commitment to monitor and enforce acceptable quality TV captioning and also ensure timely communication and resolution of captioning issues by working with consumers, captioning providers and producers of video content.

II. Background

Closed captioning enables televisions to display the audio portion of the signal as text on the screen. It is made possible through the additional bandwidth provided to broadcasters for such things as emergency services. Within that additional bandwidth, text is hidden and made visible with the use of a special encoder. Only those who decode or activate the caption can read this text. The newest technologies allow viewers simply to hit a button and turn on closed captions using their remote control or on-screen menu. Although the technology was available in the 1970's, Congress did nothing to promote it until the Television Decoder Circuitry Act, which went into effect in 1993. This amendment to the Telecommunications Act of 1934 gave the Federal Communications Commission (FCC) the authority to require all analog television sets with screens thirteen inches or larger sold or manufactured in the United States to contain a built-in decoder to display closed captioning. Before this law took effect, there were only two modes to

access captioning: by using an external decoder or a television that already contained the built in decoder. Prior to the 1993 legislation, it is estimated that only 500,000 decoders were in use and roughly 1,000,000 televisions with caption decoders had been sold. Since the passing of this legislation, it is believed that every home in the United States has at least one television with captioning technology capabilities.

Although the technology to decode the captioning was now made available to everyone who bought a new television set, there was still a shortage of programming being captioned. This was because captioning of video programming was either voluntarily undertaken by the programmer, an extremely costly undertaking, or carried out on a contractual basis. The FCC had long argued that market based incentives, rather than stringent guidelines created by it, would ensure both the highest level of quality and the proliferation of captioning. In time, however, Congress recognized the fallacy of its reasoning. In Section 713 of the Telecommunications Act of 1996, Congress amended the law to require that all new content would be closed captioned for the deaf and hearing impaired. Congress's goal was to ensure that all Americans would have access to captioned programming, especially in light of the explosion of new video content. Given general jurisdiction, the FCC was now allowed to create micro policy to promote this end. It required that 75% of all new programming be captioned henceforth. By January 1, 2006, all video programming entering the house was supposed

to be closed captioned. These policies were to be reviewed at a later date. Seven years after the Act was finally implemented, the shortcomings of the legislation are obvious. Those who are dependent on closed captioning as their source of news and entertainment are not being served. Viewers who use closed captioning continually complain that it suffers from technical and non-technical disruptions alike. Overwhelmingly, broadcasters are confused by the FCC's nebulous captioning standards and are applying in disturbing numbers under one of the Act's exceptions that allow broadcasters to dispense with the regulations if the regulations will place an undue burden on them. Recently, over a one month period, the FCC denied at least twelve bids for exemption attributed to broadcaster confusion and cost².

III. Discussion

I would like to respond to a few of the major failings of closed captioning, especially in light of the Telecommunications for the Deaf, Inc. (TDI) petition, which underscored the many defects in the existing regime. First, the FCC must adopt non-technical quality standards to ensure that errors in captioning are limited. These standards must be clear so that both programmers and caption providers will know how to conform their actions to best serve the consumer. The FCC must determine if these standards are met and shall use the threat of substantial penalties for non-compliance, which should increase with each additional failure. Also, error rates in both

² Tania Panczyk-Collins, Captioners Busy as Broadcasters Cope with New FCC Rules, Communications Daily (August 18, 2005).

prerecorded and live content, especially where the latter is news or emergency based, must be reduced. Additionally, the Commission must ensure that there is no longer a lack of qualified individuals who are trained to caption, specifically as it relates to news broadcasts. Finally, the FCC must revisit its rules regarding complaint procedures when these standards are not being met.

Significant non-technical errors continue to prevail in closed captioned programming. Much of today's captioning violates basic spelling, grammar and syntax rules. In their recent Petition for Rulemaking, TDI and several other public interest groups argued that very little is being done to ensure quality standards are being met. In its Petition, TDI suggested that a program should not be considered captioned unless it meets minimum standards for completeness, accuracy, readability, and synchronicity with the audio portion of the program.³ Indeed, perhaps the most disconcerting aspect of the existing rules is that the standard for captioning is amorphous. The lone requirement pertaining to non-technical quality standards is that the captions must provide information that is "substantially equivalent" to that of the audio portion of a video program to be considered captioned. For instance, it is not clear how many errors are allowed per minute. Captioners and programmers, therefore, are left to determine on their own whether their

³See Telecommunications for the Deaf Inc. *et al.* Petition for Rulemaking, RM-11065 (July 23, 2004).

program is adequately captioned and hence in compliance with the FCC's regulations.

One commentator suggested that for a program to be considered captioned it would have to meet strict criteria. He proposed a maximum error rate of no more than 0.2% of the words in a prerecorded show, and no more than 3% of the words in a live show may be wrong, misspelled, or absent. These rates, especially for prerecorded shows, can easily be achieved. A prerecorded show is captioned by a writer who is given the show's script. He simply transcribes the text to a software program that assists him in timing and placing the text. Prerecorded captioning is done in a studio after the television show is finished. Most over-the-air content is captioned in this fashion. Examples of this include television game shows, television movies, and most comedies and dramas. Because this process is usually done months in advance, a negligible error rate is far too generous. Because the script of the program is readily available, I would not allow any errors for this type of captioning. I would encourage the Commission to adopt and enforce this suggestion. The error rate for live programming should be only slightly more generous. Also, once these rules are passed, programmers will then have to certify that their programming is within these acceptable limits. As the rules are currently constructed, video programmers are quick to absolve themselves of blame and tend to place fault onto those who caption the content, even to the extent that some video programmers place disclaimers on

their content. Creating benchmarks is the only way to solve the problem of passing blame. Additionally, when programmers and captioners fail to meet these standards, the penalties must be severe. In its petition, TDI suggests that violations should carry an \$8,000 penalty per hour of programming that is not captioned. I would install a somewhat smaller fine, but I would levy the penalty each time a violation occurs. That way, the FCC could find several violations in a single program. Not only do I think this is workable, but it is the only way to ensure that programmers and captioners pay careful attention to detail and make the necessary improvements.

Another popular complaint is that the captions are cut off in the final minutes so that those utilizing the closed captioning function on their television never know the ending. When this happens, the captioning must not be considered acceptable for FCC purposes. The captioning must be synchronized with the audio to meet captioning requirements. In the context of prerecorded shows where the captioning is done prior to the broadcast, this can easily be corrected. Many critics cite as one problem in this framework the many incarnations of the television show. Often, shows that are originally aired in broadcast are later sold into syndication. The snag is that the original show is edited and the captions no longer match the audio portion of the programming. Broadcasters are either unaware that the captions need to be reconstructed or refuse to re-caption the program because of the costs associated with such an endeavor. Under the current rules,

however, the rebroadcast may satisfy the “substantially equivalent” test. This should not be. In order to remedy this, the FCC must be willing to review all shows in syndication. Admittedly, this is a rather large undertaking, but if the providers of the content will not do it, then a panel within the FCC must. Another common problem is the juxtaposition of the video and the captioning. Users often complain that portions of the captioning cover either too much or, at minimum, essential portions of the screen. This, too, must be rectified by stricter standards. The FCC must ensure that captioning covers a minimum amount of the screen, while making sure that it is still readable.

Poor signal reception is also sighted as a problem in accessing captions. Even slightly weak reception can cause problems with captions. Sixteen million people (approximately 15%) receive over-the-air television only. Based on these data, at least three to four million people who rely on captioning are not receiving it. The Commission clearly needs to address this issue. Consumers without access to closed captioning must have the option to subscribe to cable, satellite or other multi-channel video programming not affected by the problem of interference. It is unacceptable that so many viewers do without captioned programming. For this reason, the government should either fully subsidize or, at minimum, provide some type of governmental credit for people who fall within certain income levels and are

able to adduce some evidence that they depend on closed captioning and that that captioning is not being satisfactorily transmitted to them.

Making closed captioning services available to all who need them is only the beginning. Error rates for both live and prerecorded shows should also be minimized.

Closed captioning is produced in one of two ways: live (online captioning) and prerecorded (offline captioning). Live captioning is done as the event occurs. News shows and particularly sports events are examples. Live captions can be done from a script through a process called Electronic NewsRoom (ENR) captioning, particularly popular with news rooms, or they can be created in real time by stenographers. ENR technology makes use of text being fed from the teleprompter, which serves as its caption source. Although there is not as large a need for live captioning, this type of programming can be infinitely more important because of the critical nature of news events. The original FCC implementation of the Telecommunications Act of 1996 said that ENR captioning was sufficient for the news.

ENR technology suffers from many shortcomings, however. The scripts “often use abbreviations or include information on how the cameras are to be used. An even bigger problem is that television news scripts do not include any information that is ad-libbed, such as the weather forecast or a breaking news story.”⁴ Because news is often produced extemporaneously,

⁴ Rick Bentley, For Millions of Americans Their Favorite TV Show Sounds Like This: Closed Captioning, Fresno Bee D1 (November 29, 2004).

what is being spoken will not match the printed word on the television. These improvisations are not relayed to those who receive their captioning from ENR. Indeed, the FCC conceded that real-time is a superior way of producing captions and on January 1, 2000, it passed a law that ENR would not be acceptable from large broadcasters, including the four major networks and their affiliates in the top twenty five television markets. The new rules require live closed captioning of news and other live programming. This standard should be extended to include all television markets so that live programming on all television stations would have to be closed captioned on a real-time basis—especially news broadcasts on which viewers depend for full and prompt delivery of important information. News is no less critical to those in smaller markets than to those in larger ones, so why limit access only to the top twenty five markets? Unless required, smaller stations will not provide live captioning of the news because of the cost involved. It is reported that online broadcasting can cost as much as \$100 an hour. Smaller stations say that this money is the sole reason for not using online captioning of their news programs. Stations can apply for grants, but the federal government has allocated only \$3 million for this program. Full access to breaking news is too important to let cost dictate the quality of service.

Another problem with live captioning is the dearth of skilled stenographers working in this profession. Trained caption writers transcribe the audio onto a computer; the computer then decides where to place the text

without interfering with other visual information. Once transferred, the videotape is then distributed. The training is similar to that a courtroom reporter, but even more difficult in many respects, including the length of the program. Currently, there are only 400 real-time captioners to provide captioning for television newscasts and other live programming.

Nearly all caption providers recognize a shortage of skilled captioners. Ironically, “about half of consumers feel that better recruitment and training will lead to improved captioning” and yet “finding and training...[them] is not one of the top five concerns of service providers. . .”⁵ The National Court Reporters Association officials say many more are needed for broadcasters to comply with the new regulations. The Senate recently passed a bill that would provide \$80 million over the next four years to recruit and train captioners at community colleges and other schools. I would urge fellow lawmakers to pass this bill. In addition to receiving competitive grants and full placement upon graduation, caption writers should be compensated with competitive salaries and benefits.

Some have suggested that new technologies like real-time captioning could be refined and would obviate the need for more practitioners. Although speech recognition systems are becoming increasingly faster and more accurate, they are not without limitations. For instance, they are not able to capture text from multiple speakers in noisy environments with acceptable

⁵ Jeff Hutchins, Caption Quality Initiative Conference Report, <http://joeclark.org/access/captioning/CQI/CQI-conference-report.html> (accessed March 10, 2005).

accuracy. Therefore, there likely will always be a need for skilled captioners, and Congress must do all that it can to find more skilled workers.

Another concern voiced by many consumers is the process of remedying unsatisfactory captioning. Under the current complaint procedure regime, the FCC requires that a viewer with a complaint file his grievance in writing, providing the specifics and evidence of the failure. The complaint must be filed to the television station or cable provider no later than the end of the calendar quarter following the calendar quarter in which the failure occurred. The provider must respond in writing to the complaint within forty five days after the end of the calendar quarter in which the failure occurred, or forty five days after receipt of the complaint, whichever is later. Critics argue that more than four months can pass before the programmer is legally required to respond, let alone remedy the problem. Because of the high costs of receiving video programming (85% of households receive their content through MPVD), this delay can be extremely costly, not to mention frustrating.

The FCC must shorten the time provided for programmers to respond to these inquiries. I propose a revision to the existing complaint procedure to require that all programmers respond to consumer complaints regarding captioning quality issues within thirty days. Furthermore, I believe that since all video programmers are required to caption their content, one body within the FCC should monitor the quality of all captioning. Considering that many of the viewers who need this information are elderly and often

lack the wherewithal to compile the information needed to file a complaint—and because programmers are notorious for blaming those who caption and vice versa—I would streamline the system so that the programmers and captioners are not involved at all. The consumer would report any errors directly to the Commission.

IV. Conclusion

Through the use of clearer standards and penalties to enforce those standards, the FCC can improve the quality of captioning. The FCC should reduce the number of errors in all programming and should ensure parity between the error rates of prerecorded and live shows. It must also eliminate the use of ENR in all markets and promote job growth within the field of stenography. Lastly, the FCC must streamline complaint procedures. If these are done, the quality of closed captioning will surely improve.

Respectfully submitted,

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