

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Office of Engineering and Technology Releases and Seeks Comment on Updated OET-69 Software)	ET Docket No. 13-26
)	
Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions)	GN Docket No. 12-268
)	
)	
)	

To: Chief, Office of Engineering and Technology

**REPLY COMMENTS OF THE CONSUMER
ELECTRONICS ASSOCIATION**

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EXECUTIVE SUMMARY

As CEA explained in its initial comments, the *TVStudy* software is easier to use, more accurate, and more thorough, and it offers more functionality than prior software implementing OET-69. Its use will further the ultimate goal of the Spectrum Act to reallocate broadcast spectrum to wireless broadband and will assist the FCC in meeting the “all reasonable efforts” statutory criteria for repacking broadcast stations.

The *TVStudy* software also is fully consistent with the Commission’s obligation to use the methodology described in OET-69. There is no mystery or term of art in the phrase “methodology described in OET Bulletin 69” – it means just that, and does not extend to implementing software such as *TVStudy* or any other aspect not included in the Bulletin itself. Suggesting that Congress intended something other than the ordinary meaning of the phrase is nonsensical, given that the Commission never has defined the phrase in an administrative process or otherwise used it to mean something contrary to the dictionary definition of the word “methodology.” Moreover, *TVStudy* need not produce identical results as the previous implementing software in order to be a permissible implementation of the Bulletin and, ultimately, of the statute.

As CEA also has discussed in this proceeding, use of *TVStudy* is consistent with the Commission’s authority under the Spectrum Act. There is no change to the methodology of the Bulletin, and, even if there were, the Commission permissibly could undertake such change consistent with the tenets of administrative law. Given the detailed description in the Public Notice of the need for new software to implement the incentive auction repacking, the Commission has more than satisfied the applicable standard for a change in its policies.

For these reasons, the FCC should reject challenges to the use of the *TVStudy* software and the delays such challenges seek to create. Instead the FCC should move forward apace, using the constructive feedback from this comment process to revise the *TVStudy* software if revisions would better enable the FCC to implement the repacking provisions of the Spectrum Act.

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ELECTRONICS ASSOCIATION**

The Consumer Electronics Association (“CEA”)¹ hereby responds to comments filed in response to the above-captioned Public Notice, which seeks comment on the new “TVStudy” software designed to perform broadcast television coverage and interference analyses as part of the incentive auction, using the methodology described in Office of Engineering and Technology (“OET”) Bulletin No. 69 (“OET-69”).²

As CEA explained in its initial comments, the software is easier to use, more accurate, and more thorough, and it offers more functionality than prior software implementing OET-69.

¹ CEA is the principal U.S. trade association of the consumer electronics and information technologies industries. CEA’s more than 2,000 member companies lead the consumer electronics industry in the development, manufacturing and distribution of audio, video, mobile electronics, communications, information technology, multimedia and accessory products, as well as related services, that are sold through consumer channels. Ranging from giant multi-national corporations to specialty niche companies, CEA members cumulatively generate more than \$209 billion in annual factory sales and employ tens of thousands of people.

² *Office of Engineering and Technology Releases and Seeks Comment on Updated OET-69 Software*, Public Notice, 28 FCC Rcd 950 (OET 2013) (“Public Notice” or “Notice”); OET, FCC, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, OET Bulletin No. 69 (Feb. 6, 2004) (“OET-69”), available at http://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet69/oet69.pdf.

Its use will further the ultimate goal of the Spectrum Act to reallocate broadcast spectrum to wireless broadband and will assist the FCC in meeting the “all reasonable efforts” statutory criteria for repacking broadcast stations.³

The *TVStudy* software also is fully consistent with the Commission’s obligation to use the methodology described in OET-69. There is no mystery or term of art in the phrase “methodology described in OET Bulletin 69” – it means just that, and does not extend to implementing software such as *TVStudy* or any other aspect not included in the Bulletin itself. Suggesting that Congress intended something other than the ordinary meaning of the phrase is nonsensical, given that the Commission never has defined the phrase in an administrative process or otherwise used it to mean something contrary to the dictionary definition of the word “methodology.” Moreover, *TVStudy* need not produce identical results as the previous implementing software in order to be a permissible implementation of the Bulletin and, ultimately, of the statute.

As CEA also has discussed in this proceeding, use of *TVStudy* is consistent with the Commission’s authority under the Spectrum Act. There is no change to the methodology of the Bulletin, and, even if there were, the Commission permissibly could undertake such change consistent with the tenets of administrative law. Given the detailed description in the Public Notice of the need for new software to implement the incentive auction repacking, the Commission has more than satisfied the applicable standard for a change in its policies.

³ See generally, CEA Comments, ET Docket No. 13-26; GN Docket No. 12-268 (filed Mar. 21, 2013) (“CEA Comments”).

I. THE *TVSTUDY* SOFTWARE IMPLEMENTS THE METHODOLOGY OF OET-69 AS REQUIRED BY THE SPECTRUM ACT

The Commission may properly use *TVStudy* to meet its statutory directive because the software is in no way inconsistent with the repacking requirement to use the “methodology described in OET Bulletin 69.”⁴ The “methodology described in OET Bulletin 69” is a phrase with an ordinary meaning – not a term of art or a concept specifically defined in an administrative proceeding – and the proposals for the *TVStudy* software set forth in the Public Notice are consistent with this ordinary meaning.

A. THE ORDINARY MEANING OF THE STATUTE CLEARLY PERMITS THE USE OF *TVSTUDY*, WHICH MERELY IMPLEMENTS THE REQUIRED METHODOLOGY

As implementing software, *TVStudy* directly fulfills the Spectrum Act requirement that the Commission use the “methodology described in OET Bulletin 69” in the context of repacking. The standard meaning of the term “methodology” reflects that it is distinct from the implementation of that methodology,⁵ and thus the process of implementing the methodology of OET-69 is distinct from the methodology itself. Indeed, the Public Notice describes the *TVStudy* software as “a means for implementing the OET-69 methodology,”⁶ and OET-69 itself correctly

⁴ Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6403(b)(2), 126 Stat. 156. 226 (2012) (“Spectrum Act”).

⁵ “Methodology” is defined by Webster’s as “a body of methods, rules, and postulates employed by a discipline: a particular procedure or set of procedures,” and NAB similarly cites a definition stating that methodology is “the processes, techniques, approaches.... or set of procedures” used to solve a problem. *See Methodology* Definition, Merriam-Webster.com, <http://www.merriam-webster.com/dictionary/methodology> (last visited Apr. 4, 2013); Comments of the National Association of Broadcasters, et al., ET Docket No. 13-26; GN Docket No. 12-268, at 3 (filed Mar. 21, 2013) (“NAB Comments”). “Implement” is defined as “carry out, accomplish; to give practical effect to.” *See Implement* Definition, Merriam-Webster.com, <http://www.merriam-webster.com/dictionary/implementation> (last visited Apr. 4, 2013).

⁶ Public Notice, 28 FCC Rcd at 951.

distinguishes between methodology and implementation, noting that it “provides guidance on the *implementation* and use of Longley-Rice *methodology*” and that “[a] computer is needed to make [the Longley-Rice] predictions because of the large number of reception points that must be individually examined.”⁷ The Bulletin does not equate the L-R model with the computer used to implement the model; in fact, the implication is that one could execute the L-R methodology without a computer if one had enough time. The Public Notice is consistent with this previous approach, and the Commission should reject the arguments of the National Association of Broadcasters (“NAB”) conflating the concepts of methodology and implementation. Such a broad, non-standard interpretation is inconsistent with NAB’s own statement “that words of statutes or regulations must be given their ordinary, contemporary, common meaning.”⁸

B. THERE IS NO BASIS FOR NAB’S CLAIM THAT THE FCC PREVIOUSLY HAS DEFINED “OET-69 METHODOLOGY” IN AN ADMINISTRATIVE PROCEEDING

Contrary to NAB’s claims, the FCC has not administratively defined the phrase “methodology described in OET Bulletin 69,” or any close variant, and thus Congress could not have intended to adopt any such meaning of the phrase when it enacted the Spectrum Act. As a threshold matter, the phrase “methodology described in OET Bulletin 69” has not been defined anywhere in the Commission’s regulations or orders, and NAB offers no compelling evidence that the phrase has been construed for any length of time to mean something other than its plain meaning. Indeed, before the Spectrum Act, it appears there were no instances of that exact phrase in Commission documents, and only a single case using even a close approximation of

⁷ OET-69 at 1 (emphasis added).

⁸ NAB Comments at 3 (citing *FTC v. Tarriff*, 584 F.3d 1088, 1090 (D.C. Cir. 2009)).

that phrase.⁹ That single pre-Spectrum Act case discusses a specific detail of the methodology contained entirely within the OET-69 bulletin and thus is wholly consistent with the ordinary meaning of “methodology described in OET Bulletin 69” as referring only to content contained within the document itself.¹⁰

Moreover, none of the cases NAB cites here are apt. In arguing that when Congress uses a term that has previously been defined in an administrative proceeding, it can be presumed that Congress intended to adopt the agency’s meaning of that term in statutes enacted subsequently,¹¹ NAB cites to cases where the agency terms at issue were either defined explicitly in the agency’s

⁹ *Amendment of Parts 73 and 74 of the Commission’s Rules to Establish Rules for Digital Low Power Television, Television Translator, and Television Booster Stations and to Amend Rules for Digital Class A Television Stations*, Notice of Proposed Rulemaking, 18 FCC Rcd 18365, 18388 ¶ 54 (2003) (“The DTV methodology, as described in OET Bulletin 69, permits interference analysis of [co-located adjacent channel] operations [by] calculat[ing] the D/U ratios....”) (emphasis added).

¹⁰ *Id.* This is an example of the phrase, albeit with a comma inserted. However, as noted, it is consistent with the ordinary use of the term, since the calculation of D/U ratios is explicitly described in OET-69. *See* OET-69 at 7-8 (discussing use of D/U ratios). Furthermore, the ordinary meaning of “described in” limits the scope of the term “methodology” to the elements of OET-69 itself and does not include the implementing software. Under this ordinary reading of the statute, as the Commission implements OET-69, the Commission is limited only by the parameters and instructions provided within the four corners of that document. The “methodology described in OET Bulletin 69,” cannot, under any ordinary interpretation, mean the “methodology described outside of OET Bulletin 69.” Yet NAB repeatedly attempts to argue that documents and software that are external to, and not even referenced in, OET-69 are somehow part of the methodology described in OET Bulletin 69. For example, OET-69 does not describe how to treat cells that are flagged by the L-R methodology as having dubious results, yet NAB argues that the Commission’s prior decisions in unrelated contexts, all external to OET-69, are part of the methodology “described in” OET-69. *See* NAB Comments at 7. Additionally, NAB claims that Section 73.616(e)(1) of the Commission’s rules is a part of the methodology described in OET-69, despite the fact that OET-69 itself does not discuss that rule or establish the year of Census data that should be used. *Id.* at 10-11.

¹¹ NAB Comments at 6 n.17.

regulation,¹² or were “long construed” by the agency in previous decisions to mean something beyond their ordinary meaning.¹³ Neither situation exists here. Similarly, it is of no relevance that a court found that because Congress amended a statute six times without addressing a long-standing agency practice related to that statute, Congress essentially ratified the agency’s practice.¹⁴ Here the issue is the correct statutory interpretation of a recently passed statute, not ratification of a long-standing agency practice. Nor is there value in considering NAB’s string cite of case law to demonstrate that when an agency has interpreted a *statutory* provision in a particular way, and Congress does not modify that provision when it has the chance, or if it uses the same or similar language in another statute, Congress thereby adopts the interpretation of the agency.¹⁵ This case law is not relevant here because the phrase “methodology described in OET Bulletin 69” was not a statutory term until passage of the Spectrum Act, and the Commission is only just now interpreting that phrase.¹⁶

¹² *Prometheus Radio Project v. FCC*, 373 F.3d 372, 396-97 (3rd Cir. 2004) (“Since 1985 the Commission has defined [in 47 C.F.R. § 73.3555(e)] ‘national audience reach’ to mean ‘the total number of television households’ reached by an entity’s stations, except that ‘UHF stations shall be attributed with 50 percent of the television households’ reached.”).

¹³ *Shays v. FEC*, 414 F.3d 76, 106 (D.C. Cir. 2005) (“[T]he FEC has long construed ‘solicit’ elsewhere in FECA as covering indirect requests.”).

¹⁴ NAB Comments at 5 n.16 (citing *Sebelius v. Auburn Reg’l Med. Ctr.*, 133 S. Ct. 817, 827-28 (2013)). That case describes Congressional ratification of an agency action, not Congressional adoption of agency-defined terms, and is not relevant to the issue of statutory interpretation. In the case of OET-69, there is no long-standing regulation defining the “methodology used in OET Bulletin 69.”

¹⁵ See NAB Comments at 5-6 n.16 (all but the first citation, *Sebelius v. Auburn Reg’l Med. Ctr.*, refer to agency statutory interpretations).

¹⁶ This same logic also distinguishes NAB’s reliance on *EEOC v. Aramark Corp.*, 208 F.3d 266, 271 (D.C. Cir. 2000), since that case refers to standing judicial (not even agency) interpretations of statutory language. NAB Comments at 6 n.17.

C. *THE PHRASE “METHODOLOGY DESCRIBED IN OET BULLETIN 69” IS NOT A TERM OF ART WITH A MEANING CONTRARY TO ITS ORDINARY MEANING*

The “methodology described in OET Bulletin 69” also cannot be considered a term of art that has come to mean something different than its plain ordinary meaning.¹⁷ As discussed above, there simply are no FCC decisions in which “methodology described in OET Bulletin 69” could have been used as a term of art. It appears that the only place “methodology described in OET Bulletin 69” has been defined to mean something other than its ordinary meaning is in NAB’s own filings. In contrast, in the cases NAB cites, the terms of art under consideration were clearly defined in a statute,¹⁸ legal precedent,¹⁹ or industry standards.²⁰ Given that there are no legislative, administrative, or judicial uses of the phrase prior to the Spectrum Act, NAB’s argument must be rejected. A phrase cannot be considered a term of art if it has not been used broadly, and certainly not if it has never been used at all.

¹⁷ NAB Comments at 5-6.

¹⁸ *Burgess v. United States*, 553 U.S. 124 (2008) (finding that Congress used the phrase “felony drug offense” in the Controlled Substances Act was based on that phrase as a term of art defined by in a different statute (21 U.S.C.S. § 802(44)).

¹⁹ *McDermott Int’l, Inc. v. Wilander*, 498 U.S. 337, 342 (1991)(“[S]eaman’ is a maritime term of art. . . . Our first task, therefore, is to determine who was a seaman *under the general maritime law* when Congress passed the Jones Act.”)(emphasis added); *Morissette v. United States*, 342 U.S. 246, 261-62 (1952) (finding that where Congress left out an express “intent” element from the crime of conversion of government property, “in the light of an unbroken course of judicial decision in all constituent states of the Union holding intent inherent in this class of offense, even when not expressed in a statute,” the intent element would be required).

²⁰ *Stephens v. U.S. Airways Group, Inc.*, 644 F.3d 437,440 (D.C. Cir. 2011) (citing a paper on Actuarially Equivalent Benefits published by the Society of Actuaries for the definition of “actuarially equivalent”).

D. THE SPECIFIC IMPROVEMENTS OF THE TVSTUDY SOFTWARE ARE CONSISTENT WITH THE OET-69 METHODOLOGY

As discussed in detail below, each of the improvements proposed by the Public Notice is consistent both with the methodology described in OET-69 and with the overall purpose of the Spectrum Act.

1. NAB MISCHARACTERIZES THE AVAILABILITY OF CERTAIN SOFT SWITCH OPTIONS IN THE *TVSTUDY* SOFTWARE

The flexibility of “soft switches” that enable an operator to utilize a wide range of parameters has nothing to do with the question of what particular settings will be used for the FCC’s repacking analysis, and NAB’s concerns are unfounded and extreme. Broadly, NAB is wrong to assume that the *TVStudy* software necessarily will make additional changes to the FCC’s coverage and interference analysis just because it enables a user to evaluate coverage and interference under different circumstances. More specifically, NAB appears to assume that because interference from low-power television (“LPTV”) and TV Translator stations technically *can* be included in the analysis under the *TVStudy* software that it will be included for purposes of repacking. However, the Public Notice does not discuss this option and does not provide any indication that the Commission is considering including LPTV and TV Translator stations in the analysis. NAB also incorrectly suggests that the *TVStudy* software necessarily will treat previously flagged cells as cells where there is assumed interference,²¹ a misplaced conclusion that is plainly contrary to what the Public Notice actually proposes, as described in greater detail below.

Contrary to NAB’s protests, the flexibility afforded by the *TVStudy* software is an asset, not a liability, because it will enable the Commission to better achieve the goals of the Spectrum

²¹ Declaration of Victor Tawil ¶ 12 (Mar. 21, 2013), attached to NAB Comments (“Tawil Declaration”).

Act. While the Commission may not employ all of the flexibility of the soft switches in its repacking process, the existence of additional flexibility does not impede the Commission's ability to faithfully implement the methodology of OET-69.

2. THE HANDLING OF ERROR CODES

The Public Notice's inquiry regarding how the *TVStudy* software should handle cells flagged by the Longley-Rice algorithm is fully consistent with the Spectrum Act. As noted above, NAB appears to attack a proposal that is contrary to what was proposed in the Public Notice. While NAB's Comments suggest that flagged cells would be assumed to be *interfering*,²² the Public Notice reflects a different proposal. The Public Notice notes that implementing software for other OET bulletins use the calculated signal strength value to determine whether a cell would be covered, essentially ignoring the flag, and explains that this approach produces generally reasonable results.²³ It never suggests that such flagged cells would be assumed to interfere. While the soft switches in *TVStudy* may permit such an assumption, the Commission has not suggested that it would use *TVStudy* in that manner.

NAB's attacks on the actual proposals in the Public Notice also are without merit. OET-69 does not address how to treat flagged cells.²⁴ The FCC therefore may treat flagged cells in the way that the FCC concludes serves the purposes of the Spectrum Act. Indeed, the fact that OET-72 and OET-73 specifically incorporate an assumption regarding flagged cells into the text of those bulletins is further evidence that Congress intended to leave this detail to the discretion

²² NAB comments at 7; Tawil Declaration ¶ 12.

²³ Public Notice, 28 FCC Rcd at 954-55.

²⁴ Letter from Julie M. Kearney, Vice President, Regulatory Affairs, CEA, to Marlene H. Dortch, Secretary, FCC, ET Docket No. 13-26; GN Docket No. 12-268, at 5-6, n.27 (filed Mar. 18, 2013) ("CEA Letter").

of the FCC. If Congress had wanted to *require* that flagged cells be ignored, it could have identified OET-72 or OET-73 in the Spectrum Act.²⁵ However, Congress referenced OET-69 – which, unlike OET-72 and OET-73, has no set assumption with regard to flagged cells – thereby leaving that implementation decision to the FCC.

NAB also erroneously argues that the Commission has previously described a change to the treatment of flagged cells as a change in the OET-69 methodology.²⁶ In the case cited by NAB, however, the Commission appears to have been using the word “methodology” generically, without reference to OET-69; indeed, OET-69 is not even mentioned in the Commission’s discussion of the change being considered there.²⁷ In contrast, the Spectrum Act’s use of the word “methodology” is precisely qualified by the phrase “described in OET Bulletin 69,” as discussed above.²⁸ OET-69 does not prescribe, or even address, how the Commission should treat flagged cells. Thus, consistent with how Congress characterized the methodology the Commission is to use, the Commission has the flexibility to treat flagged cells as it determines is in furtherance of the overall goals of the Spectrum Act.

3. THE USE OF A ONE-ARCSECOND DATABASE

NAB erroneously argues that the reference in OET-69 Bulletin to the linkage to a database that contains terrain data every three arc-seconds of latitude and longitude means that

²⁵ NAB Comments at 7.

²⁶ NAB Comments at 7-8 (citing *Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television*, 16 FCC Rcd 5946, 5972 ¶¶ 65-66 (2001) (“*DTV Conversion Order*”)).

²⁷ *DTV Conversion Order*, 16 FCC Rcd at 5971-72 ¶¶ 64-66.

²⁸ Spectrum Act § 6403(b)(2), 126 Stat. at 226.

the FCC, in implementing the OET-69 methodology, must also use that level of granularity.²⁹

The relevant paragraph of OET-69 reads:

“Finally, terrain elevation data at uniformly spaced points the [sic] between transmitter and receiver must be provided. The FCC computer program is linked to a terrain elevation database with values every 3 arc-seconds of latitude and longitude. The program retrieves elevations from this database at regular intervals *with a spacing increment which is chosen at the time the program is compiled...*”³⁰

The first sentence of that paragraph describes the relevant step in the methodology: selecting and providing terrain elevation data at uniformly spaced points. The second sentence indicates the database to which the software was linked. The final sentence reflects that, notwithstanding that database, the user chooses the spacing increment. Thus, OET-69 does not require that terrain data be supplied at the 3 arc-second level of granularity.

NAB further claims that the Commission has repeatedly characterized the use of three-arcsecond data as part of its methodology; yet its sources are unpersuasive.³¹ In *County of Los Angeles* and *State of New York*, the Public Safety and Homeland Security Bureau describes in some detail the “methodology” of studies performed by state or county local governments evaluating the effects of a 700 MHz public safety radio system using the L-R model; the description provided is not of the OET-69 methodology used for evaluating TV broadcaster to TV broadcaster interference, and it does not appear that either local government study relied solely on the methodology described in OET-69. The Bureau’s description of the details of

²⁹ NAB Comments at 9.

³⁰ OET-69 at 6 (emphasis added).

³¹ See NAB Comments at 9 n.34.

other methodologies does not change the methodology described in OET-69.³² *Advanced TV Systems*, also cited by NAB, describes one of several acceptable methods for calculating the permissible post-DTV transition effective radiated power of a broadcast station as using terrain data with 3 arcsecond resolution.³³ The description offers no indication that this specific resolution of terrain data was required by the OET-69 methodology itself. Indeed, OET-69 is not even mentioned.

4. THE USE OF ACTUAL BEAM TILT DATA

NAB's criticism of the Public Notice's proposal to use more accurate electrical antenna beam tilt data from the FCC's Consolidated Database System ("CDBS") similarly reflects a misunderstanding that the reference to a static data input requires the use of that static data. This argument confuses the inputs of the computer software program with the actual methodology being used. Here, OET is proposing to follow the methodology of OET-69, but to use more accurate inputs to yield more accurate results. There is no change to the underlying methodology.

5. THE USE OF 2010 CENSUS POPULATION DATA

NAB mistakenly argues that use of 2000 Census data is required by the methodology described in OET-69. However, even NAB acknowledges that "the use of 2000 Census data is not specified in OET Bulletin 69."³⁴ Instead, NAB points to a reference to 2000 Census data in

³² See *County of Los Angeles, California*, 23 FCC Rcd 18389, 1804 ¶¶ 30-31 (PSHSB 2008); *State of New York*, 22 FCC Rcd 22195, 22197-99 ¶¶ 6-9 (2007).

³³ *Advanced Television Systems and Their Impact Upon the Existing Television Broadcast Service*, 23 FCC Rcd 4220, 4312 (2008).

³⁴ NAB Comments at 10.

Section 73.616(e)(1)³⁵ of the FCC’s Rules, and argues that the rule makes 2000 Census data a part of the methodology of OET-69. This argument is flawed for at least two reasons.

First, the rule is inapplicable to the incentive auction repacking process. Section 73.616(e)(1) requires that “[f]or evaluating compliance with the requirements of this paragraph, interference to populations served is to be predicted based on the 2000 Census population data and *otherwise according to the procedure set forth in OET Bulletin No. 69.*”³⁶ Section 73.616 of the Rules pertains to interference predictions associated with applications to modify the DTV Table of Allotments. The rule does not apply in the context of incentive auction repacking. Indeed, the rules governing the repacking process are still in the process of being formulated by the Commission in this proceeding.

Second, the use of the phrase “*otherwise according to the procedure set forth in OET Bulletin No. 69*” in Section 73.616(e)(1) demonstrates that a requirement to use year 2000 data is *not* already a part of the OET-69 methodology.

Because there is no requirement in OET-69 regarding use of any particular vintage of Census data, and the one rule specifying 2000 Census data cited by NAB does not govern the repacking process, the Commission remains free to choose the population database that it concludes will enable it to fulfill its directive under the Spectrum Act.

6. CORRECTION OF DEPRESSION ANGLE CALCULATION

NAB argues that correcting the depression angle calculation may introduce errors where broadcasters use mechanical downtilt but where the FCC does not have that data. NAB’s complaint appears to be based on the analysis of Doug Lung in his article, “FCC OET-69 Update

³⁵ 47 C.F.R. § 73.616(e)(1).

³⁶ *Id.* (emphasis added).

Appears Promising: Changes Should Reduce Errors.”³⁷ In that same article, Mr. Lung notes that collecting the necessary data would be difficult, but constructively suggests “[o]ne solution would be to allow stations to submit real antenna azimuth and elevation pattern data if they wanted the most accurate analysis of their coverage.”³⁸ To the extent the Commission finds that additional information would be useful to increase accuracy, and broadcasters provide the necessary information to the FCC in a timely fashion, CEA would not oppose the use of that data.

7. OTHER PROPOSED FEATURES

The remaining proposals to improve the accuracy of data inputs in the software used to implement the methodology of OET-69 also are consistent with the requirements of the Spectrum Act. NAB’s criticism of those proposals, such as increasing the level of precision of geographic coordinates, using a global calculation cell grid, and using antenna height above sea level, appears to be based solely on the fact that the use of more accurate inputs will change the results of predicted coverage and interference – in some cases increasing broadcaster’s predicted coverage, and in other cases decreasing it. As demonstrated below, the Spectrum Act does not require *TVStudy* to duplicate the results of the previous OET-69 implementation, which uses outdated and less accurate data.³⁹

³⁷ Doug Lung, *FCC OET-69 Update Appears Promising Changes: Should Reduce Errors*, TVTechnology (Feb. 8, 2013); <http://www.tvtechnology.com/article/fcc-oet--update-appears-promising--/217650> .

³⁸ *Id.*

³⁹ *See infra*, section II.

II. ***TVSTUDY* NEED NOT RETURN RESULTS IDENTICAL TO THE PREVIOUS IMPLEMENTATION OF OET-69 IN ORDER TO BE A PERMISSIBLE IMPLEMENTATION OF THE BULLETIN'S METHODOLOGY**

NAB erroneously argues that because the *TVStudy* implementation of OET-69 returns different results than the old implementation, it therefore is not using the methodology described in OET-69.⁴⁰ Contrary to NAB's assertions, the text of the statute permits updated calculations that better model the coverage area and population served as of February 22, 2012, and reasonable efforts to satisfy the Spectrum Act require updated results.

The Spectrum Act states that "the Commission shall make all reasonable efforts to preserve, as of the date of the enactment of this Act, the coverage area and population served of each broadcast television licensee...."⁴¹ In order to fulfill this requirement, the Commission will have to build a model of what the coverage area and population served of each broadcast television licensee was on that date. The statute gives the Commission flexibility in how to build this model, other than requiring that it use the methodology described in OET-69. The statute thereby provides the Commission with the flexibility to use the method of predicting coverage area and population served that the FCC concludes satisfies its obligations under the Spectrum Act.

NAB misinterprets the statute to require that the coverage area and population served must be *as it would have been calculated on that date*, using the old implementation software that was used at the time.⁴² This interpretation is at odds with the text of the Act, where the

⁴⁰ For example, NAB protests the use of antenna height above sea level instead of height above ground, the use of increased precision in lat/long coordinates, and the use of a uniform calculation grid solely on the basis that they produce different results than the old implementation of OET-69. NAB Comments at 12.

⁴¹ Spectrum Act § 6403(b)(2), 126 Stat. at 226.

⁴² NAB Comments at iii.

phrase “as of the date of the enactment of this Act” directly modifies the phrase “the coverage area and population served.” That phrase does not restrict when the calculation of coverage area and population served can be made.

NAB’s interpretation, if adopted, would lead to perverse results. The OET-69 methodology operates on several sets of data, including information about terrain and population. To the extent this data has changed over time (in some instances, over decades),⁴³ more accurate and current data should be used in order to produce more accurate estimates of coverage areas and populations served as of the passage of the Spectrum Act.

Furthermore, there are a large number of implementation details that are not described in OET-69, as OET has pointed out.⁴⁴ These details are therefore necessarily left to the discretion of the FCC. Congress expected that the FCC’s actions in response to the Spectrum Act would result in changes to broadcaster service area and population covered.⁴⁵ The fact that *TVStudy* produces different results than the previous implementation does not invalidate *TVStudy*. In fact, given the changes in the underlying data, such differences are evidence that the *TVStudy* more accurately models February 22, 2012, coverage area and population served than does the previous implementation.

III. USE OF *TVSTUDY* TO IMPLEMENT OET-69 IS CONSISTENT WITH THE COMMISSION’S AUTHORITY UNDER THE SPECTRUM ACT

OET has the authority necessary to adopt the proposals in the Public Notice. The *TVStudy* software implements the methodology described in OET-69. The Public Notice does

⁴³ Indeed, Census data from 1990 and 2010 reflect an increase in the U.S. population of 24.5%, and shifts in the location of the population.

⁴⁴ Public Notice at 2 (“OET-69 does not, however, specify all of the parameters and methods required when developing software to implement OET-69’s methodology.”).

⁴⁵ CEA Comments at 9-11.

not propose changes to the methodology of OET-69. In light of that, NAB's procedural arguments are inapplicable. Even assuming, *arguendo*, that full Commission action is required to adopt the use of the *TVStudy* software or any of the proposals in the Public Notice, nothing prevents the full Commission from doing so.

A. *NEITHER THE PUBLIC NOTICE NOR TVSTUDY WOULD CHANGE THE METHODOLOGY DESCRIBED IN OET-69*

As demonstrated above and previously by CEA, the Public Notice does not propose to change the methodology described in OET-69;⁴⁶ it merely describes and seeks public comment on updates and improvements to the tools that the Commission uses to implement that methodology.

NAB argues that, in the past, changes similar to those proposed in the Public Notice were adopted at the full Commission level. The one example NAB provides, the requirement to use year 2000 Census data for post-DTV transition application purposes, is inapposite. In that case, the Commission was adopting a new rule, Section 73.616(e)(1), for the very specific purpose of evaluating post-DTV transition applications. Since that rule does not apply in the context of the repacking process,⁴⁷ the Public Notice is not proposing to modify or otherwise reverse that rule. In addition, the Public Notice is not proposing adoption of a rule specifying the technical data to be used in the *TVStudy* implementation software.

Finally, NAB's argument that the FCC's regulations require that any changes to OET- 69 be published in the Federal Register⁴⁸ is irrelevant, since the Public Notice does not propose to

⁴⁶ CEA Letter at 3; CEA Comments at 11-16; Reply Comments of CEA, GN Docket No. 12-268, at 17-18 (filed Mar. 12, 2013).

⁴⁷ *Supra* at 13.

⁴⁸ NAB Comments at 18.

modify OET-69. Instead, the Public Notice seeks comment on a specific software implementation of OET-69.

B. EVEN IF FULL COMMISSION ACTION WERE NEEDED, NOTHING PRECLUDES THE FULL COMMISSION FROM ACTING HERE

Even assuming that the Commission can elect to utilize the *TVStudy* software only through an Administrative Procedure Act (“APA”) rulemaking,⁴⁹ this does not bar the Commission’s use of that software to support the proposed incentive auction. NAB’s argument to the contrary rests on the premise that the Commission cannot make this decision now because the *Incentive Auction NPRM* did not explicitly state the Commission’s intent to use the *TVStudy* software.⁵⁰ NAB’s premise is false.

It is well-settled that an agency “‘may make changes in its proposed rule on the basis of comments without triggering a new round of comments, at least where the changes are a ‘logical outgrowth’ of the proposal and previous comments.’”⁵¹ In order for a rule to be a “logical outgrowth” of a proposal, the agency must have provided proper notice of the proposal such that interested parties have been alerted to “‘the possibility of the agency’s adopting a rule different

⁴⁹ 5 U.S.C. § 553.

⁵⁰ NAB Comments at 19 (“The failure to incorporate comments on a crucial element of the incentive auction in the Incentive Auction Rulemaking substantially compromises the ability of commenters to meaningfully comment on the incentive auction proposal.”).

⁵¹ *Sprint Corp. v. FCC*, 315 F.3d 369, 375-76 (D.C. Cir. 2003) (quoting *City of Stoughton v. United States EPA*, 858 F.2d 747, 751 (D.C. Cir. 1988)); see also *Charles Crawford v. FCC*, 417 F.3d 1289, 1295 (D.C. Cir. 2005) (“‘It is well-settled that an agency need not initiate a new notice-and-comment period as long as the rule it ultimately adopts is a ‘logical outgrowth’ of the initial notice.’”) (quoting *First Am. Discount Corp. v. Commodity Futures Trading Comm’n*, 222 F.3d 1008, 1015 (D.C. Cir. 2000); *Fertilizer Inst. v. EPA*, 935 F.2d 1303, 1311 (D.C. Cir. 1991); *Wyerhaeuser Co. v. Costle*, 590 F.2d 1011, 1031 (D.C. Cir. 1978)).

than the one proposed.”⁵² On the facts of this case, it is beyond reasonable dispute that a decision to utilize the *TVStudy* software would be a “logical outgrowth” of the *Incentive Auction NPRM* and the record associated with that proceeding.

Interested parties to this proceeding have been apprised of “the terms or substance of the proposed rule” or “a description of the subjects and issues involved” as required by the APA.⁵³ The *Incentive Auction NPRM* lays out the general framework of its repacking plan, giving parties “fair notice”⁵⁴ of and seeking comment on a broad range of issues related to the use of OET Bulletin 69.⁵⁵ Even more to the point, the Commission expressly mentioned the use of specialized OET software in connection with OET Bulletin 69 and stated its intent “to use that software in [its] repacking methodology to replicate the coverage areas of stations assigned to different channels.”⁵⁶ Shortly after the comment cycle closed on the *Incentive Auction NPRM*, OET issued the instant Public Notice seeking comment on the *TVStudy* software to be used in the Commission’s repacking methodology. The Public Notice directed parties to file comments on the *TVStudy* software in both the OET docket and the *Incentive Auction NPRM* docket number 12-268.⁵⁷

⁵² *Sprint Corp.*, 315 F.3d at 376 (quoting *Kooritzky v. Reich*, 17 F.3d 1509, 1513 (D.C. Cir. 1994)).

⁵³ 5 U.S.C. § 553(b)(3).

⁵⁴ See *Long Island Care at Home, Ltd. v. Coke*, 551 U.S. 158 (2007); *Fertilizer Inst. v. Browner*, 163 F.3d 774, 779 (3d Cir. 1998).

⁵⁵ *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, 27 FCC Rcd 12357, 12387-99 ¶¶ 91-118 (2012).

⁵⁶ *Id.* at 12391 ¶ 100.

⁵⁷ See Public Notice, 28 FCC Rcd at 956 (“Comments on the matters discussed in this Public Notice should be filed in Dockets 13-26 and 12-268”).

Under these facts, it is not credible to suggest that parties have had to “divine [the FCC’s] unspoken thoughts.”⁵⁸ To the contrary, parties reasonably could “have anticipated”⁵⁹ that the agency would revisit the details of OET’s software in light of the *Incentive Auction NPRM* read together with the Public Notice. This is particularly the case because, as OET emphasized:

. . . the software that is currently used to implement OET-69 . . . are based fundamentally on source code and data from the 1990s and earlier. Since that time, some of the underlying datasets have evolved or have been replaced. In addition, parties have gained sufficient experience to have offered FCC staff informal feedback on the existing programs’ relative strengths and weaknesses.⁶⁰

Consequently, the Commission’s proposed use of the *TVStudy* software is at least a “logical outgrowth” of the *Incentive Auction NPRM* and the record associated with that proceeding.

Nothing in NAB’s comments compels a contrary conclusion. NAB’s citation to the appearance of OET Bulletin 69 in 47 C.F.R. §§ 73.8000 and 73.616(e) is of no moment.⁶¹ Neither rule applies in the context of the incentive auction.⁶² Further, the fact that the references to OET Bulletin 69 were inserted into these rules by “formal, Commission-level rulemaking proceedings” has no bearing on whether the Commission’s proposed use of the *TVStudy* software to support the incentive auction is a logical outgrowth of the *Incentive Auction NPRM* and the record of this proceeding.

⁵⁸ *CSX Transp., Inc. v. Surface Transp. Bd.*, 584 F.3d 1076, 1080 (D.C. Cir. 2009).

⁵⁹ *Covad Commc’ns Co. v. FCC*, 450 F.3d 528, 548 (D.C. Cir. 2006).

⁶⁰ Public Notice, 28 FCC Rcd at 950.

⁶¹ NAB Comments at 18.

⁶² To its credit, NAB admits that Section 73.8000 has no bearing on the incentive auction. *Id.* Unfortunately, NAB fails to recognize the same point with regard to Section 73.616, which deals with applications to add a new channel to the post-transition DTV Table of Allotments. 47 C.F.R. § 73.616.

NAB's general references to the Government in the Sunshine Act (the "Sunshine Act") are similarly unhelpful. The Commission is proceeding in compliance with the requirements of this act. The Public Notice was published in the proposed rules section of the Federal Register on February 15, 2013.⁶³ The agency then received public comment on that proposal in both the OET docket and the *Incentive Auction NPRM* docket.⁶⁴ Further, the proceeding has been designated as "permit-but-disclose" under the Commission's *ex parte* rules to further promote an open dialog regarding the use of the *TVStudy* software. There is nothing in this process that is inconsistent with the Sunshine Act.

Finally, NAB's allegation that by setting the deadline for commenting on the Public Notice two weeks after the close of the comment cycle on the *Incentive Auction NPRM*, OET "substantially compromise[d] the ability of commenters to meaningfully comment on the incentive auction proposal" is not credible.⁶⁵ Clearly, NAB was fully apprised of the proposal to use the *TVStudy* software and was able to exercise fully its comment rights. Indeed, NAB's comments comprised 24 pages of text and were accompanied by three separate engineering statements. Moreover, all of this information was filed in the *Incentive Auction NPRM* docket. NAB was in no way compromised by the timing of the Public Notice.

Nor does the timing of the Public Notice compromise the Commission's ability to consider the comments it receives. The Commission is more than capable of considering any

⁶³ *Office of Engineering and Technology Seeks Comment on Updated OET-69 Software*, Public Notice, 78 Fed. Reg. 11129 (Feb. 15, 2013).

⁶⁴ NAB's assertion that OET permitted "commenters to use either the docket number for *Public Notice* 13-138 or the *Incentive Auction NPRM*" is wrong. NAB Comments at 19. OET directed parties to file comments in *both* dockets. See Public Notice, 28 FCC Rcd at 956 ("Comments on the matters discussed in this Public Notice should be filed in Dockets 13-26 and 12-268").

⁶⁵ NAB Comments at 19.

concerns regarding the use of the *TVStudy* to support the incentive auction in conjunction with the rest of the record even though comments on the Public Notice were filed two weeks after the *Incentive Auction NPRM* comments.

C. *USE OF THE TVSTUDY SOFTWARE WOULD NOT BE ARBITRARY OR CAPRICIOUS*

When an agency modifies or rescinds a rule, it need only demonstrate “that the new policy is permissible under the statute, that there are good reasons for it, and that the agency believes it to be better.”⁶⁶ Here, OET has been clear in the Public Notice that it believes *TVStudy* is far superior to the existing OET-69 implementation and that the existing implementation would be incapable of effectively enabling the Commission to meet the requirements of the Spectrum Act. Even if NAB’s claims about certain changes reducing the accuracy of certain elements of the analysis are true, this would not necessarily mean that the overall calculation is less accurate. In addition, as discussed at length in CEA’s comments and above, the Commission must consider its actions within the full context of the Spectrum Act. Accordingly, accuracy of coverage and interference elements would be one, but not the only, important issue to consider. Finally, there is no requirement that OET or the Commission pick the best solution that satisfies the statute, only an acceptable solution. Use of *TVStudy* would be perfectly justifiable and in no way either arbitrary or capricious, and the Commission should reject any concerns to the contrary.

⁶⁶ See *FCC v. Fox TV Stations, Inc.*, 556 U.S. 502, 515 (2009). Even if this situation met the higher threshold for policies that have been significantly relied upon or that have been modified based on changes in factual circumstances (which it does not), OET has provided, and the Commission can provide, a significantly detailed justification sufficient to meet this threshold.

IV. CONCLUSION

For the reasons stated above, the FCC should reject challenges to the use of the *TVStudy* software (and the delays they would create) and should instead use the constructive feedback from this comment process to make any warranted changes to the *TVStudy* software to better enable the FCC to implement the repacking provisions of the Spectrum Act.

Respectfully submitted,

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